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25 PORTRAITS TO SHAPE YOUR BUSINESS The Volume 10 Issue 2 Version 1.0

highlights

Social Capital and Relationship Marketing

Effect of Proactive Personality

Corporate Governance and Market Liquidity

Leadership Orientation of Chinese Professionals





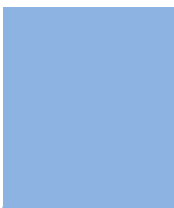
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From the Chief Author's Desk

The research activities among different disciplines of natural science are backbone of system. The deep and strong affords are the demands of today. Sincere afford must be exposed worldwide. Which, in turns, require international platform for rapid and proper communication among similar and interdisciplinary research groups.

The Global Journal of Management and Business Research is to fulfill all such demands and requirements, and functions also as an international platform. Of course, the publication of research work must be reviewed to establish its authenticity. This helps to promote research activity also. We know, great scientific research have been worked out by philosopher seeking to verify quite erroneous theories about the nature of things.

The research activities are increasing exponentially. These great increments require rapid communication, also to link up with others. The balanced communication among same and interdisciplinary research groups is major hurdle to aware with status of any research field.

The Global Journals is proving as milestone of research publication. In view of whole spectrum of Knowledge, the research work of different streams may be considered as branches of big tree. Every branch is of great importance. Thus, we look after the complete spectrum as whole. Global Journals let play all the instruments simultaneously. We hope, affords of Global Journals will sincerely help to build the world in new shape.

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Analytical Hierarchy Process for Higher Effectiveness of Buyer Decision Process

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GJMBR Classification
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Abstract- Buyer decision processes are the decision-making processes undertaken by consumers about a potential market transaction before, during, and after the purchase of a product or service. More generally, decision-making is the cognitive processes of selecting a course of action from among multiple alternatives. How many evaluation criteria a consumer will use, what different types of criteria will be considered and how much importance will be placed on each of them depends on the consumer himself and the product consideration. The Analytical Hierarchy Process (AHP) is a multi criteria decision-making process that is especially suitable for complex decisions, which involve the comparison of decision elements, which are difficult to quantify. The crux of AHP is the determination of the relative weights to rank the decision alternatives. In this study, it has been identified that through using AHP model consumers can evaluate the product attributes differently from simple evaluation criteria. AHP process described an effective buying decision by finding out the effectual attributes of different alternatives.

Keywords: Analytical hierarchy process, Buying decision process, MCDM, Purchase behavior

I. INTRODUCTION

Consumer buying behavior is very complex and it may vary greatly across different types of products and buying decisions. Consumers use different criteria and attributes in the decision process especially in the evaluation stage. Analytical Hierarchy Process (AHP) is such a tool that can be used to evaluate buyer decision process more effectively and efficiently.

Buying Decision Process: Consumer buying decision produces an image of an individual carefully evaluating the attributes of a set of products, brands, or services and rationally selecting the one that solves a clearly recognized need for the least cost (Hawkins, 2007). Marketers have to go beyond the various influences on buyers and develop an understanding of how consumers actually make their buying decisions. Specially, marketers must identify who makes the buying decision, the types of buying decisions, and the steps in the buying process.

tages of the Buying Decision Process: Smart companies will immerse themselves in trying to understand the customer's overall experience in learning about a product, making a brand choice, using the product, and even disposing of it. Market scholars have developed a "stages model" of the buying decision process. The consumer passes through five stages: problem recognition, information search, evaluation of alternatives, purchase decision and post purchase behavior (Kotler, 2006).

Problem Recognition: The buying process starts when the buyer recognizes the problem or need. The need can be triggered by external or internal stimuli. Marketers need to identify the circumstances that trigger a particular need. By gathering a number of information from a number of customers, marketers can identify the most frequent stimuli that spark an interest in a product category. They can develop marketing strategies that trigger consumer interest.

Information Search: An aroused customer will be inclined to search for more information. The relative amount and the influences of the information sources vary with product category and the buyer's characteristics. Each information sources perform a different function in influencing the buying decision. Through gathering information, the customers learn about competing brands and their features.

Evaluation of Alternatives: There are several decision evaluation processes, the most current models of which see the process as cognitively oriented. Consumers vary as to which product attributes they see as most relevant and the importance they attach to each attributes. They will pay the most attention to attributes that deliver the sought benefits.

Purchase Decision: In the evaluation stage, the consumers form preferences among the brands in the choice set. The consumer may also form an intention to buy the most preferred brand. Attitude of others and unanticipated situational factors can intervene between the purchase intention and the purchase decision.

Post purchase Behavior: After purchasing the product, the consumer will experience some level of satisfaction or dissatisfactions. The marketer's job does not end when the product is bought. Marketers must monitor post purchase satisfaction, post purchase actions and post purchase product use.

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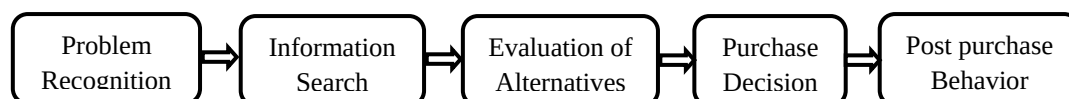


Figure 1: Five-Stage Model of Consumer Buying Process

The AHP is a comprehensive framework when multiobjective, multicriterion and multifactor decisions are made. In this paper, AHP is used to increase the effectiveness of the concept of buying decision process. This method was applied to clarify the concept of buying and to focus the strategy to the most essential issues.

II. LITERATURE REVIEW

The Analytic Hierarchy Process (AHP) is a multi-criteria decision-making approach and was introduced by Saaty (1977). The analytical hierarchy process (AHP) has proven to be a useful method for decision making (Saaty 1980). The AHP has attracted the interest of many researchers mainly due to the nice mathematical properties of the method and the fact that the required input data are rather easy to obtain. The AHP is a decision support tool which can be used to solve complex, unstructured decision problems (Partovi, 1994). It uses a multi-level hierarchical structure of objectives, criteria, sub criteria, and alternatives.

Some of the industrial engineering applications of the AHP include its use in integrated manufacturing (Putus, 1990), in the evaluation of technology investment decisions (Boucher and McStravic, 1991), in flexible manufacturing systems (Wabalickis, 1998), layout design (Cambron and Evans, 1991), location planning of airport facilities and international consolidation terminals (Min, 1994), large and complex project such as the "Silverlake Project" (Bauer et al, 1992), software development (Finnie et al, 1993), supplier selection (Iqbal, 2004), selection of alternative communication media (Quamruzzaman, 2002) and also in other engineering problems (Wang and Raz, 1991). It can be applied to contribute understanding in various types of decision problems (Arbel and Orhler, 1990; Hämmäläinen, 1990; Srinivasan and Bolster, 1990;).

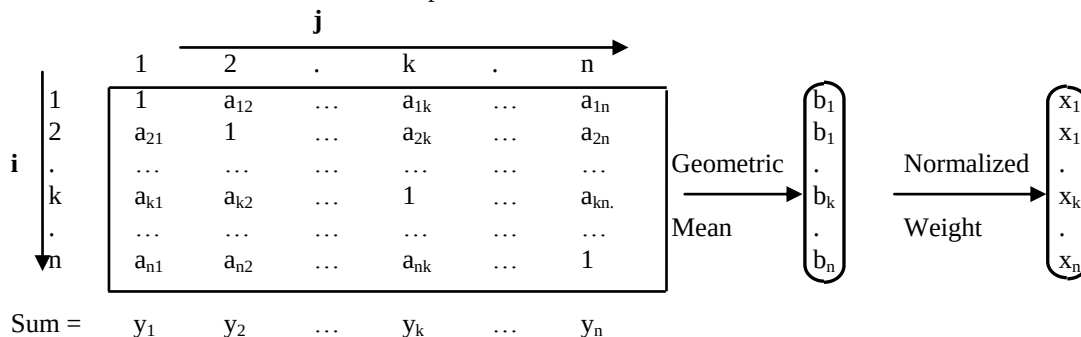
A. Theory of Analytical Hierarchy Process

The Analytical Hierarchy Process (AHP) organises the basic rationality by breaking down a problem into its smaller constituent parts. By decomposing the problem, the decision-maker can focus on a limited number of items at the same time. The AHP is carried out in two phases: the

design of the hierarchy and the evaluation of the components in the hierarchy (Saaty, 1980 and Vargas, 1990).

The Analytical Hierarchy Process (AHP) is a multi criteria decision making process that is especially suitable for complex decisions which involve the comparison of decision elements which are difficult to quantify. It is based on the assumption that when faced with a complex decision the natural human reaction is to cluster the decision elements according to their common characteristics. It is a technique for decision making where there are a limited number of choices, but where each has a number of different attributes, some or all of which may be difficult to formalize. It is especially applicable when a team is making decisions. It involves building a hierarchy (Ranking) of decision elements and then making comparisons between each possible pair in each cluster (as a matrix). This gives a weighting for each element within a cluster (or level of the hierarchy) and a consistency ratio (useful for checking the consistency of the data).

The crux of AHP is the determination of the relative weights to rank the decision alternatives. Assuming that there are n criteria at a given hierarchy, the procedure establishes an $n \times n$ pair-wise comparison matrix, A , that reflects the decision maker's judgment of the relative importance of the different criteria. The pair-wise comparison is made such that the criterion in row i ($i = 1, 2, 3, \dots, n$) is ranked relative to each of the criteria represented by the n columns. Letting a_{ij} define the element (i, j) of A , AHP uses a discrete scale from 1 to 9 in which $a_{ij} = 1$ signifies that i and j are equally important, $a_{ij} = 5$ indicates that i is strongly more important than j and $a_{ij} = 9$ indicates that i is extremely more important than j . Other intermediate values between 1 and 9 are interpreted correspondingly. For consistency, $a_{ij} = k$ automatically implies that $a_{ji} = 1/k$. Also all the diagonal elements a_{ii} of A must equal 1 because they rank a criterion against itself. The relative weights of criterion can be determined from A by dividing the elements of each column by the sum of the elements of the same column. The resulting matrix is called normalized matrix, N .



The numerical results of attributes are presented to the decision maker to assign relative importance according to a predefined scale. Now a judgment matrix prepared. It is an $(n \times n)$ matrix; normalized weights are calculated

Where, i and j are the alternatives to be compared. a_{ij} is a value that represent comparison between alternatives or attributes i and j . The above judgment matrix may be consistent if $a_{ij} \cdot a_{jk} = a_{ik}$. For all values of i, j, k , in the above

judgment matrix, sum of the element in a column, $y_k = \sum a_{ij}$, where, $i = 1, 2, \dots, n$ and $j = 1, 2, \dots, n$

Geometric mean is calculated as, $b_k = [(a_{k1}) \cdot (a_{k2}) \cdot \dots \cdot (a_{kn})]^{1/n}$, where, $k = 1, 2, \dots, n$

Normalized weights are calculated as, $X_k = \frac{b_k}{\sum b_k}$

Acceptability of alternative or attribute is measured in terms of Consistency Ratio (C.R.)

Consistency ratio = consistency index / randomly generated consistency index

Atty's measure of consistency is done in terms of

Consistency Index (C.I.) $C.I. = \frac{\lambda_{\max} - n}{n-1}$

where, $\lambda_{\max} = y_1x_1 + y_2x_2 + \dots + y_kx_k + \dots + y_nx_n = \sum y_kx_k$
= largest eigen value of matrix of order n

Now, some Randomly Generated Consistency Index (R.I.) values are as follows:

n	1	2	3	4	5	6	7	8	9	10
R. I.	0	0	0.58	0.9	1.12	1.24	1.32	1.41	1.45	1.49

If $C.R. < 10\%$, then the level of inconsistency is acceptable. Otherwise, the alternative or attribute is rejected. The overall consistency may also be measured to justify the validity of selection. It has been tried to find out a systematic approach of buying decision process using this AHP tool.

III. PROBLEM DEFINITION

The consumers arrive at attributes toward the various brands through an attribute evaluation procedure. Suppose that a consumer has narrowed his choice set to four computers (A, B, C and D) (Kotler, 2006). Assume that he is interested in

four attributes, memory capacity, graphics capacity, size and weight and price. Table shows his belief about each brand rates on the four attributes. Most buyers consider several attributes in their purchase decision. Suppose he assigned 40 percent of the importance to the computer's memory capacity, 30 percent to the graphics capacity, 20 percent to the size and weight and 10 percent to the price. The weight for each attribute is then multiplied by the performance score that is assigned. Finally, these products are summarized to determine final rating for alternatives.

Table 2: A Computer's Brand Beliefs about Customers

Computer	Attributes				Scores
	Memory Capacity	Graphics Capacity	Size and Weight	Price	
A	10	8	6	4	8.0
B	8	9	8	3	7.8
C	6	8	10	5	7.3
D	4	3	7	8	4.7
Weight	0.40	0.30	0.20	0.10	

Therefore, the consumer will favor computer A, which (at 8.0) has the highest perceived value. The major limitation of this approach is that it is difficult to effectively take qualitative evaluation criteria into consideration. Memory capacity, graphics capacity, size and weight and price are strongly related to each other. However, in the above evaluation process the relation between the attributes has not been considered. This evaluation process can be effectively modified using Analytic Hierarchy Process (AHP), which is a Multi Criteria Decision Making (MCDM) technique.

IV EVALUATING BUYER DECISION PROCESS THROUGH AHP MODEL

The Analytical Hierarchy Process is a Multi Criteria Decision Making (MCDM) techniques, where both quantitative and qualitative performance factors are considered to select an alternatives. As buyer decision process involves several qualitative and quantitative criteria. The qualitative criteria are judged by expert opinions, whereas quantitative criteria are judged against the collected data and calculated quantitative criteria.

The above example is assessed by Analytical Hierarchy Process to increase the effectiveness of buying decision process by evaluating the alternatives considering the both quantitative and qualitative performance factors.

For pair-wise comparison, i.e. relative importance of one option over other is done using a scale of relative

importance. For example, if the consumer believes that memory capacity is moderately more important than

price, then this judgment is represented by a 3. Judgments are required for all the criterion comparisons, and for all the alternative comparisons for each criterion. The consumer has to develop a set of pair wise comparisons to define the relative importance of the criteria to complete the matrix. Preference weight values for different level of importance are shown in Table 3.

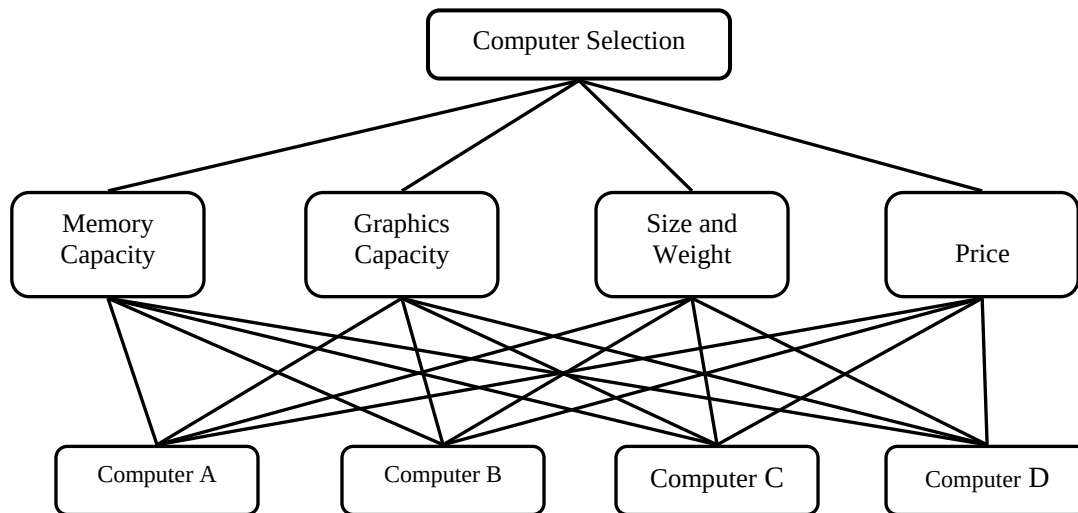


Figure 2: Evaluating Buyer Decision Process through AHP Model

Table 3: Level of Preference Weight For AHP

Level of importance/ preference weights	Definition	Explanation
1	Equally Preferred	Two activities contribute equally to the objective
3	Moderately	Experience and judgment slightly favor one activity over another
5	Strong importance	Experience and judgment strongly or essentially favor one activity over another
7	Noticeable dominance	An activity is strongly favored over another and its dominance demonstrated in practice
9	Extreme importance	The evidence favoring one activity over another is of the highest degree possible of affirmation
2,4,6,8	Intermediate values	Used to represent compromise between the preferences listed above
Reciprocals	Reciprocals for inverse comparison	

Table 4: Evaluation at Level 1

Attributes	Memory Capacity	Graphics Capacity	Size and Weight	Price	Geometric Mean	Normalized Weight
Memory Capacity	1	3	5	1	1.967989	0.43017
Graphics Capacity	1/3	1	4	2	1.074569	0.23488
Size and Weight	1/7	1/5	1	1/5	0.274941	0.06009
Price	1	1/2	5	1	1.257433	0.27486
Sum	2.476	4.7	15	4.2	4.574932	1

For the assignments in the above judgment matrix,
 Consistency Index (C.I.) = 0.07493
 Randomly Generated Consistency Index (R.I.) = 0.9

$n = 4,$

$\lambda_{\max} = 4.224798$

Consistency Ratio (C.R.) = 0.083258 = 8.3258%,

So, acceptable

Table 5: Evaluation at Level 2 for Memory Capacity

	Computer A	Computer B	Computer C	Computer D	Geometric Mean	Normalized Weight
Computer A	1	10/8	10/6	10/4	1.510763	0.389817
Computer B	8/10	1	8/6	8/4	0.854039	0.220365
Computer C	6/10	6/8	1	6/4	0.906413	0.233879
Computer D	4/10	4/8	4/6	1	0.604351	0.155939
Sum	2.8	3.5	4.664	5.5	3.875566	1

n= 4,
R.I. = 0.9,

$\lambda_{\max}$ = 3.811241,
Consistency Ratio (C.R.) = 0%,

C.I. = 0
So, acceptable

Table 6: Evaluation at Level 2 for Graphics Capacity

	Computer A	Computer B	Computer C	Computer D	Geometric Mean	Normalized Weight
Computer A	1	8/9	8/8	8/3	1.240535	0.285695
Computer B	9/8	1	9/8	9/3	1.395907	0.321477
Computer C	8/8	8/9	1	8/3	1.240535	0.285695
Computer D	3/8	3/9	3/8	1	0.465186	0.107132
Sum	3.5	3.109	3.5	9.334	4.342163	1

n= 4,
R.I. = 0.9,

$\lambda_{\max}$ = 3.999307,
Consistency Ratio (C.R.) = 0%

C.I. = 0
So, acceptable

Table 7: Evaluation at Level 2 for Size and Weight

	Computer A	Computer B	Computer C	Computer D	Geometric Mean	Normalized Weight
Computer A	1	6/8	6/10	6/7	0.78804	0.193543
Computer B	8/6	1	8/10	8/7	1.050731	0.258061
Computer C	10/6	10/8	1	10/7	1.313389	0.32257
Computer D	7/6	7/8	7/10	1	0.919484	0.225826
Sum	5.167	3.875	3.1	4.428	4.071644	1

n= 4,
R.I. = 0.9,

$\lambda_{\max}$ = 3.999948,
Consistency Ratio (C.R.) = 0%,

C.I. = 0
So, acceptable

Table 8: Evaluation at Level 2 for Price

	Computer A	Computer B	Computer C	Computer D	Geometric Mean	Normalized Weight
Computer A	1	4/3	4/5	4/8	0.854521	0.199985

Computer B	3/4	1	3/5	3/8	0.640931	0.149998
Computer C	5/4	5/3	1	5/8	1.068271	0.250009
Computer D	8/4	8/3	8/5	1	1.709201	0.400008
Sum	5	6.667	4	2.5	4.272924	1

$n = 4$,

$\lambda_{\max} = 4.000019$,

C.I. = 0.00000633

R.I. = 0.9,

Consistency Ratio (C.R.) = 0.000703%,

So, acceptable

Based on the above matrices, an overall evaluation is performed using the calculated weights of the alternatives and four measuring criteria, as follows:

Table 14: Final Evaluation for Analytic Hierarchy Process (AHP)

Alternatives	Attributes and their Weights				Composite Weight	Over-all Ranking
	Memory Capacity	Graphics Capacity	Size and Weight	Price		
	0.43017	0.23488	0.06009	0.27486		
Computer A	0.389817	0.285695	0.193543	0.199985	0.301389	1
Computer B	0.220365	0.321477	0.258061	0.149998	0.227038	3
Computer C	0.233879	0.285695	0.32257	0.250009	0.255812	2
Computer D	0.155939	0.107132	0.225826	0.400008	0.215759	4

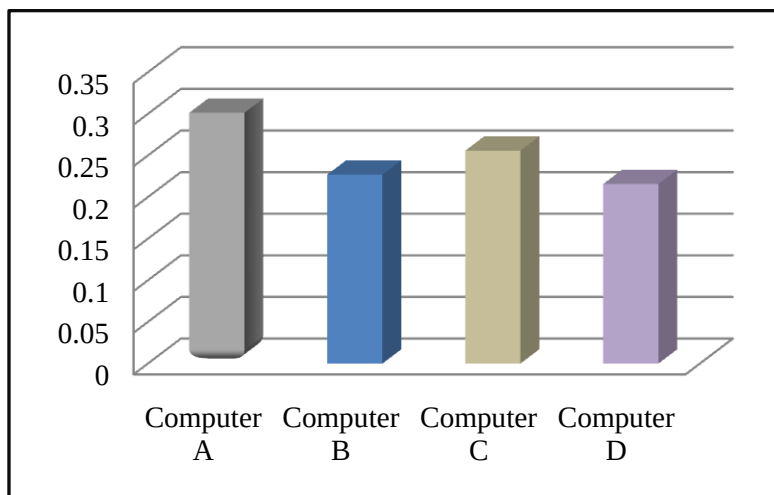


Figure 3: Decision Analysis Graph

IV. CONCLUSIONS

Buying process starts long before the actual purchase and has consequences long afterward. Evaluation of alternatives is a vital and critical stage of an effective buying process. Analytical Hierarchy Process can be an effective tool for evaluation of alternatives for buying decision process. AHP has been engaged to improve and support individual decision making about buying process. The Multi Criteria Decision Making process described in this paper ensures that effective buying decision can be possible by finding out the effectual attributes of different alternatives by the consideration of both quantitative and qualitative performance factors.

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Strengthening the Delivery Mechanism in Hospitality Management Education by Applying the Implications of Sound Pedagogical Theories

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Abstract- This paper is an attempt to identify the ways to strengthen the delivery mechanism of Hospitality Management Education in India by applying the implications of sound pedagogical theories. The elements like human resources, materials and methodology-applied act as foundation of efficient delivery mechanism. In order to reinforce these foundation elements, it becomes essential to provide some pedagogical scaffolding to them. These pedagogical scaffoldings, consisting of findings of various teaching-learning theories, propose many instructional strategies that can be utilized for enhancing the efficacy of Hospitality Management Education.

In Indian context, the curricula of various courses of hospitality education are developed by the academic or professional institutions with the inputs of regulatory bodies like AICTE, NCHMCT and also of industry experts. But in the absence of efficient delivery mechanism, even the best of the curricula formulated fails to yield the desired results. The various 'pedagogical theories' suggest suitable remedial measures for the same. Theories provide theoretical framework to explain various concepts and also suggest the reasons behind various phenomenon. These are formulated after thorough observation with the help of inductive and deductive reasoning. Research in the field of psychology has provided greater insights about the teaching-learning process and has resulted into the formulation of many pedagogical theories. Findings of various teaching-learning theories are now being utilized for design, development, delivery and evaluation of instructional system. This has lead to the improvement of the whole process of education. The important findings of these theories bearing direct impact on hospitality education are identified in the paper and effort is made to analyze the rationale behind the present delivery mechanism with the purpose of its improvement.

Keywords: delivery mechanism, hospitality management education and pedagogical theories

I. INTRODUCTION

In the last twenty years, 'Hospitality Management Education' experienced an impressive growth worldwide as reflected in the variety of programs offered by the increasing

number of hospitality education providers. As the quantitative expansion is always followed by the emergence of many qualitative issues, the quality of hospitality education programs has also been severely questioned by the industry stakeholders including hospitality industry experts and hospitality industry employers recently. In response, issue of quality in hospitality programs - *how to enhance it and evaluate it* - has been placed squarely on the contemporary agenda of many hospitality education providers (Kaissi, Chahine & Jammal)

A study carried out by the Federation of Hotel and Restaurant Association of India (FHRAI) would cause concern to the industry on the question of the current status of hospitality management education. Of the managers interviewed, about 20 per cent thought the quality was poor and that it is further declining; there is lot of emphasis on theory and not on the practical side of operations. They also complained that the quality of faculty in most institutions is poor; teachers are out of touch with the modern needs of hotels. One complaint of the faculty members was that the quality of industrial training in hotels was not up to the mark. (Seth, 2005)

Competition, the use of information technology, focus on quality, innovation, and intellectual capital are few aspects that describe today's environment notwithstanding the environment of tourism and hospitality industry. Advent of globalization and its diverse implications are putting a lot of pressure on hospitality education providers to improve the environment of hospitality education by subjecting it to various changes and developments (Shayya, M.). This paper stems from the above fact to develop the topic of strengthening delivery mechanism of Hospitality Management Education with relevant pedagogical theories by paying regard to theoretical as well as practical approaches to teaching and learning. The paper stresses the need for a paradigm shift in teaching and learning methods and strategies from traditional didactic styles that mainly use lecturing to more dynamic student-centred and proactive learning approaches as well as innovative teaching techniques.

II. CONTEXT OF THE STUDY

The paper explores the present status of Hospitality Management Education in India with a view to analyse the

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deficiencies of its instructional system. Findings of globally well established as well as well evolving pedagogical theories will be explored to reach at efficient strategies for strengthening the delivery mechanism of Indian Hospitality Management Education to bridge the emerging skill gaps among hospitality professionals.

III. OBJECTIVES

This paper is an attempt to accomplish the following objectives: To explore the prevailing scenario of Hospitality Management Education in India. To identify the requisite skills among Hospitality professionals in the present era of globalization. To investigate the pedagogical world to find out relevant theories suiting the present Hospitality Management Education system. To enlist the suitable pedagogical findings to be utilized for strengthening the delivery mechanism of Hospitality Management Education.

IV. REVIEW OF LITERATURE

Before analysing the present status of Hospitality Management Education in India, it becomes imperative to keep in mind the historical perspective of Hospitality Management Education in India.

A. *Historical Perspective of Hospitality Management Education in India*

The All India Council for Technical Education (AICTE) was set up in 1945 by Govt. of India on the recommendation of Central Advisory Board of Education (CABE) to stimulate, coordinate and control the provision of education facilities which industrial development of the post-war period would need. At that time, AICTE's mandate basically covered only programme in Engineering and Technology. The growth of industries in the country just after independence also demanded the need for qualified professionals in fields such as Business Management, Architecture, Hotel Management, Pharmacy, etc. So, the Hotel Management or Hospitality Education also came under the ambit of AICTE. Hotel Management Education had a modest beginning with short programmes in Nutrition and Food Sciences which started in late fifties. Four colleges were established in four major metropolitan cities between 1961 and 1964. The National Council for Hotel Management and Catering Technology (NCHMCT) was set up in 1982-83 to which all the institutions of Hotel Management run by the Government are affiliated. (Hundred-thirteenth report On Technical education, 2001).

B. *Present Status of Hospitality Education in India*

Since the focus of hotel management is primarily on catering to the needs of guests the term 'hospitality industry' has now become popular (Warrier, 2008). The hospitality industry is defined as the activity of providing lodging, fooding, beverage and recreational services, which not only include hotels but motels, restaurants, clubs, casinos, theme parks, rest houses, guest houses, hostels, hospitals, industrial canteens, ships and airlines, (Dutta, 2008). The industry is

growing rapidly, thanks to the unprecedented advances in tourism and international business, and consequent travel which have enhanced the demands of hotels managed by competent professionals (Warrier, 2008). If we analyze the growth of professional higher education institutions in India, the institutions providing Hotel Management course have been increased from 41 in 1999/2000 to 70 in 2005/06, witnessing a growth of 70%. The ratio of private and public share has been 90:10 in 2003/04. (Agarwal, 2006)

In India, the National Council for Hotel Management and Catering Technology holds an entrance test for admission to the 3-year B.Sc. Hospitality and Hotel Administration programme, offered jointly by the Council and the Indira Gandhi National Open University. Selection to more than 30 institutes of Hotel Management and Catering Technology in different parts of the country, from Thiruvananthapuram to Srinagar, is made based on the ranks in this entrance test. The programme equips students with various skills, knowledge and attitude to discharge the supervisory responsibilities in the hospitality sector. It also involves laboratory work that enables students to acquire the knowledge and skills in the operational areas of food production; food and beverage service; front office operation; and house keeping. Further, it provides managerial inputs in hotel accountancy; food safety and quality; human resource management; facility planning; financial management; strategic management; tourism marketing; and tourism management. (Warrier, 2008).

For a qualitative assessment of the status of hospitality education in India and to obtain certain estimated data from the key players, the Federation of Hotel and Restaurant Association of India (FHRAI) conducted field interviews among the three key stakeholders - the hotel managers, faculty of hotel management institution and students. Following are some of the observations of the study:

Many managers from metropolitan cities observed that hotels and the current status of hospitality management education in India and faculty is poor or that it is satisfactory but needs tremendous improvement. According to them, a lot of emphasis is laid on theory rather than practical training of hotel operations.

On the complaints from the institutions on the quality of industrial training for students in the hotels, majority of the interviewed managers said that there are problems in this, and the fault lies on both sides. While many hotels consider such trainees as cheap labour and fill more seats than they can manage, some fault also lies with the institutions. They do not monitor the training and do not make sure that the students are sent only to such hotels which have a training department and have also earned a high reputation for imparting good industrial training in the past.

Many faculty members felt that hotels should co-operate more with the institutions in areas like curriculum development, guest lecturers and training of faculty members in the hotels. They appreciated some of the hotels who are inviting the faculty members for a brief exposure of about two weeks where they get to see the working in key departments of the hotel and also get exposed to latest trends in operations, equipment and procedures.

Hotel managers said that institutes have a theoretical curriculum and many of the things they taught are not in keeping with modern trends in hotels operations. Some of the students also feel that the institutes should revise their curriculum, add more practical hours and also buy some new and latest equipment being used in the hotels. (Status of Hospitality Management Education in India, 2005)

4.3 Requisite Skills in the Present Scenario

Those hospitality professionals who have the right temperament and aptitude to meet the personal requirements of guests, and the strength of technical training in the diverse aspects of hotel management have fine professional prospects in India and abroad. Fine communication skills, pleasing behaviour, politeness, ability to remain composed even under tension, willingness to work anytime during the day or the night, and expertise in the different aspects of the industry are necessary for success (Warrier, 2008). Although these qualities may seem simple they are constantly being put to the test due to the request of the people served by this very demanding industry. (Dutta, 2008) According to Miranda (1999), five of the most important skills needed by college graduates as ranked by hospitality recruiters are: employee relations, leadership, guest services, staffing, and conflict management. Hospitality managers today need to work harder in handling new areas of specialization and in processing information at a more sophisticated level than did their predecessors. Umbreit (1992) proposed that in future six specific areas of expertise will be required to adequately prepare graduates for successful careers in hotel and restaurant management; which are: Leadership Skills, Human Resource Management, Service Marketing, Financial Analysis, Total Quality Management and Written and Oral Communication (as cited by Davies, 1995). Hospitality Education providers must ensure that graduates are enabled to respond in the new hospitality workplace of the present era. (Miranda, 1999)

Considering the concerns about quality issues and the increased array of skills required in the present global hi-tech world, it becomes apparent to improve the delivery of Hospitality Management Education in India. Various pedagogical theories suggest a way forward for meeting these challenges. Before discussing the findings of these theories relevant to Hospitality Education, corresponding review of literature provides a strong foundation ground to reach at any conclusion.

C. Analyzing Pedagogical Theories

According to Webster's online dictionary, pedagogy includes the activities of educating or instructing or teaching; activities that impart knowledge or skill. Teaching and learning are the two complementary processes of any pedagogical system. Some of the important theories of teaching and learning are discussed below in brief.

D. Theories of Teaching

How we teach is shaped by our own explicit or implicit beliefs about how students learn. Our personal theory of teaching and learning will be expressed in the language we use when referring to teaching and learning, the expectations

we have of students as learners, the processes we put in place for teaching and learning to occur, the tasks we assign to students and the ways we assess their learning. Dennis Fox (1983) has suggested a number of such theories which he classified by means of various metaphors for teaching and learning such as transferring, shaping, building, travelling and growing.

E. Transferring

Teachers subscribing to this theory see knowledge as a commodity which can be transferred and use language such as 'imparting knowledge' or 'conveying information' to describe the teaching/learning process. The traditional lecture is a perfect manifestation of the transfer theory in action; the teacher's job being to transfer the required knowledge to the students. The process should be successful if the material is 'well-prepared, effectively organised and imparted' and the students are very receptive.

Shaping

Fox's second theory involves Shaping rather than transferring. Teaching and learning involve a process of shaping or moulding students, their thinking and skills, to a predetermined and often detailed specification. Typical verbs used to describe the process include 'produce' and 'develop'. Teaching/learning activities often involve demonstration by the teacher followed by practice or development exercises with the student following a similar procedure or applying the given principle.

F. Building

A hybrid theory combining elements of these two is the Building Theory in which students' brains are analogous to building sites and words such as 'build' are frequently used in relation to 'concepts' or skills. With this model teaching involves not only delivering the materials; it also involves building the structure according to a predetermined plan.

G. Travelling

In addition to these relatively simple models, Fox suggests two developed theories of teaching. The first of these he calls the Travelling Theory. Here, learning is construed as a journey through the subject-matter terrain. The role of the teacher is to be local guide and words such as 'guide', 'lead' or 'point the way' are typically used to describe the process. One principle inherent in this model is that the guide, while expert, is still open to new discoveries, knowing that the countryside is continually changing and that there is always something new to learn. Another is that however knowledgeable the guide may be, exploration is essentially a personal endeavour which the learner must do themselves.

H. Growing

Fox's final model is the Growing Theory in which the student's brain is seen as a garden tended by the gardener teacher. Fox does not suggest descriptors for this model, but they would include words such as 'nurture' or 'foster development' or 'promote growth' of the student in relation to the subject. (Regan, 2007)

V. THEORIES OF LEARNING

Merriam (2001) argues that the knowledge base of learning comprises a myriad of theories, models, sets of principles and explanations. Explanations of what happens are called learning theories. Learning theories provide us with vocabulary and a conceptual framework for interpreting the examples of learning that we observe and also suggest where to look for solutions to practical problems. The theories do not give us solutions, but they do direct our attention to those variables that are crucial in finding solutions. Wikipedia identifies three main categories or philosophical frameworks under which learning theories fall: behaviourism, cognitivism, and constructivism.

A. Behaviourism

Behaviourism believes that learning in human beings occurs only when there is observable change in their behaviour. Accordingly, only overt behaviours are the indicators of learning, as they can be observed and measured. These theories ignore the effect of thought processes going on in the mind. According to these, we learn things because we get conditioned to them by repetitively doing and getting reinforcement for them and not by using our cognitive or mental abilities.

B. Cognitivism

Cognitivism is based on the belief that learning is an internal process and, cognitive/mental activities, although less observable than overt human behaviour, are important to learning. These cognitive abilities involve thinking, memory, sensation, perception, attention, conceptual understanding, problem solving, metacognition (awareness about one's own mental capabilities) etc.

C. Constructivism

Comparatively more recent than the earlier two groups, the constructivist theories assert that, based on their own perception and personal interpretation, learners construct their own knowledge and understanding. Each learner is unique and brings his/her own unique experiences and contexts to learning new things. Therefore, learning is meaningful only when the learning contexts and materials are based on the learner's cognitive structure and socio-cultural context (Panda, 2008).

In addition to above theories, the concept of Experiential Learning is also catching a wider attention now a days, particularly when we are mainly dealing with adults who use their experience to create and construct knowledge. In a way, this concept is an off shoot of constructivism with emphasis on andragogy (teaching of adults). According to this, adults have their own concrete experience, based on which they make their own observations, reflect, generalize and test (Srivastava, 2007). Experiential learning is a general term used to describe academically related work experience which gives learners opportunity to utilise their work related experiences in the construction of further learning.

VI. DISCUSSION

Various pedagogical theories as elaborated in the review of literature lead us towards the discussion on applying their implications for Hospitality Management Education.

A. Teaching Strategies suitable to Hospitality Management Education

A challenging, competitive, and continuously changing environment which surrounds the field of tourism and hospitality management definitely requires the teacher to be an inspirer, guiding the students to be their own self-guides. Accordingly, the travelling, growing and building theories would be more logical to consider today than the transfer and shaping theories as they pose a predefined approach of shaping a student rather than a proactive, student-centred and flexible approach which is rarely satisfied in the latter theories.

Teaching in the field of tourism and hospitality should involve research methods and student-centred learning approaches. A student in this field is expected to know how to apply rather than how to 'memorize' theory; likewise, a teacher in this field ought to be more than a lecturer as the transfer theory denotes. A paradigm shift from traditional, mainly 'lecturing' teaching approaches to learner centred strategies, is deemed necessary.

Contextualized learning and problem-solving techniques are basic approaches for teaching human resource management. Among the major techniques which can be used in this subject is the case study approach as it aims at developing students' analytical skills, and helps the student gain more interest in research based methods.

In the field of tourism, stimulating interest in research among students is necessary. Here comes the role of utilization of slides and websites which contextualize research within a global capacity.

The use of group cohesion and interaction through focus groups is of equal importance. An example of how group interaction is satisfied is group assignments and projects.

Other basic teaching techniques including questions & answers, discussion, brainstorming exercises, presentations, work groups, role playing, interviews, educational trips or visits and simulation aim at encouraging creative thinking. (Shayya, M.)

B. Instructional Implications of Learning Theories

Various implications of different theories of learning applicable to the field of education in general and hospitality education in particular, are discussed below:

C. Behaviourist Theories of Learning

Learners should be clearly informed of the objectives or outcomes of learning, so that they can set the expectations for themselves and assess their performance.

In order to promote learning, learning materials must be sequenced properly according to various maxims of teaching like simple to complex, concrete to abstract, known to unknown, knowledge to application etc.

The learning needs to be structured in succession of steps so that the learners would master each step in sequence until the entire sequence is learned.

Immediate feedback should be provided to the learners after each assessment activity to reinforce their achievements and to suggest them, if any corrective actions are required. The responses that are rewarded or reinforced properly are likely to be repeated by the learners.

D. Cognitivist Theories of Learning

Learners must receive the information in the form of sensations before they can perceive and process the information. So, such instructional strategies should be used which exploit maximum sensory inputs. These are very much crucial for the subjects like 'Food & Beverage Production'

Students should be asked some questions in the beginning to test their previous knowledge regarding the topic. This will help them to recall the pre-requisite knowledge, get motivated to learn further and organise the new knowledge with already existing knowledge structure in their mind.

Various items of a lesson should be organized into an information map providing overview of the lesson.

The processing of the information could be improved by using Mnemonics. Mnemonics are strategies used by learners to organize relatively meaningless input into more meaningful images or semantic contexts. For example, VIBGYOR reminds us the various colours of the rainbow.

Learning materials should provide variety of activities suiting to the different styles of learning so that learners can choose the suitable activities according to their learning styles.

Learners should be provided opportunities for utilising their metacognitive abilities in the form of self check questions, collaborating with other learners and reflecting on one's own learning.

E. Constructivist Theories of Learning

Learners should be kept active throughout the learning process with the help of meaningful activities so that learners can create personalized meaning of the concept.

Learners should be provided opportunities to construct their own knowledge by utilising various types of interactions like learner-teacher, learner-learner, learner-content etc.

Learners' critical thinking and inquiry should be promoted by asking them thoughtful, open-ended questions in discussion group, and they should also be encouraged to ask questions to each other.

Time and opportunities should be provided to the learners to reflect and internalise the knowledge. They can maintain a learning journal to enhance reflection and processing of information.

Meaningful examples, assignments, projects etc should be provided to help the learners to apply and personalise the knowledge. (Ally, 2008)

F. Experiential Theories of Learning

Learners should be encouraged to directly involve themselves in the experience, in order that they gain a better

understanding of the new knowledge and retain the information for a longer time.

Learning should be supplemented with the provisions of activities such as internships, practical, on the job training etc. It provides a bridge between learning in the classroom and learning on the job.

Activities like team work, project work, which would involve the learners to experience the application of the concepts learnt, should be planned.

G. Future Perspective of Teaching-Learning Strategies for Hospitality Management Education

Some of the futuristic trends in Hospitality Management Education gaining attention now days are being discussed below in brief:

H. E-Learning Strategies

This is one of the novel topics that require a separate research. E-learning involves the use of internet technologies to deliver a broad array of solutions that enhance knowledge and performance. It can also be defined as instruction delivered on a computer by means of a CD ROM, internet or intranet. E-learning aims at empowering students to become genuine partners in learning (Shayya, M.). E-learning is frequently technology-led rather than theory-led. By drawing upon the elements of environment, learning activities, multisensory exposure, emotions and forms of intelligence, it appears that e-learning design can be used so as to offer learners more holistic learning support. The fusion of e-learning, underpinned by the theories of experiential learning, should enhance the integration of pedagogy and technology. Carefully applied, experiential e-learning (E² learning) offers multiple permutations for stimulating and deepening learning. (Beard, Wilson & McCarter 2007)

E-learning for tourism and hospitality graduates helps develop interpersonal skills, acquire challenging knowledge through knowledge networks, become ICT and information literate, and develop an attitude towards continuous professional development.

I. Learning through Benchmarking

This requires seeking best practices by comparing performance in order to improve it. Benchmarking reinforces student-centred learning and problem based techniques in tourism and hospitality education. The concept of learning can still take further connotations through benchmarking for hotel management organizations to exploit competitive advantage (Shayya, M.). Many institutes of international repute and instructional strategies adopted by them could act as benchmark for professionals related to hospitality education in India.

J. Specialized Internship

Wolff (1997), found that one of the best ways for the education system to keep up with the industry's demand is specialized internships. The internships enable concept attainment while exposing students to response-based work environments and industry methods. Most of the recruiters

think that majority of the skills are best learned in on-the-job setting and the industry should assist hospitality education in developing curriculum content (Miranda, 1999). Specialized internship provides opportunities to individuals who want to master the area of their interest, thereby bringing learner-centered and contextualized focus to the hospitality education.

VII. CONCLUSION

We cannot tie hospitality management education to one particular pedagogical theory. From a pragmatic point of view, educationalists find what works and use it. We must allow circumstances surrounding the learning situation to help us decide which approach to teaching and learning is most appropriate. On the basis of above discussion, we can draw out some of the pearls from the vast sea of pedagogical findings that can enhance the qualitative splendour of Hospitality Management Education.

B. Curricular issues

Institutions and industry should consider the following:

Hospitality educators need to evaluate and review the curriculum to enable the graduate to meet the expectations of industry and the process of globalization.

The hospitality industry must work with educators to deliver the curriculum content that should meet the current and future needs of the firm, industry and individual career of their employees. It is strongly recommended that hospitality education should focus on the curricular content meeting the contemporary needs of industry, and industry should assist education to develop educational programming that could in turn limit training costs and operational costs. (Miranda, 1999)

It is also recommended that hospitality education should focus more on employable skills as part of their curriculum development. These skills are needed by graduates when entering the industry; hence these must be inculcated among students as part of the educational experience

C. Strengthening the Delivery Mechanism of Hospitality Management Education

According to Barron, Watson & McGuire (2005), educational providers are facing a number of key changes that are focusing attention on efficiency in relation to delivery methods. New opportunities offered by information technology could facilitate major change in delivery of education, providing greater flexibility for learning (Litteljohn and Watson, 2004). There should be flexibility of provision, choice and delivery mechanisms within a clear and transparent funding system. This should be done through effective partnerships of private, public and social sectors with greater coherence and collaboration at local levels. Some of the suggestions for strengthening various foundation elements of delivery mechanism are summarised below:

D. Effective Teaching and Learning Methods

The educators should use innovative, flexible and creative teaching methods and techniques like problem-solving, case

studies, discussions, brainstorming, role playing, group work, projects etc. The program should ensure teaching and learning in electronic environment which highlights usage of Information Technology and multi-media. The link with e-learning cannot be underestimated as it can provide support and opportunities in new and innovative ways. With the use of technology hospitality administration will be able to serve customers quicker and more effectively.

The students should be engaged in activities that relate to the profession and inculcate various employable skills (collaborative, inter-personal, leadership, communication, IT skills etc). This requires proper provisions of internships, student organizations, community initiatives, student-projects, collaborative learning and technology enabled learning.

Internship or on-the-job training component should be strengthened with enhanced cooperation between the training provider and employer; and requires proper division of roles suited to individual circumstances. Work-based training should be flexible and responsive to trainee and employer needs alike with suitable opportunities for specialization.

Diversified delivery mechanism should be adopted by introducing multiple instructional strategies suiting the different learning styles to strengthen the learner-centred focus in hospitality education.

The continuous improvement in the delivery mechanism should be ensured by setting quality benchmarks.

E. Changing roles of Teachers

While acknowledging that learning is ultimately the responsibility of the student, Dehler, Welsh, & Lewis (2001) argue that the task of the educator is to create a space in which learning can occur. So, the role of educationalists and course providers in the learning process is also important. Technology has changed the perception of the teacher, now the teacher becomes a facilitator, a guide (Wolff, 1997). Wolff also adds "Not only does technology suggest a continuous improvement mode; it frees educators from the demands of so-called expertise to spend time investigating and suggesting solutions for the industry's challenges" (Miranda, 1999). Teachers should strive for continuous professional development by taking up online study or distance learning, attending workshops, seminars, conferences, summer schools or meetings (of learned societies), training programmes and also by taking up short term courses.

F. Physical Infrastructural Support

The delivery mechanism needs the support of proper infrastructure for its fortification. So the hospitality programs should provide the necessary facilities for experiential learning in food and beverage, housekeeping, property management or design etc. The laboratories should be well equipped with the required and up to date instruments and equipment. The laboratory sessions should be supervised by qualified instructors. The staff member responsible for the practical work should be available for students' enquiries. The program should have a carefully

constructed, functioning, and monitored plan for the continued maintenance, replacement, modernization, and support of lab equipments and related facilities.

The program should ensure that the library collection reflects a systematically planned and current program acquirement and response to faculty recommendations. The references for literature review required for students should be available in the library. Internet services and an electronic library should be offered in the library for staff members and students. The books and periodicals present in the library should be well documented and an easy electronic search needs to be available.

Lecture rooms should be well equipped with the necessary tools for teaching (LCD projectors, computers and others). They should be comfortable for students and have adequate capacity.

A hospitality program should ensure that software packages & information systems related to the field of hospitality are properly offered. Adequate number of computer laboratories should be available for students. Wide bandwidth internet services should be made available for staff and students with proper intranet connections. (Kaissi, Chahine, & Jammal)

G. *New Horizons for Hospitality Management Education*

This paper stressed the necessity for a paradigm shift from traditional didactic teaching styles to more dynamic ones which focus on student-centred, contextualized, practical-oriented, skill based flexible forms of teaching-learning strategies with a purpose to equip the students to have a strong capital of professional skills and thus gain a cutting-edge advantage in today's competitive world.

E-learning strategies, structured & specialized internship with active involvement of all the stake-holders of hospitality sector, and benchmarking for ensuring continuous improvement are the emerging areas of interest in Hospitality Management Education which require further research and elaboration.

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Interface between Corporate Vision, Mission and Production and Operations Management

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GJMBR Classification

FOR: 150307,150399

GJEL: D24

Abstract- There are compelling reasons for organisation to develop strategic vision. It stimulates organisations mission and challenge employees. In addition corporate mission statements which are fundamental unique purpose that differentiates a firm, sets the organisational context for strategic decisions. The task for production and operations management is to relate the corporate mission and vision statements to the operating characteristics of the production process. This paper argues that corporate vision should inform mission statement and that a future compelling picture of production and operations activities should inform both. It is suggested that exploring and developing the company's operating system for competitive advantage is a product of vision and mission alignment and comprehension. This indicates that a faulty or poorly defined vision or mission statement could inhibit the conduct of production and operations management activities and promote enterprise failure.

I. INTRODUCTION

The definition of corporate vision and mission statement is a task that can easily be slighted in the strategic management process. Some corporations do not have a vision or mission statements or merely take both to mean the same or are quite unclear in their definition of both statements. But the critical roles of both the vision and mission statement in providing and guiding the framework for managerial actions indicates that listlessly defining or slighting the task of defining these statements could be counter-productive. For example, in the absence of well articulated vision and mission statement provision of unified direction for the corporate geographically scattered employees will be quite difficult. In addition, providing a basis for a culture that guides future executive action will be absent.

Therefore, the task of defining a picture of the company's destinations, setting forth the future roles and objectives of the organisation and the fundamental unique purpose that differentiates and link the organisation with the society are not to be taken lightly. This effort requires serious attention and should be systematically determined. The issues are central to production and operations management in that corporate vision and missions articulate the long term intentions, dreams and aspirations of owners and strategic decision makers; and set the sail for business operational activities. This paper, therefore, is intended to explore and establish the interface between corporate vision, mission and

production and operations management. How the vision and mission statement provides the framework for management of physical operations, manufacturing and services.

II. CORPORATE VISION

A corporate entity needs a vision because ‘‘ where there is no vision, the people perish...’ (Proverb 29: 18). This quotation from the holy writ aptly captures the essence of vision both at individuals and corporate level. Vision is important in that it guides and perpetuates corporate existence. Vision is viewed as a mental picture of a compelling future situation. It originates from creative imagination, the act or power of perceiving imaginative mental images or foresightedness.

Corporate vision could be thought of as related to intuition. This is, however, not to eliminate other sources of corporate vision. Corporate vision can be associated with external agencies imposition of strategy or vision and, they can be deliberately formulated as part of planning process (Johnson, Scholes and Whittington 2006). Indeed, some writers have pointed out that the role intuition has been neglected (Hurst, Rush and White, 1989). Such downplay seem to neglect reality as Hurst et.al argued that setting new business ventures turnaround and new strategies are the products of creative inventory management rather than detailed planning.

Notwithstanding the process leading to the emergency of vision, from strategic management perspectives, corporate vision creates a picture of a company's destination and provides a rational for going there(Thompson, Gamble and Strickland,2004) -Somewhat of a roadmap of a company's future. Essentially, corporate vision represents the dreams, wild aspirations of the company as may be stated by the top executives or founders of the organisation.

Corporate vision is the desired future state of the organisation; an aspiration around which a strategist might seek to focus the attention and energies of the organisation (Johnson, et.al, 2006). And, in the words of Bennis and Nanus (1997) strategic decision makers or founders must first have developed a mental picture, a mental image, of a possible and desirable future state of the organisation. They emphasised that the critical point is that a vision articulates a view of a realistic, credible, attractive future for the organisation; a condition that is better in some ways than what now exists. Corporate vision delineates management aspirations for the business, providing a panoramic view of where are we going and why?

Consequently, the vision statement should be a necessity and a useful management tool for giving an organisation a

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sense of future direction for a viable corporation. A future direction that becomes real when the vision statement is implanted in the minds of organisations members (Thompson, et.al, 2004) and then translated into concrete mission or purpose for the organisation.

This demands the communication of corporate vision to decision makers and top level managers. It is only on this ground that they can be emotionally committed to making the vision a reality. The awareness of why, where and how the organisation and its competitors will be competing in the future creates a vivid image that provokes emotion and enthusiasm (Lynch, 2006; Thompson, et.al, 2004). Visions, in our considered opinion, indicate aspirations and the mission statements indicate tasks to be accomplished and their pursuits are in terms of specific corporate objectives, strategies and operating policies anchored in production and operations management capabilities.

A corporate vision is the corporate future picture. It is a challenging and imaginative picture of the future roles and objectives of an organisation, sometimes, significantly going beyond its current environment and competitive position (Lynch, 2006). It may, therefore, be a highly desired possibilities that may not be attainable. It is an inspirational resonance of desires, values and possibilities which overlap (Wootton and Horne, 1997). Bennis and Nanus (1997) however argued that there are compelling reasons for organisations to develop strategic visions. It is argued that visions provide desirable challenge for employees and stimulate organisations mission positively. In addition, it is suggested that exploration of new development areas outside existing boundaries and resources are often the product of a vision that requires careful explorations and development. Hamel and Prahalad (1994) have suggested that the relevance and appropriateness of a corporate vision statement can be judged on five criteria: foresight, breath, uniqueness, consensus and action ability. Reasoned considerations of these variables should help a visionless organisation to develop one. And, in the opinion of Lynch visions can lead to a purpose or engineer a change of purpose.

III. THE CONCEPT OF MISSION

Strategic decision makers need to determine the basic goals, characteristics and philosophies that key-in into the corporate vision. The purpose of the mission statement is to set the organisational context within which strategic decisions are made to provide the firm with a strategic focus and direction in the realisation of the stated or implied vision. According to Pearce II (1982) corporate mission is the fundamental unique purpose that set a firm apart from others of its type and that identifies the scope of its operations in product and market terms.

The mission statement distinguishes a corporate entity by defining the roles that the organisation is to play in the society. That is, the particular need(s) of the society for which the organisation exists to serve. Thus, the mission statement defines the basic reasons for the existence of the organisation. And, as suggested by Kazmi (1996) it serves to link the organisation to the society. Therefore, a formal

mission statement answers the question of any venture such that any discerning outsider can come to term with what business the business entity is in and what are the reasons for its being. A clear definition of corporate mission and purpose is, therefore, essential for effectively establishing objectives and strategy formulation. That is, the corporate mission is a foundation for corporate priorities, strategies, ideas and assignment.

IV. DEVELOPING MISSION STATEMENT

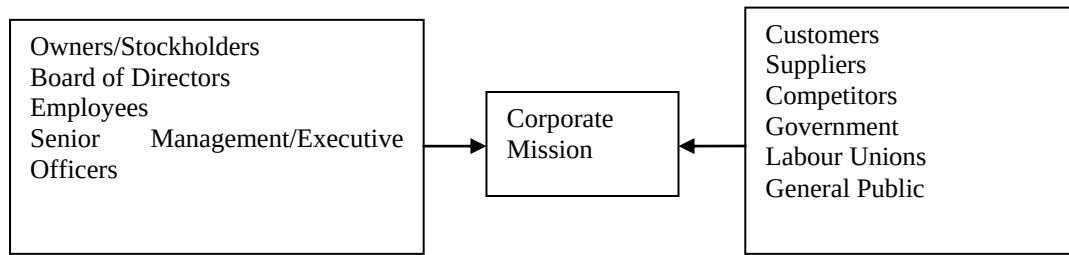
It has been suggested that clearly defined missions are essential for the well-being of an institution (Drucker, 1973). Indeed, extant literature suggested that institution without clear goals may be subject to both external and internal pressure than institutions with clearly defined missions and goals (Perrow, 1970). The importance of corporate mission statement notwithstanding Pearce and David (1987) posit that no empirical research has been published as guide to corporate mission statement development. However, from the examinations of corporate mission statements available evidences indicates common attributes of the mission statement. From the works of Pearce (1981); Pearce and David (1987) the mission statement describes corporate purpose, customers, products or services, market niche, area of operations, business philosophy and basic operative mechanisms.

In addition, the corporate self concept, desired public image and core technologies to be adopted are key component of the corporate mission statement. The unsatisfied needs of customers must be anticipated and incorporated into the corporate mission. Blunt perceptual ability in specifying key component of the corporate mission in such manner that incorporates customers' future needs can be inhibitive- an inhibiting factor in adapting to changing external environment (Fjortoft and Smart, 1994). The case of the US rail road is a classical example. Railroads defined their industry wrongly and became product-oriented instead of customer-oriented, that is, they were railroads-oriented instead of transportation-oriented (Levit, 1960). This constrained railroads ability to respond to the market through managerial inventiveness and skill which could have secured growth for the enterprise. The lesson drawn from the rail road experience is the need not to focus on a product or service.

The escape route in developing a meaningful mission statement is a focus on the utility of the company's product to customers. However, there is the need to avoid "pious platitude" as it is suggested that most corporate missions are abstract and consist of pious platitudes often formulating necessities as objectives (Ackoff, 1987). A well developed corporate mission must differentiate the company from other of its type and relevant to all the relevant stake holders. The relevance of the mission to claimant is the extent of the incorporation of their interests in the firm's

Mission

must be recognized and acknowledge in the process of developing a meaningful and enduring mission statement



Adapted "The Company Mission as a Strategic Tool" Pearce
II, J.A. Sloans Management Review Spring 1982

V. CORPORATE VISION AND MISSION

Admittedly, a number of corporations took their vision and mission statements to mean the same thing while some have both a written mission and vision statement. It is important in this context, however, to understand the difference between the corporate mission and their visions. Vision in one breath is the future picture of the organisation while the mission statement describes the role that the organisation chooses to adopt based on current situation. Indeed, the mission statement clearly answers the question what is the corporate business?" the vision statement answers the question "what the corporate entity want to be"

The concept of vision and mission is clearly distinguished in the advertised slogan of a Nigerian bank: "Twenty years ago we have a vision, Today, we have a mission" This advertised slogan aptly demonstrates the relationship between corporate vision and mission. Vision is a backdrop for the development of purpose. Vision should naturally bring about a sense of purpose and mission.

According to Wootton, et.al (1997) vision should inform the mission statement and be embedded in it. Visions, they insisted, must be realistic in the light other facets of the mission. Consequently, we can discern or infer from the mission statement the future business aspirations, expected changes in company's business and the direction the business is heading

VI. PRODUCTION AND OPERATIONS MANAGEMENT

Production and Operations management lies at the heart of organisations efforts to actualise the mission statement. Corporate visions and missions remain abstract pious platitudes until it is linked to societal needs and resources are assembled, deployed and utilised to deliver the mission in product and service format. Production and operations activities are concerned with the conversion of input resources into finished products and services (Banjoko, 2002). Put differently, developing the mission statement in product and service terms.

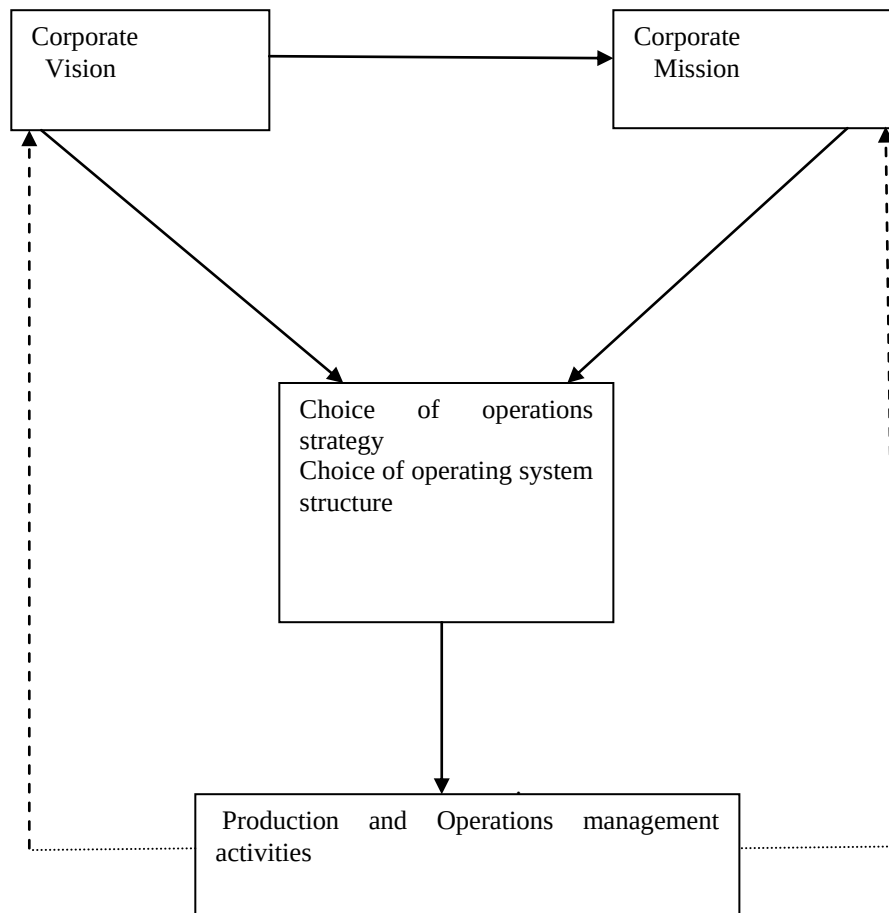
Production and operations management is concerned with all aspect of the management of physical operations, manufacturing, and services. The scope of production and

management extends not only to the refinement of control techniques or development of operations procedures but also to the effective selection, application and management of technologies. Essentially, production and operations management provides a link between operating decisions, policies and corporate mission as well as prescribe decisions and policies that could be adapted to maximise corporate competitiveness. Skinner (1985) argued that operations could become a formidable competitive weapon if allowed to play strategic role in the organisation

Indeed, one of the most difficult and important functions of production and operations management is that of relating corporate mission and objectives to the operating characteristics of the production process. Slack et.al (2004) argued that there are five operational performance objectives: cost, quality, speed, flexibility and dependability, for example, all these must be translated to operational characteristics of the production and operation system. The specifications of excellency in output in the mission statement demands, for example, determination of permissible percentage of defective in process output, product reliability, warrantees offered or in the service industry in terms of service time, waiting time, permissible number of customers complaints, among others.

Mission statements indicate the core technologies the organisation is to adopt. However, production and operations management influences the design of the production system for the delivery of the mission. The intervention measures are obtained through such means as product and process design, capacity determination, facilities location and layout, work design and measurement, among others.

Maximization of organisational competitiveness in the market is for most organisational a strategic component of the mission statement. The beginning point for such endeavour seem to be that production and operations management specifies and develop the general and engineering specifications for the output of the production process in form that places the organisational above competitors. In addition, determination of the organisations desired output rate (capacity determination) must address both current and future demand. Current operational capacities and development of capacities in future is an important operational device for organisational competitiveness



Modified and Adapted from Wootton, S and Horne T(1997) Strategic Planning : the Nine Step Programme

The interlocking nature of corporate mission and production and operations management can be depicted as below. Visions can lead to mission or engineering of missions while the mission statement sets the framework for production and operations activities through the design of operations strategy. Operations strategies represent the company's long-range plan for the production of the company's goods and services (Gaither, 1996). It is a road map specifying how the firm will employ its production capabilities to support mission accomplishment (Davis, Aquilano and Chase, 2003). Production and operations management through provision of information on existing operating system structure, objectives, and strategies and implications of goods or services and demand characteristics of goods or services being considered do influence corporate mission.

VII. MISSION STATEMENT AND PRODUCTION AND OPERATIONS MANAGEMENT

Implementations of the corporate mission statement demand the acquisition, mobilisation of resources and the creation of structures and processes. Three key elements of the mission statement, at least, have implications for operations and production management: the company's

basic product or service, primary market and core technologies for service and product delivery. Primary market to be served will indicate the nature and predictability of demand and the subsequent system structure that is feasible. In addition, operations and production emphasis is influenced by the broader corporate mission statement, for example, production emphasis and pursuit of customers' service and quality products is consistent with the specifications of mission statement. From the foregoing the company's mission statement provides the framework for operations and production management. Operation and production strategies are the means for translation of mission statement into concrete products consistent with the values and beliefs encapsulated in the mission defined. Operations and production strategies are themselves derivatives of overall operating strategies which are detailed statements of means to achieve objectives (Pearce II, 1981). Operating strategies, which are derivatives of corporate mission, specify how operations and production can achieve organisational goals within the framework of corporate mission defined.

The requirement of the company mission and vision statement will significantly influence production systems current and projected capabilities. According to Wild (1999) the mission statement declarations on the nature of goods or services to be provided, nature of market to be served and manner of service influences operations and production management choice of structure, choice of objective and production strategies.

VIII. SYNTHESIS AND CONCLUSIONS

From the foregoing, it is clear that corporate vision, mission and production and operations management are closely related. Organisations must have an imaginative future picture of the roles of its production and operating system consistent with the overall vision for the organisation. Harnessing resources, exploring and development the operating system in line of future compelling situations is a necessity for remain competitive.

Production and operations management achievement of operations objectives must make major contributions to the fulfilment of the organisation's mission and the pursuit of its vision. Corporate mission statement provides the framework for production and operations activities, notwithstanding, production and operations management influences strategic direction through provision of information on operating structure, objectives and strategies. This implication of this is the possibilities of re-defining corporate mission and vision through creative development and explorations of the potentials of the company's operating system

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Collaborative Networks, Social Capital And Relationship Marketing: Competitive Divergences, Convergences And Unfoldings

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GJMBR Classification (FOR)
150503, 150502, 140104, 140102

Abstract: The objective of this article, through an ample bibliographical revision, is to construct links between the areas of the knowledge that deal with the subjects as collaborative networks, social capital and relationship marketing, approaching concepts as cooperation, contribution, confidence, relationships and exchanges of values. As result, the present study demonstrates the complementarities between the concepts in the different fields, establishes the utility to approach the complex systems with a ampler specter of analysis tools that make possible the communication beyond the borders of the established knowledge, and open an interesting agenda of future researches that allows verify the creation of value in the interior of networks of companies, being surpassed the financial aspects and of regulation and including the context social that involves the networks.

Keywords-Collaborative Networks, Social Capital, Relationship Marketing.

I. INTRODUCTION

World-wide the economic order has pressured the organizations around of the world to seek new alternatives to compete face to the challenges of the global economy, what implies in the adoption of a systematic of simultaneous competition and cooperation (BENGSTON; KOCK, 2000). These pressures on micro and small companies evidence the necessity of structural changes in the business-oriented concepts, mainly the relational ones, and this denotes the necessity in such a way to create and to keep structural strategies guided by contextual values of the technical environment of the institutional one. In the relation scope, the concept of cooperation appears, that accord Pires et al (2001), it is supported in the perception of that a company is not isolated in its environment, but is part of an interdependent world. In terms of complex organization, the format of collaboration networks it comes being an alternative so that these companies, due the synergy formed in virtue of its association, reaching a bigger potential of exploitation of the chances of the marketing environment. That is corroborated by Amato Neto (2000) that states the necessity of the companies on account to

pressing to have flexibility, to improve abilities, to generate develop quick answers to the requirements of the market and the competitive pressures. For in such a way, one becomes technological and management qualification, to keep the access to the market and to be in tune with the international changes. For micro and small companies this is, many times, a too much including roll of abilities that does not allow them to act separately, emphasizing the increasing importance of the inter-companies and inter-institutional relations.

In relation to the reasons that take the companies to cooperate between itself, Amato Neto (2000) points out as associative advantages: to combine abilities and to use know-how of other companies; to divide the responsibility to carry through technological research, sharing the acquired development and knowledge; to share risks and costs to explore new chances, carrying through experiences in set; to more offer a line of products of diversified superior quality and; to exert a bigger pressure in the market, being increased the competitive force in benefit of the customer; to share resources, with special it has detached to that are being underutilized; to strengthen the purchase power and to get more force to act in the markets where the companies are inserted - what is called by Schmitz (1996) of collective efficiency, and to Piore and Sabel (1984) it represents a paradigm of the flexible entailing of ability relations objectifying broader markets.

The inter-organizational relations appear from small informal agreements and, initially, demand little trust, a time that the involved risk is low. These transactions repeat themselves with passing of the time and they normative themselves, informally, by means of the fairness and of the efficiency. This is an increasing process to trust resources and expectations cycles of a relation in terms of inter-organizational cooperation, increasing the trust of the parts through the previous interactions. If these will be perceived as being efficient and equitable, is increased the probability of that the parts want to effect, in future transactions, riskier and significant investments (RING; VAN OF VEN, 1994). However, the construction of these relationships has supportive by the trust, a delicate process of construction that it intends to level the behavior of the participants. To perceive that a partner trusts other starts to be more important of what the trust existence. When a partner

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perceives that the other attributes trust to it, is more easy the creation of a cycle of reliable construction (THOBEN; JAGDEV, 2001).

It points out, however, that despite the advantages already observed in this type of approach, such as the scale gains and market power, provision of solutions, learning and innovation, reduction of costs and risks, social relations and leadership opportunities (VERSCHOORE; BALESTRIN, 2006; BARCELOS et al, 2007), it is imperative that the social capital is present in the foundation of these relationships.

Social capital here is defined as the value of the social networks between people and organizations - characterized for trust, cooperation, involvements and information sharing - that constructs the capacity to decide problems and to reach goals in mutual benefit (SCHUURMAN, 2003; KRISHNA, 2004; MANSUTI; RAO, 2004). The social capital of an organization can be esteem by intermediary of the evaluation of its social network, which is defined as a map of the relationships between linked individuals for diverse familiar bows of familiarity that they vary since the relation of cause until the contractual association (BARNES, 1954).

Relationship Marketing, that in accordance with the economic paradigm that reigned approximately in practical the marketing ones per three decades, occupied of the existing relationships in dual relation purchaser-salesman with sights to the maximization of value and reduction of the transaction costs, each time more extends its target of form to include the networks of companies and to consider different actors and its multiple interactions, what Gummensson (2002) it calls total relationship marketing.

The objective of this article, for intermediary of an ample bibliographical revision, is to construct bridges that establish links between the areas of the knowledge that they deal with the subjects, networks of companies, social capital and relationship marketing, approaching concepts as cooperation, contribution, trust, relation value of the relationships and relational exchanges.

II. THEORETICAL BACKGROUND

A. *The collaboration networks and the social capital development*

So that it is possible the cooperation between business partners, the opportunist behavior must be minimized. Axelrod (1990) says that the social relations limit the opportunist behavior in way that, limiting the opportunism, the social capital potencializes collaborative practices (COLEMAN, 1990). In this in case, the collaborative networks are the mechanisms for the development of the social capital, therefore they allow experiences of mutual aid (VERSHORRE; BALESTRIN, 2008), in the form of interaction and reciprocity. This model has the advantage to diminish the necessity of contractual procedures, that raise the costs and reduce the efficiency (RING; VAN DE VEN, 1994), to fight the opportunism (WILIAMSON, 1985), a time that the opportunist behavior will not be accepted by the network and the agent will lose its collective benefits

(SIDE BOYD; HANLON, 1990), what it would evidence a bigger cost for this type of behavior in the cooperation networks (GULATI, NOHRIA AND ZAHEER, 2000).

The class action, however, has its reasons in strategically and economic roots (PERROW, 1992), where the cohesion, the negotiation and the cooperation reign on the competition (RATTNER, 2003). The trust it is pointed as indispensable factor with respect to the cooperation between the inter-organizational relationships, therefore it is the guarantee of that the partners do not explore the vulnerabilities in the transactions (BARNEY; HANSEN, 1994; MCALLISTER 1995). It allows the people deals with high levels of uncertainty, making possible the understanding of interactions without controlling or anticipating the behavior of others, reducing the necessity of the formal mechanisms that diminish flexibility (LUHMANN, 1979). This demand, however one adjusted management of the relationships (HEIDE, 1994; KIM, 1999), therefore the people make emotional investments in the relationships that consider trustworthy, searching to reach a period of training where they do not need or they want evidences you add to trust (LEWIS; WEIGERT, 1985).

B. *Cooperation*

The cooperation between companies or inter-organizational relations got prominence from changes in the competitive environment. To Wittmann (2004) the complex of relationships in a context marked for the information and technology had appeared, where isolated behaviors find each time little spaces. In this same line of reasoning, the enterprise competitiveness became complex due to influence of the global phenomena that affect the local organizations.

In this context, Lastres and Cassiolato (2003) detach that the formation of inter-organizational relations is characterized by the geographic proximity and generally meets "associated the historical trajectories of construction of identities and formation of territorial bonds (regional and local), to leave of a social, cultural base, common economic politics and representing, therefore, environments more favorable to the interaction, the cooperation and the trust between the actors".

In these regional environments, the cooperation networks occur in all the business sectors and between companies of some transports, being able to involve different degrees of in agreement cooperation the natures of the operations vary in relation to the intentions and objectives. As Barney et al (1996 apud BRAGA, 1999), it enters the reasons for the formation of alliances, are distinguished: to explore scale economies, to reduce the costs of entrance in new markets, to reduce the costs of entrance in new business-oriented segments, to learn with the competitors, to manage the uncertainty strategically, to manage costs and to share risks. However, although the advantages observed in function of the cooperation, it must, according to Morgan and Hunt (1994) the development of the used concepts as changeable mediating-key for the success of the cooperation nature that must be reached so that a relationship if establishes. This variability would be the commitment and the trust that represent mediators between a series of antecedents and a

set of resultants of the relationship. While the commitment represents the intention in keeping a relationship of long stated period, the trust is a basic requirement so that this relationship in fact if establishes, a time that determines the security of that none of the involved parts will explore the vulnerabilities of the other, since a relation of long stated period requires a sharing of information that eventually will exploit the fragilities of both the parts. The concepts of commitment and trust meet related e closely, in accordance with Morgan and Hunt (1994), the trust presents a stronger effect, a time that the intention to establish a relationship of cooperation, represented for the commitment, will not be accomplished without one definitive reliable level has been reached.

C. Cooperation networks

Bremer and Ortega (2000) define cooperation networks as being a group of companies what interact for the exchange of abilities, going beyond the pure relationship of purchase and selling.

According to New and Mitropoulos (1995), the network idea is important for presenting an alternative to the fatigue of the market against the economic hierarchy of the great groups. It enhances the natural stability of many commercial relations, providing a structure for the best understanding of the technological propagation by means of the practical ones, beyond promoting the profit of competitive advantage in small companies.

González (2003) when dealing with the question the cooperation between companies, salient that the main theoretical approaches on the subject are:

- (a) Costs of transaction, where the cooperation between companies reduces the opportunism of the hierarchy and prevails against the limited and uncertain rationality of the market. The initial benefit if finds in the reduction of the costs based on vertical cooperative agreements;
- (b) Strategically behavior, where the companies search to reach competitive advantages in the long stated period through the coo petition, mainly in horizontal agreements, that is, between competitors;
- (c) Organizational approach, where the horizontal, vertical and transversal agreements produce organizational the learning due to the relations of exchange of information and knowledge, resources and qualifications.

The dynamics of the cooperation practically appears as an opposition of the perspective of the traditional competition. Research points with respect to the culture of the cooperation as one of the factor-key for the prosperity in the long stated period (FUKUYAMA, 1996; PUTNAM, 2002), mainly in the spheres economic and social (CASTELLS, 1999).

As Corrêa (1999) as Casarotto Filho (1999) agree that the birth, the development, the maintenance and, at last, the survival of the networks, depend on the quarrel and equation of three basic aspects:

- (a) Culture of the trust: on aspects to the cooperation between the companies, involving culture and the interests of people and companies. The social ethics and that one established by the group for are basic for the reinforcement

of the trust between the partners are the performance of the networks.

- (b) Culture of the ability: to recognize the essential abilities of each partner. Take together since technological aspects technician as the intangible ones, such as the processes in know how.

- (c) Culture of the technology of the information: to establish one mechanics of flow of information with rules in its depth and transparent, what it is vital to feed the network.

In 1996, Adam Branderburger and Barry Nalebuff had published the book Co-opetition, inserting the term in the field of the strategically administration, initially used to identify and you study the strategies of relationships between companies who search complementarity for its operations. According to Ghemawat (2000, p.43) who participates of co-opetition, is "participant of which the customers buy complementary products or services or for which supplying complementary products that sell".

However, the true intention of Branderburger and Nalebuff (1996) was to elucidate the room element of this chain of value, the proper competitor companies, forming the call value network, where the company if also relates with its competitors, starting to co-opetition. This vision brought a cooperative dimension to the competitive boarding and contributed mainly so that the complex relations of the competitive environment are understood better, in dynamic aspects as complementary, cooperation, adaptation and survival.

To Faggion (2002) three factors help in recent years to explain the success of the networks of micron and small companies in different economic scenes: the economies of scale by means of networks; the trust and the cooperation that coexist with the competition; e the state of social welfare caused by the increase of the efficiency of regional industrial sectors. The author emphasizes that the classic theories had neglected the economic power of these factors and that are related to the trust and the cooperation.

The advantages, according to Gulati et al apud Kosonen (2001), of the inter-organizational networks or networks of companies, they are summarized of the following form: strategically networks to provide an organization with potential access and socialization with the information, resources, markets and technologies, with advantages of learning and economy of scale, and allow that the companies reach its strategically objectives, sharing risks and extending to periods of training of the value chain and organizational functions.

D. Social Capital

In accordance with D'Araújo (2003), the social capital represents an innovative concept as for analyzes them of development, therefore express potential of a society in establishing interpersonal trust and networks of cooperation with the objective to produce good collective. It stops Tsai and Ghoshal (1998), the term was originally used in the description of the relation, involved resources in individual bows, used for the development of individuals in the social community of the organizations. However, the target of the concept comes if extending, accumulating of stocks aspects

of the society, in the form of the relations inside and outside of the family (COLEMAN, 1998), and relations intra and inter companies (BURT, 1992).

As Milani (2004), the term social capital mentions the association to it where the pertaining capital to a collective or community, is shared, not being of private property. It stops Putnam (1993), the term mentions the aspects to it of the social organization - networks, norms and bows reliable - that they act as people who become things easier of coordination and cooperation for the search of mutual benefits. In accordance with the author, still mentions itself to the connections between the individuals, for way of norms of reciprocity and resultant social networks of the trust between the same ones. The engagement emerges of the resultant interaction, aiming at a common benefit. To Grootaert and Van Bastelar (2002) still can be understood as the capacity of interaction of the individuals, its potential of interaction with around and the capacity to recognize new behaviors, intentions, values and abilities.

In agreement with Krishna and Uphoff (1999), two types of social capital, the structural one can be observed, of external character, that as determines the functions in the interior of structures based for rules and procedures, as the networks, facilitate to the flows of communication and class actions; and the cognitive, of internal character, that if they relate to the sharing of the beliefs, norms, values and trust between the members. It stops Rattner (2003), the capital one helps to keep the social cohesion, to establish negotiations at the moments of conflict and to the maintenance of the cooperation on the competition. It bases itself on the fact of the social actors to possess obligations and expectations in common and, therefore, to search to establish relations, stimulating the trust to speed the flow of information.

Social researchers had started, recently, to around investigate the social capital in diverse communities of the world. They have used, frequently, the concept of social capital considered by Robert Putnam as starting point, that is, the notion of social capital as the "characteristics of the social life - networks, norms and trust - that they qualify the participants to act in set of form more effective to pursue mutual objectives" (PUTNAM, 1995, p. 67).

E. Trust

The inter-organizational relations of cooperation, to Ring and Van de Ven (1994), they appear, only they grow and if they make solid with passing of the time, as a consequence of individual positions and recognition of these on the part of the too much actors of the network. Three forms exist for which the individuals affect a inter-organizational relation of cooperation: defining on degree of uncertainty to the change; specifying the interpersonal reliable extension for the conflict resolution; e defining expectations of waited results. TomWitmann et al (2004), frequent obstacles in the relations in enterprise networks are the individualism, the diffidence, the lack of engagement and the inefficient communication, among others. In the enterprise way, Das and Teng(2001) and Nooteboom (1996) differentiate trust as: trust based on the ability (competence trust) and trust based on the intention (goodwill trust). Nooteboom (1996)

observed that trust can become related with the ability of the partner in carrying through definitive in agreement performance the waited one, or its intentions in making this. The first described reliable form is based on the capacities (competence trust), while second, in the intentions (goodwill trust).

The literature of administration and sociology, according to Ring and Van de Ven (1994), presents two visions reliable: the vision of business risk, according to which the parts, by means of contractual formalizations, guarantees and mechanisms of security, creates safeguards that they regulate the business relations; e the vision of the good will, that emphasizes the faith in the moral integrity and objective common, that is produced by means of interpersonal interactions that they direct for partner-psychological bonds of mutual norms, feelings and friendships when dealing with the uncertainty.

In this context, the trust must be constructed throughout the time (JARILLO; STEVENSON, 1991; PARK; UNGSON, 2001), therefore characteristic basic as honesty, disposal and effectiveness, they are only perceived and after agreed to a long period of relation (LAJARA; LILO; SEMPERE, 2002). The trust starts to be constructed in the beginning of the formation of the network (HOFFMANN; SCHLOSSER, 2001), depending on what the partners, unilaterally, demonstrate with regard to the future commitment, idiosyncratic investments in the partner, sharing of information and you safeguard in the figure of a contract (DYER, 1997).

To establish trust between the partners is, certainly, the cited factor more in literature as prerequisite for the cooperation (HAKANSON; KJELLBERG; LUNGREN, 1993). The companies, represented for people, must want using to trust and to desire to trust its pairs (WALTERS; PETERS; DESS, 1994); without trust it does not have engagement and, as result of this lack of trust, the network will possibly go to fail, exactly that the objective is logical and beneficial for the partners (CULLEN; JOHNSON. SAKANO, 2000).

To Luhmann (1998), the trust is a social mechanism that allows the individuals to manage the uncertainty with increasing tolerance in a natural concurrencies behavior in the enterprise way. By this, the trust is seen as a form to legitimize the social relationships integrating the enterprise partners, the one that goes beyond established legitimately for norms and the written values. Cummings and Bromiley (1996), in agreement with the too much authors, they affirm that the main argument on the importance of the trust says respect the minimization of costs generated by this, through the reduction of opportunist behaviors in the work relations. Still according to authors (CUMMINGS; BROMILEY, 1996), the trust has left of an individual belief based by the perceptions of the dimensions affective, cognitive and intentional that is, the trust is as the human being feels, thinks and intends to act. This individual belief constructs the common belief: the perception that the too much parts of the group act of good faith, with honesty, in the relationships. These perceptions represent antecedents of the trust, for the agreement that the partners do not search extreme advantages on the others, despite the chance

appears. This reliable definition is summarized, then, to the effort to act of good-faith, with honesty in the exchange and limited opportunism (WILLIAMS, 2001).

F. Relationship Marketing

In a seminal article, Parvatiyar and Sheth (2000) had considered at great length to trace it the conceptual field of performance and bases of marketing of relationship, as well as describing the occurred paradigmatic changes in the theory of marketing that they had lead to the emergency of marketing of relationship as a thought school. To undertake this important task, the authors evaluate a diversity of perspectives adopted for a series of authors throughout the time, since narrowest and functional until most including and paradigmatic.

Amongst the limited and functional perspectives more it is possible to cite the identifications of marketing of relationship with database marketing e retention of customers, elaborated for Bickert (1992) and Vavra (1992). Other authors still present a definition of relationship marketing as a combination of the previous approaches, that is, the integration of database marketing with the retention of customers in long stated period (SHANI; CHALASANI, 1992).

The perspectives amply supply a more strategically vision of marketing of relationship, modifying the paper of marketing to manipulate the consumer for a genuine engagement of this, for intermediary of the communication and the sharing of knowledge, as it is the case of the approaches of McKenna (1991) and Berry (1983).

One of the main changes of perspective brought for the theoreticians of marketing of relationship it consists of the distinction carried through between exchanges you do business and relation exchanges (GRÖNROOS, 1990; MORGAN. HUNT, 1994). While the classic boarding of marketing if it guided for the call telling and selling, the orientation of the relationship marketing if return them directed activities to establish, to develop and to keep lasting relationships.

Regarding the question of the relationship, El-Ansary (1997) it raises an interesting referring question to the difference enters marketing of relationship (relationship marketing) and relationships of marketing (marketing relationships) that, according to author is more than what mere semantics, being related to the different natures and specificities of one and another one. According to definition of El-Ansary (1997), while the relationships of marketing they can assume any form, including concurrencies relationships or of rivalry, the relationship marketing possess a different specificities, with focus directed to the cooperative and collaborative relationships between an organization and its consumers and, or others stakeholders.

A common aspect to all the different definitions elaborated for the diverse authors who if had dedicated to establish the conceptual beddings of marketing of relationship (ADLER, 1996; ARNDT, 1979; GRÖNROOS; GUMMESSON, 1985) if it relates to the recognition of the development and

maintenance of the relationships as a process and, more specifically, as a destined process to create and to increase the economic value of the relation exchanges for all the involved parts in the relationships.

This is, without a doubt, an important change of paradigm in relation to the classic theory of the marketing. As already she is widely recognized, as much the theory how much the practical ones of marketing they must its origin to the economic thought, motivated, over all, for the disinterest of the economists in the details of the behavior of the markets and in the functions of the intermediate (PARVATIYAR; SHETH, 2000).

G. Networks of Relationships and Competitive Advantage

Macadar (2004) develops a sufficiently including understanding regarding the factors that generate competitive advantages for the organizations and, amongst them, on the played role, specifically, for the network of relationships as generating source of these advantages. The traditional economic perspective of marketing classic establishes that the competitive advantage of one determined organization is decurrently of the resources and capacities that belong and are controlled for an only company. With the emergency of the global markets and the closing of the competition, many organizations are not capable of, separately, mobilizing the necessary resources to the competitiveness in this new scale business-oriented. Of agreement with diverse authors (HUNT; MORGAN, 1995; DYER; SINGH, 1998; JAP, 1999; SRIVASTAVA; FAHEI; CHRISTENSEN, 2001), many times these critical resources exceed the borders of an organization and, therefore, productivity profits are possible when the organizations if make use to effect idiosyncratic investments and to combine its resources of only form.

As defined for Hunt and Morgan (1995), resources are tangible entities and intangible that allows that a company establishes it offers of value for the market. If these rare resources will be e, or only, it can be said that the company enjoys of a competitive advantage. This means that a comparative advantage (ownership of only resources) can be converted into competitive advantage (it offers only of value for the market). Under certain conditions of competitiveness, structure of the market and necessities of the consumers, relationships can be a generating resource of competitive advantage, a time that allow that a network of companies mobilizes resources that, of another form, none of the organizations in the interior of the relation would be capable to agglutinate if it competed on account proper. A sustainable competitive advantage can be defined as the implementation of a strategy of value creation, on the part of an organization, that is only difficult e to imitate for the competitors. This definition implies the installation of that a sustainable competitive advantage must be seen since an external perspective.

Of this definition it is inferred, also, neither that nor all the resources of a company possess the potential necessary to generate sustainable competitive advantages. It stops Barney apud Hofmann (2000), only the resources that present the rarity attributes, value, incapacity to be imitation and

incapacity to be substituted can be considered as sources of sustainable competitive advantages.

To the opposite of the physical resources, financial and human, that can be bought or be dislocated, the process to construct relationships of long stated period is difficult of being reproduced by other actors. Resources as loyalty, trust and reputation are intangible and constructed throughout the time and, therefore, they are possible sources of if transforming into sustainable competitive advantages, of agreement with the perspective of the attributes of Barney apud Hofmann (2000).

H. Networks of Companies and Marketing of Relationship

According to Pereira (2004) for intermediary of the analysis of some authors it is possible to affirm that the focus of attention of marketing it is passing for alterations of a microeconomic paradigm with emphasis in the competition and the relation exchanges for a politician-economic perspective that visualizes the organizations as social, dynamic, adapted systems and internally differentiated in which the relation exchanges between organizations prevail. To Grönroos (2000), this approach of interaction and networks for the management of relationships originate in Sweden, with IMP Group, according to which the networks of companies form a dominant concept and the relationship a sub-concept that explains the development and the management of the networks. The Swedish School brings for the target of marketing of relationship new elements that, according to its integrant ones, are equally important and interdependent. This element-key is: actors, activities and resources. Of agreement with this approach, the actors are defined by the activities that they play and the resources that control, being connected to the too much actors saw resources and activities, as represented in Picture 1.

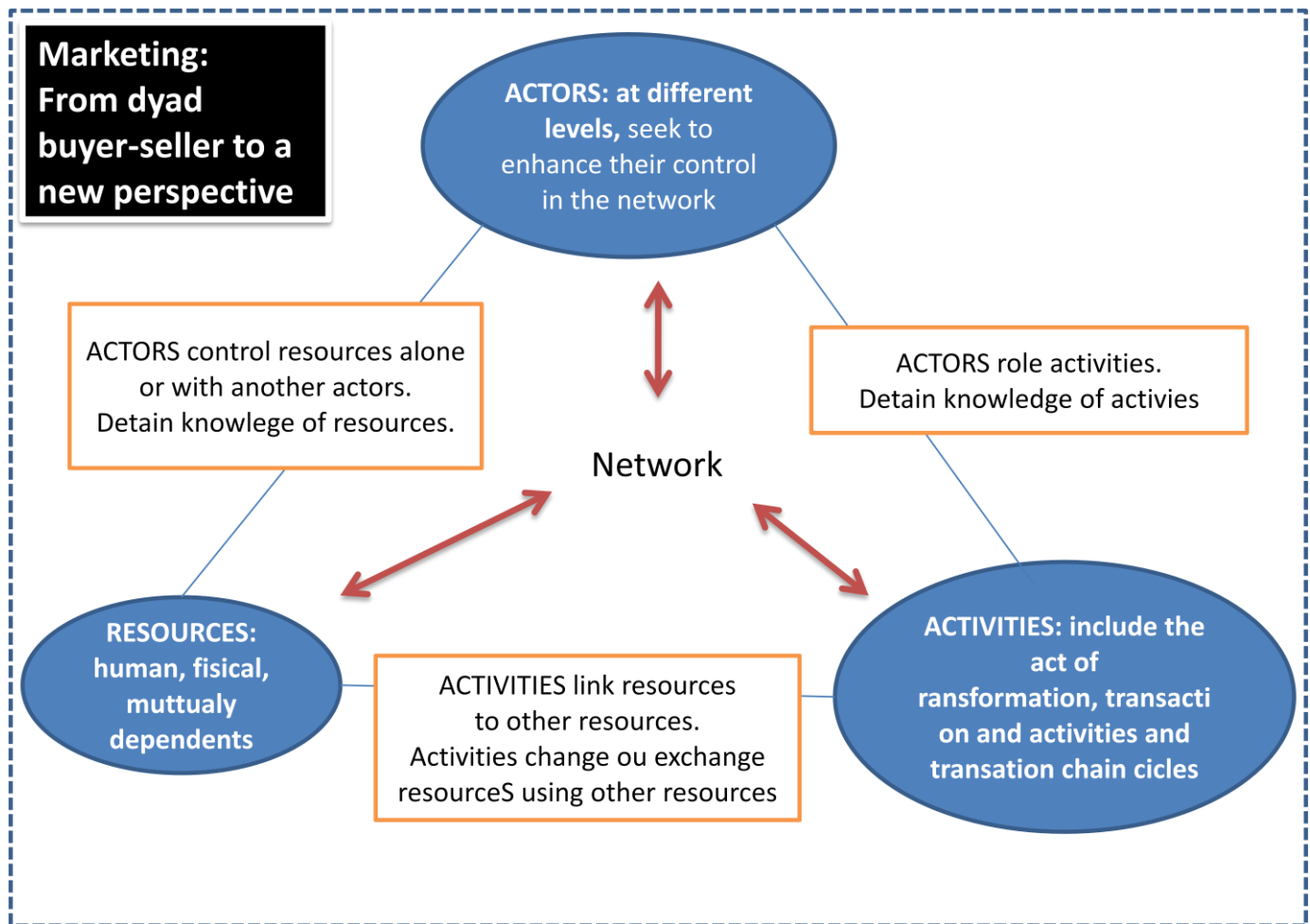
As if it can perceive clearly in the figure above, the relation aspect is extremely significant in this model. Thus, the relationships between the different actors provoke changes in the networks. This model modifies the focus of conventional analysis of the relationships, of dual for the indirect impacts of the relationships, as well as the effect that the system has on the individual relationships.

To Pereira (2004), this relation approach of networks is methodological, contributing for the analysis of the connectivity of some partners, in such a way internally how much in the relationships that surpass the network, as with the final consumer, for example, of form to understand the effect of the relationships between the actors of the network in the perception and satisfaction of the customers.

Consonant to this, Healy et al (2001), for considering the nature of the field of the confused marketing of relationship, they consider a classification system that it uses as base the context of the relationship and the number of participants of the exchange process, arriving at the following definitions:

- (a) Marketing of relationship: it understands only the interactions between purchaser and salesman;
- (b) Marketing of neo-relationship: it also considers others stakeholders, however it still understands the relationship as one dual;
- (c) Networks: it starts to consider, beyond the simple relationships (dual), for other actors.

This definition understands different approaches distinct proposals for authors and schools (DOSI, 1998; DOSI; TEECE; WINTER, 1992; HODGSON, 1998; NELSON; WINTER, 1982; NELSON, 1987), that they focus the cooperation as alternative for increase of the competitiveness level. In this context, to marketing of relationship the paper of manager of the relationships between the different actors inside and outside of the network would fit (value chain)



Picture 1: Model of networks: actors, activities and resourcesSource: adapted of Project ION (2002)

In this direction, the environment of work in networks, highly recommendable in the current competitive environment, requires on the part of the organizations the development of new abilities and management capacities, which can benefit of the discoveries and proposals brought for the field of the administration for marketing of relationship.

III. ANALYSIS OF THE RESEARCH

Objectifying to locate complementarities between the concepts in the different fields, one searched, on the basis of

the bibliographical revision, the construction of a map (figure 2) verifying the convergence between the concepts, of form to guide the analysis of the content. Limiting it the context of networks (FUKUYAMAM; PUTNAM. 2002), it was observed that the following categories had emerged: cooperation, trust, social capital and management of the relationships.

Of these, one searched to evidence the conceptual definition of the authors, in the measure where they contributed for the

formation of the central idea. What it is observed, is that Marketing of Relationship it emerges as boarding for the management of the social capital of the cooperation networks, and contributes for the increase of the collective efficiency and competitive advantage. The trust and cooperation are constructs closely on, in a relation where the reduction of the opportunist behavior is indispensable for the maintenance of a flexible relationship of long stated Period (Cummings And Bromiley, 1996; Barney And Hansem, 1994; Mcallister, 1996; Morgan And Hunt, 1994; Ring And Van Of Come, 1994). At The Same Time Where These Relations If Establish, The Network Constructs The Social Capital, In The Form Of The Organization Based For The Trust And Cooperation (Schuurman, 2003; Krishna, 2004; Mansuti; Rao, 2004; Putman, 1993). It Is Converged, Therefore The Management Of The Relationships, That It Aims At To Create And To Increase The Value Of These Relation And Collaborative Exchanges, Is They Intra-Organizations Or In The Relation With The Consumers Adler, 1966; Arndt, 1979; Grönroos; Gummesson, 1985; Grönroos, 1990; Morgan; Hunt, 1994, El-Ansary, 1997).

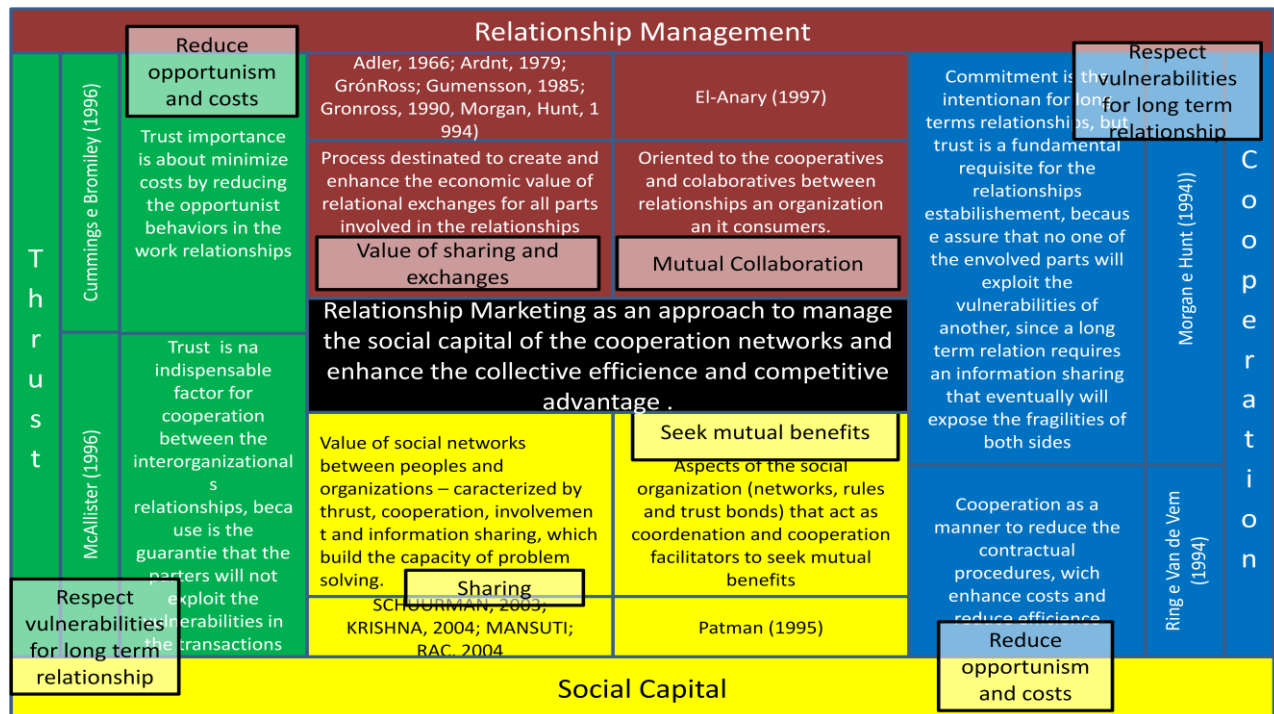
The picture 2, as a result of this convergence analysis, evidences the similar aspects between Relationship Marketing, Thrust, Social Capital And Cooperation, which are: reduce opportunism and costs, respect vulnerabilities for long term relationship, sharing, seek mutual benefits, mutual collaboration and increasing value of sharing and exchanges.

Arrived in port for this convergence, one wants, therefore, to evidence, as the model of Project ION (2002), the complementarities of the model of networks, where if the existence of the social capital in this arrangement must make gift, already constituted of the cooperation and trust, but

with the economic objective of generation of collective efficiency.

Being the relation aspect of extreme importance for the supportive of this model, it is pointed Marketing of Total Relationship, in its target to consider different actors and multiple interactions, as a natural boarding for the efficient management of these interactions between the actors is it in the interior of the network or graviton in its around.

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Picture 2: Convergence Analysis Representation, Source: Authors

the existence of the social capital in this arrangement must make gift, already constituted of the cooperation and trust, but with the economic objective of generation of collective efficiency.

Being the relation aspect of extreme importance for the sustainability of this model, it is pointed Marketing of Total Relationship, in its target to consider different actors and multiple interactions, as a natural boarding for the efficient management of these interactions between the actors is it in the interior of the network or graviton in its around.

IV. CONCLUSION

The bibliographical revision of the fields of networks of companies, social capital and marketing of relationship makes possible a series of inferences concerning the complementarities between its concepts. In certain direction, it is possible to state that these knowledge if support in one same conceptual base, allowing a more including understanding of an extremely complex reality for its proper nature.

The collaborative networks, representing a new form of social morphology that follies the specificities of the new competitive reality, contribute in basic way so that individuals and organizations can amplify of exponential form its possibilities of performance and extend significantly its efficiency, of a form that would not reach acting as isolated entities.

As demonstrated, the trust it is a mediating variable of extreme importance so that relationships in fact if establish, a time that determines the security of that none of the involved parts will explore the vulnerabilities of the other, since a relation of long stated period requires a sharing of

information that eventually will display the fragilities of both the involved parts in the relationship.

The social capital that emerges of the relationships between the diverse involved in the network, understood actors as the value of the social networks between people and organizations - characterized for trust, cooperation, involvement and sharing of information - and that it constructs the capacity to decide problems and to reach goals in mutual benefit, express the potential of a society in establishing interpersonal trust and cooperation networks with the objective to produce good collective.

In this perspective, the social capital can be defined as one consequence of the interactions accomplished between actors, resources and activities, making of the relationship marketing a natural boarding for the efficient management of these interactions between me the actors, are they in the interior of the network or graviton in its around.

The contributions originated in such a way in the relationship marketing how much in the contribution networks they emphasize the necessity of deeper interactions with the customers and too much actors of the

marketing process, as well as stand out the importance of the management of the proper relationship, stop beyond the traditional management of the marketing composition.

The main representatives of the related Swedish School proclaim the necessity to identify, to establish, to keep, to extend e, in case that necessary, to finish relationships with the different groups of interest, with profit. In accordance with this perspective, is of basic importance, the establishment and fulfillment of promises on the part of all the involved ones in the relationship, so that the different objectives are reached. Therefore, are presented in picture 3 the additional constructs for the Project Ion proposed model. It is important for the understanding of the focus of marketing of relationship, as already mentioned, the change of paradigm of the discrete transaction for the relation exchange that bases the establishment of relations. The relation exchange, in contrast of the discrete transaction, occurs throughout the time and, therefore, it needs to be measured not by its immediate consequences, but in terms of

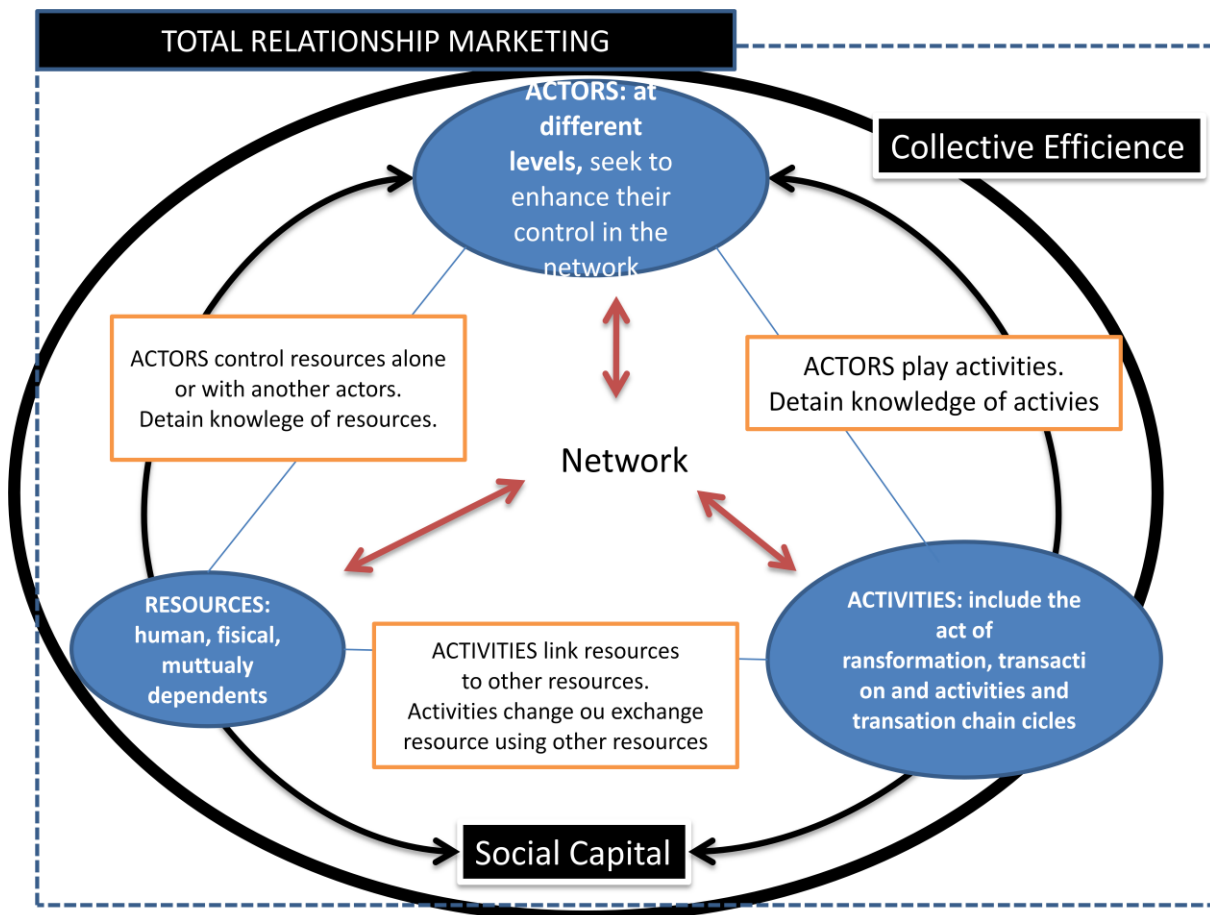


Figura 3: Proposed ModelSource: Autores, based in Project ION (2002)

vision of anticipated, express future in the concept of lifetime value.

The consolidation of the concept of lifetime value, in contraposition to the only perspective of selling, it practically compels the organizations that adopt this position to assume an orientation for relationships in all its transactions with excessively public consumers and. This perspective force the installation of the exchange relations as a process of creation of mutual value, guiding the development of models of management of these processes that take in consideration the quality of the contacts established between the different ones stakeholders in all the extension of the value chain.

This boarding of networks and its relationships focus the creation of value for way them interactions between the actors, beyond the purely economic aspects. According to this boarding, the strategy in the network is constructed collectively, what it demands the coordination of the activities and resources for the constitution of a true network of value creation.

Therefore, those outcomes can be summarized in a academic and in a business dimension: The theoretical outcomes can be described as: a) convergence of the concepts;b) collaborative networks are a new form of collective efficiency; c) trust is a moderator variable for relationships in this context. And the managerial outcomes can be described as: a) change the paradigm of discrete transition to relational exchange; b) learn how to use Total Marketing Concept to manage the actors interaction;c) focus on lifetime value.

As result, the present study it demonstrates the complementarities between the concepts in the different fields, establishes the utility to approach the complex systems with a wider specter of analysis tools that make possible the communication beyond the borders of the established knowledge and open an interesting agenda of future research that allows to measure the creation of value in the interior of networks of companies, being surpassed the financial aspects and of regulation and including the context social that involves the networks.

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Demographic Differences among International Undergraduate Students at A Malaysian Public University

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Abstract- A growing body of research has been carried out in international students' adjustment to study the determinants and outcomes of the socio-cultural adjustment process. The present study was conducted to determine whether demographic factors have any differences on socio-cultural adjustment. Data was collected using a structured questionnaire (self-administered). Findings show that international undergraduate students' adjustment cultural empathy, impersonal endeavors, and cultural relatedness do not differ significantly by gender and marital status. It was found that the age group of between 18 and 20 years showed higher level of impersonal endeavors to the local environment as compared to the age group of 21-23 years and 24-26 years. The study also found that those who are reside in Malaysia between 18 and 24 months adjust significantly higher in impersonal endeavors and cultural relatedness, whereas they did not differ in terms of cultural empathy. The general conclusion that can be drawn from the present study is that demographic factors can contribute to the adjustment process by the international undergraduate students. There are also other possible factors that can influence the adjustment process among the students in Malaysian higher learning institutions. These other possible factors are forwarded for future research.

Keywords- International undergraduate student, socio-cultural adjustment, cultural empathy, impersonal endeavors, cultural relatedness, test of differences, public university, Malaysia.

I. INTRODUCTION

Currently Malaysian institutions of higher education are striving to attract international students from other countries. The number of international students studying in Malaysia has been increasing since 1996, due to various higher education reforms were introduced in order to facilitate the entry of international students into higher education

and 11,628 respectively. There are also a big number of students from Nigeria (6,765), Iran (6,514), Bangladesh (3,820) and the Middle East countries

Going by the latest statistics, there are more than 90,000 international students currently studying in the numerous institutions of higher learning in Malaysia. According to Immigration Department records, the number of foreigners holding student passes number 90,501 as of 31 December 2008. This is close to the target set by the Ministry of Higher Education, which is 100,000 by 2010. Out of the figures provided by the Immigration Department, Indonesia and China constitute the highest number of international students in this country. They number 14,359

(<http://islamhadhari.net/?p=2543>). According to Paige (1990), international students are defined as individuals who temporarily reside in a country other than their country of citizenship in order to participate in international educational exchange as students. As the number of international students entering Malaysian universities increase, the need to understand and to address their cross-cultural adjustment to this country becomes more important. Adjusting to a new culture can be a challenging and stressful experience. Rigorous academic demands along with the challenges to adjust to a new culture may put international students at a greater risk than students in general. Lin and Yi (1997) mentioned that international students face common as well as their own unique problems such as racial discrimination, language problems, accommodation difficulties, dietary restrictions, financial stress, misunderstandings, and loneliness. Furthermore, coming from different cultures, international students cannot escape from cultural shock and are often with astounding difficulties (Pruitt, 1978). According to Pedersen (1995), "culture shock is the process of initial adjustment to an unfamiliar environment" (p. 1). International students differ greatly in adjusting to their new circumstances and studies. Some adjust easily while others find it very difficult. It becomes vital to understand the factors most involved in a successful adjustment. Therefore, the goals of this article are to identify major demographic variables involved in the adjustment process for international undergraduate students. Specifically, this article introduced the concept of socio-cultural adjustment and used them to (a) determine relationships between demographic factors with cross-cultural adjustment.

II. OBJECTIVE OF THE STUDY

The literature on international student adjustment is mostly littered with research from overseas with a focus on its

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antecedent variables (Jou & Fukada, 1996; Li & Gasser, 2005; Poyrazli et al., 2002; Polek et al., 2008; Wilton & Constantine, 2003; Yang et al., 2006) as well as the adjustment and its outcomes (Poyrazli & Kavanaugh, 2006; Zhao, 2006). The present study is aimed at addressing the following question: (1) What are the impact of demographic variables such as gender, age, marital status, and length of stay in Malaysia on the three dimensions of socio-cultural adjustment that is cultural empathy, impersonal endeavors, and cultural relatedness.

III. LITERATURE REVIEW

A. Socio-Cultural Adjustment

Ward and Kennedy (1999) are among many writers to argue that there is limited consensus and clarity as to what adjustment means, as the construct has been described and measured in varying ways and from several perspectives. According to Ramsay et al. (1999), adjustment describes the fit between students and the academic environment. In this study, socio-cultural adjustment is viewed from a social learning perspective, predicted by variables related to cognitive factors and social skills acquisitions (Ward and Kennedy 1999).

B. Demographic Differences and Adjustment

Sumer et al. (2008) suggested age variable contributed uniquely to the variance in anxiety. Older students were more likely to report higher levels of anxiety (Sumer et al. 2008). Sumer et al. (2008) further explained that older students may be more traditional, more resistance to change, and have more difficulties in accepting the host culture's norms and values and, therefore, experience higher levels of anxiety during their adjustment period. The younger the international students, the quicker and easier the adjustment process in the foreign country (Tomich et al. 2003).

Fong and Peskin (1969) was the earliest study examined gender differences in adaptation. They suggested that female students experience more strain than their male counterparts. Other studies that examined international students showed that female students had higher emotional, physiological, and behavioural reactions to stressors (Misra et al. 2003) and also were more likely to feel homesick and lonely than were male students (Rajapaksa & Dundes 2002). Sumer et al. (2008) found no relation between gender and international students' depression and anxiety levels. Thus, there is a need for more careful investigation of gender differences when evaluating international student adjustment.

The potential for adjustment processes to be complicated among international students acculturating with spouses and family have also been noted in the literature (Oropeza et al. 1991). In Poyrazli and Kavanaugh's (2006) study, results showed that married international students reported experiencing a lower level of social adjustment strain than the single ones. Since these students are married, they do not feel the need to explore other possible relationships, and fulfil their social support needs at home through their spouse or family. Therefore, in the case of married international

students, the marital relationship may be functioning as a buffer.

The longer individuals reside in the foreign country, the better the adjustment process to the new environment will be (Ward & Kennedy 1992; Wilton & Constantine 2003). For instance, Wilton and Constantine (2003) found that greater length of stay in the U.S. was associated with lower levels of psychological distress among Asian and Latin American international college students. In a more recent study on the relationship between adult attachment styles and psychological and socio-cultural adjustment of Polish, Russian, and Hungarian immigrants to Dutch society by Polek et al. (2008), it is proven that length of residence appeared to be positively related to identification and contact with the host culture. Therefore, the following hypothesis is proposed.

IV. METHODOLOGY

A. Participants

Participants were 93 international undergraduate students enrolled in a large public university in the northern region of Malaysia. In all, 44 were male (47.3%) and 49 were female (52.7%). The students were from a variety of different countries (51.6% from China, 16.1% from Indonesia, 10.8% from Canada, 6.5% from Finland, 5.4% from Thailand, 3.3% from France, 2.2% from Maldives, 4.4% from other countries such as Nigeria, Saudi Arabia, Japan, and the United States) and identified a variety of different languages as their native languages (Chinese: 51.5%; Indonesian: 15.1%; English: 14%; Finnish: 5.5%; French and Thai: 4.3% respectively; Dhivehi: 2.2%; Others such as Japanese and Arabic: 1.1%). The average age was 21 years ($SD = 1.49$) and their average length of stay in Malaysia was 16.45 months ($SD = 13.30$). In terms of marital status, majority of them were single (96.8%). All faculties were represented, with the greatest number of students enrolled in Management School (65.6%).

B. Materials Socio-Cultural Adjustment

29-item socio-cultural adjustment scale (SCAS) developed by Ward and Kennedy (1999) was used in the present study. The scale measured the degree to which international students perceived difficulties in understanding the local values and cultures, interacting with the hosts, meeting the demands of daily life, and behaving in a culturally appropriate manner. Sample items included "Using the transport system" and "Taking a local perspective on the culture". International students used a 5-point likert scale ranging from *no difficulty* (1) to *extreme difficulty* (5).

C. Demographic Information

This information was obtained about the following: age, gender, marital status, ethnicity, country, school, native language, length of stay in Malaysia, country of origin, and year of course.

D. Procedure

Participants were invited to respond to a questionnaire containing the preceding measures in lectures, tutorial

classes or library in the third week of the second semester. They were informed verbally of the research project, procedure, and ethical implications involved. The questionnaires were distributed to those who agreed to participate in the study and returned immediately after they finished completing the questionnaire, which lasted 10 minutes. They were not required to supply their names.

V. RESULTS

E. Factor Analysis

To assess the factors of socio-cultural adjustment, a factor analysis using component analysis with varimax rotation was carried out (See Table 1).

Table 1: Results of Factor Analysis

Items	Factors		
	F1	F2	F3
FACTOR 1: Cultural Empathy			
14. Dealing with bureaucracy	<u>.65</u>	.31	.33
23. Accepting/understanding the local political system	<u>.73</u>	.35	.21
24. Understanding the locals' world view	<u>.84</u>	.25	.15
25. Taking a local perspective on the culture	<u>.81</u>	.17	.21
26. Understanding the local value system	<u>.73</u>	.33	.35
27. Seeing things from the locals' point of view	<u>.88</u>	.18	.22
28. Understanding cultural differences	<u>.71</u>	.30	.25
29. Being able to see two sides of an intercultural issue	<u>.78</u>	.29	.25
FACTOR 2: Impersonal Endeavors			
8. Talking about yourself with others	.26	<u>.70</u>	.18
9. Understanding jokes and humor	.40	<u>.60</u>	.34
16. Adapting to local accommodation	.15	<u>.74</u>	.30
17. Communicating with people of a different ethnic group	.25	<u>.81</u>	.06
18. Relating to members of the opposite sex	.33	<u>.71</u>	.21
20. Finding your way round	.32	<u>.58</u>	.28
FACTOR 3: Cultural Relatedness			
2. Using the transport system	.28	.13	<u>.67</u>
4. Getting used to the pace of life	.08	.40	<u>.65</u>
7. Worshipping in your usual way	.29	.26	<u>.69</u>
11. Getting used to the local food/finding food you enjoy	.18	.17	<u>.78</u>
13. Dealing with people in authority	.41	.16	<u>.67</u>
Eigenvalue	9.81	1.63	1.29
Percentage of Variance	29.65	20.07	17.26
Total Variance Explained	29.65	49.71	66.98
KMO Measure of Sampling	.91		

Adequacy

Approximate Chi-Square 1253.87***

$N = 93$.

Note: Items included for the respective factors are underlined for identification

*** $P < .001$

Three items (3, 21, and 22) had communalities values of less than 0.5 and seven items (1, 5, 6, 10, 12, 15, and 19) had high cross loading were deleted from further analysis. A three-factor solution (each with eigenvalue greater than 1.0) accounted for 66.98% of the total variance.

The first factor, whose items were labeled the Cultural Empathy, included Items 14, 23, 24, 25, 26, 27, 28, and 29. This factor accounted for 29.65% of the variance. Factor 2 accounted for 20.07% of the total variance and included Items 8, 9, 16, 17, 18, and 20 ; this set of items was labeled the Impersonal Endeavors. Factor 3 accounted for 17.26% of the total variance and included Items 2, 4, 7, 11, and 13. This set of items was labeled Cultural Relatedness.

F. Results on Descriptive Statistics

The means, standard deviations, and correlations for the three dimensions of socio-cultural adjustment scale are shown in Table 2. Reliabilities obtained in this study are also reported for all dimensions with multiple items.

Table 2: Descriptive Statistics of Socio-Cultural Adjustment Dimensions

Dimensions	1	2	3	M	SD
1 Cultural Empathy	(.95)			2.26	0.91
2 Impersonal Endeavors	.69**	(.87)		2.08	0.77
3 Cultural Relatedness	.64**	.62**	(.83)	2.25	0.86

$N = 93$.

Note: Scale internal consistencies appear in the diagonal.

* $P < .05$; ** $P < .01$.

G. Test of Differences

Several test of differences using the t-test and the one-way anova was conducted to see if there existed any differences in terms of the major variables of the present study by the demographic factors. The results of the analysis are presented in Table 3, 4, 5, and 6.

Table 3: Differences in the Socio-Cultural Adjustment by Age

Dimensions	18-20 (Mean)	21-23 (Mean)	24-26 (Mean)	F-value
Cultural Empathy	2.44	2.13	2.38	1.20
Impersonal Endeavors	2.35	1.91	1.98	3.54**
Cultural Relatedness	2.41	2.14	2.29	1.01

** $P < .05$

Those who are between the age group of 18 and 20 years, indicated significantly higher impersonal endeavors,

whereas they did not differ in the age group of 21-23 years and 24-26 years.

Table 4: Differences in the Socio-Cultural Adjustment by Gender

Dimensions	Male (Mean)	Female (Mean)	t-value
Cultural Empathy	2.19	2.33	-.74
Impersonal Endeavors	1.98	2.17	-1.13
Cultural Relatedness	2.12	2.37	-1.39

There are no significant differences in cultural empathy, impersonal endeavors, and cultural relatedness among male and female international undergraduate students.

Table 5: Differences in the Socio-Cultural Adjustment by Marital Status

Dimensions	Single (Mean)	Married (Mean)	t-value
Cultural Empathy	2.26	2.31	-.07
Impersonal Endeavors	2.07	2.42	-.62
Cultural Relatedness	2.25	2.60	-.57

The t-test indicated that there were no significant differences among international undergraduate students by marital status in terms of cultural empathy, impersonal endeavors, and cultural relatedness.

Table 6: Differences in the Socio-Cultural Adjustment by Length of Stay in Malaysia

Dimensions	< than 6 mths (M)	6 to 12 mths (M)	13 to 18 mths (M)	19 to 24 mths (M)	> than 24 mths (M)	F-value
Cultural Empathy	2.02	2.13	2.44	2.08	2.54	1.37
Impersonal Endeavors	1.90	2.00	2.43	1.62	2.29	2.51**
Cultural Relatedness	1.84	2.07	2.67	2.52	2.44	2.91**

** $p < .05$

Those who reside in Malaysia between 18 and 24 months significantly higher in impersonal endeavors and cultural relatedness adjustment, whereas they did not differ in terms of cultural empathy.

VI. DISCUSSION

The purpose of the present study was to determine the effect of demographic variables on the three dimensions of socio-cultural adjustment among international undergraduate students at a Malaysian public university. The test of differences obtained in the present study showed that age (particularly in the age group of 18-20 years) has a significant difference on impersonal endeavors. One

possible reasons is that the younger the international students, the greater the amount of contact with Malaysian students. The interaction between the international and Malaysian students is a strong determinant of adjustment, therefore, it is inferred that the younger one is, the quicker and easier the adjustment process will be. Besides, younger students may be more open and flexible to a new culture and to environmental differences. This might be due to globalization, which gives younger students the opportunity to have more exposure than senior students to Malaysian culture through internet and network.

In addition, the present study also found that length of stay (those who reside in Malaysia between 13 and 18 months) differ significantly on impersonal endeavors and cultural relatedness. Length of stay in a new culture is one of the most important factors of successful socio-cultural adjustment; adaptation is especially low at the beginning then improves in the earliest stages until it reaches a plateau (Ward & Kennedy, 1999). Furthermore, students who had resided in Malaysia for longer period of time tended to differ in adjusting to Malaysian cultural norms. These students may also have more established social support networks than individuals who have recently enrolled into the university.

However, contrary to the prediction, cultural empathy, impersonal endeavors, and cultural relatedness do not differ by gender and marital status. Students already have enough social support from Malaysian friends, lecturers, and administrators.

Since this paper only studied the effect of demographic factors on the socio-cultural adjustment process among international undergraduate students, future researches can be carried out to study the effect of demographic factors among international graduate students. Also, similar studies can be applied in private university in Malaysia. The present study only investigated the effect of demographic factors on socio-cultural adjustment, there may be other factors such as personality, social support, motivational factors, academic achievement, and adjustment difficulties that can influence the adjustment process among the international students in institution of higher learning in Malaysia. So, it is worthwhile to conduct a research on these factors to find out the impact of those factors on international students adjustment.

VII. LIMITATIONS

As with all empirical research, the present study also has limitations. Due to the time and resource constraints, the current research was limited and applies to the international undergraduate students participated in this research at a public university in the northern region of Malaysia. Future replication research may provide a larger sample size., by which more data will be collected for statistical analysis and more international undergraduate students as well as international graduate students will have the chance to provide more direct and constructive feedback. Such information can be of benefit to international offices.

Secondly, the present study is cross-sectional in nature and clearly eliminated the possibility of testing cause and effect

about the determinants of international students' adjustment. Future research should employ longitudinal research designs to overcome this limitation.

Thirdly, because the study's measures were self-report, the respondents may not have honestly reported their attitudes or behaviors because of social desirability or self-enhancement motives.

VIII. CONCLUSION

In conclusion, the age group between 18 and 20 years has a significant difference on impersonal endeavors. International students who reside in Malaysia between 18 and 24 months differ significantly in impersonal endeavors and cultural relatedness. However, findings have shown that gender and marital status did not differ with the three dimensions of socio-cultural adjustment. It is hoped that the results of the present study have contributed valuable information to future researchers. It is also hoped that the researchers can use the study's findings as their future reference on international student adjustment. Although there are some limitations, it is hoped that the first step taken in studying the demographic factors of international students is significant for further justification.

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Efficient Market Hypothesis, Price Volatility, and Performance of Mutual Funds

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GJMBR Classification (FOR)
150303,150205,150399

Abstract- Mutual fund organizations have responsibility towards investors to provide them optimal returns using their abilities to efficiently tap market timings along-with desired diversification. Mutual fund portfolio management is a real dynamic decision process whereby continuous evaluation and monitoring is demanded from efficient fund managers. Ever improved technologies and deregulation have significantly contributed towards improving the operational efficiency of mutual fund managers yet the investors risk perception gap is widening. In this paper an attempt has been made to identify if mutual fund managers can outperform by estimating market movements. Results of the study support Efficient Market Hypothesis (EMH) and conclude that Mutual fund managers cannot identify similar patterns in market movements and stock market follows Random Walk.

Keywords- Sensex Volatility, Net Asset Value (NAV), Portfolio, Efficient Market Hypothesis (EMH), Market return, Random walk, Risk, Investment.

I. INTRODUCTION

Portfolio management deals with untapped future opportunities through stock market mechanism thus require very high degree of precision in identifying the scope to predict market movements. Element of uncertainty in stock market volatility expects mutual fund managers to be every time updated with market information. Investors' composition in mutual fund is varied depending upon their investment objectives and accordingly fund managers cannot generalize the investor's expectations. Portfolio management timings & styles generally adopted by fund managers are based on investor's expected returns from their investments and the common choice of fund managers is either to select active management in which managers try to distinguish and identify the securities that have scope to outperform in the market or they may move towards adopting passive management style in which they hold the portfolio that is allocated exactly the way whole market is allocated. Stock market movements lure a common investor in anticipation of getting extra ordinary returns on their investment which they cannot get by investing in other traditional investment avenues. But common investors being unaware of market tactics trust their saving to mutual fund managers and look forward for higher returns which they

cannot expect applying their own knowledge. Continuous research has been carried on by financial experts to identify the strategies that can beat the market yet no promising approach has been identified than can consistently provide success in measuring and predicting stock market movements.

Emerging technologies are trying to reduce the ever challenging problem of managing risk return trade off where a possibility of providing minimum risk is expected for a given level of return or maximum expected return is aimed at with given level of risk. Markowitz's Modern Portfolio Theory (MPT) suggested mean-variance model for portfolio selection (PS) problems taking three parameters as measurement- Arithmetic mean (expected returns), Standard deviation (risk) and Correlation among the returns (Markowitz, 1952). This theory has quantified the benefits of diversification along with preposition of efficient frontier. Each portfolio on efficient portfolio offers a maximum possible return on a given level of risk. William Sharpe (1964) extended MPT into Capital Asset Pricing Model (CAPM) to include the notion of systematic and specific risk. Systematic risk is risk of holding the market portfolio and specific risk is risk associated with a particular security.

II. REVIEW OF LITERATURE

Financial markets with high degree of volatility generally move through investor's sentiments. Investors generally build their perception taking past information and their perception is translated into their expectations that accelerate market volatility. Sufficient evidences can be traced from mutual fund investors and they do react to past performance (Ippolito, 1992), (Goetzmann and Peles, 1997), (Christoffersen, 2001). Evidence of 'smart money' phenomenon given by zheng (1999) also suggests that some investors are able to identify funds with a better performance using previous information. Study by De Bondt and Thaler (1985) investigated investor behavior and provided that mean reversion in stock prices is an evidence of investors' overreaction where investor overemphasize recent past performance in forming future expectations. In contrast to this momentum trading strategy is generally followed by the investors who do not believe in analyzing previous charts and examining the financial statements rather they are concerned with trading of stock in news. Baker and Wurgler (2006) suggest investor sentiment is a belief about future cash flows and investment risk that is not justified by the facts in hand.

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A. Market Efficiency and Forecasting

Concept of Efficient market Hypothesis (EMH) always disturb the stock market forecasters and contradicts the opinion of researchers who consider that stock market has got any pockets for predictability which can be used to get above average return. The Efficient Market hypothesis (EMH) evolved from Samuelson (1965) and became more functional with study conducted by Fama (1970) who applied this idea to theoretical models and empirical studies of financial securities prices which generated a functional insight into price discovery practice. The essence of EMH is that market prices of any publically traded stock fully reflect all available information. Logic behind it is that all market participants who consider price to be very low will be placing order to purchase it whereas pessimistic investor who considers current prices to be very high will plan to sell them. EMH pushes investors to accept the market returns as they accrue as there is no scope of predictability in stock market. Malkiel (2003) argues that efficient financial market do not allow investors to earn above average returns without accepting above average risk.

Critics of the EMH oppose the view of researchers about short term predictability in stock market. Roberts (1959) argued that if the stock market behaved like a mechanically imperfect roulette wheel, people would notice the imperfections and, by acting on them, remove them. Many statistical techniques had been used to forecast stock prices based on trend or historic stock prices but Cootner (1964) supported the view that stock market has no memory i.e the way a stock price behaved in past is not useful in divining how it will behave in future. As more researcher tried to identify the patterns for predicting market returns, Rozeff (1976) found that January stock returns were higher than any other month whereas Gibbons (1981) reported "Monday Effect" and concluded that prices tended to go down on Mondays and challenged the weak form of market efficiency. The market cannot be perfectly efficient or there will be no incentive for professionals to uncover the information that gets so quickly reflected in market prices (Grossman and Stiglitz, 1980).

All investors have rational expectations and prices do fully reflect all available information and marginal –utility-weighted prices follow martingales (Lucas, 1978). Granger (1986) argued that if two prices are co-integrated, then one price can be used to forecast another which violates the principle of efficient market. Research findings on strategy of buying past winners and selling past losers generate significant positive returns over a holding period of 3-12 months (Jegadeesh and Titman, 1993) (Asness et al. 1997). Grinblatt et al. (1995) examined the domestic strategies of US mutual funds and concluded that they do buy past winners however they don't sell past losers but adopting momentum trading strategy they get significantly better returns. Use of sophisticated non parametric statistical techniques that can recognize patterns, some of the stock prices signals used by technical analysts such as "head and shoulders" formations and "double bottoms", may actually

have some modest predictive power (Lo, Mamaysky and Wang, 2000). Market crash in 1987 reduced the acceptance of EMH when huge equity bubble developed in late 1990s and subsequent bust was witnessed.

B. Market Efficiency and Cost of Information

Acceptance of efficient market rejects the successfully prevailing million dollars wide spread global financial markets reason being if everybody believes that stock market cannot pay them above average returns than nobody will invest and role of analysts is wiped out. Grossman and Stiglitz (1980) argued that if all the relevant information were reflected in market prices, market agents would have no incentive to acquire the information on which prices are based. Cornell and Roll (1981) have shown that sensible market equilibrium must leave some room for analysis and according to their opinion it is reasonable to have efficient market where people earn different gross rate of return because they pay different cost for information. Study by Lo and MacKinlay (1995) has proved that serial correlations are not zero and that the existence of too many successive moves in the same direction enables them to reject the hypothesis that stock prices behave as random walk. Whatever the stock investor select based on any unique or rarely available information, EMH contradicts to their ability to yield extra ordinary returns. Momentum investors who invest based on stock in news or past trends, they don't realize excess returns. Odean (1999) studied a sample of investor who did even worse than investors who adopted buy and hold strategy. Reason for this under performance was transaction cost involved in attempting to exploit whatever momentum existed.

III. INVESTMENT PHILOSOPHY

Extensive literature available has proved that since Markowitz (1952) attempts have been made to resolve the conflicts of how decision makers should choose among composite alternatives that combine stochastic outcome as he was strongly in favor that choice for portfolio of securities is entirely different from securities that an individual investor holds (Bernstein 1996). Risk averse behavior of investors reflects the choice of investors to avoid risk or take negligible risk that means whenever an individual investor is given option to go for guaranteed return with probability one which are comparatively less than gambling return with probability less than one, chances are that he may go for guaranteed return.

Uncertainty in investment decision prevails when Mutual fund AMC's skills and knowledge fail to have proper access of decision relevant information due to complexity of financial markets. This incapacity forces decision makers to adopt a simplified approach where risk is considered to be exogenous variable. Huge literature available on predictin

stock market returns has proved that generally investors think high past stock market return predict high future return (De Bondt, 1993) even though there is no support for such belief in the data (Fama 1988). Further, evidence by Fisher and Statman (2000) have shown that individual investor's stock market return expectations are positively correlated with past returns. Mutual fund managers before moving towards market need to identify the investment needs of investors and then a combination of investment strategies should be adopted accordingly (see figure 1). Although being a market participant mutual fund managers need to be updated every time with market information but to respond to these changes require their diligent skills. Return ambiguity and changes in risk perception of individual investor affect action taken in risky financial market. Gottesman & Morey (2006) conducted research to find relationship between manager's education and mutual fund performance and concluded that certainly managers with higher intelligent level acquire advance knowledge on market movements and can use these skills to get superior performance.

	Stimulus	Divergent	Opportunistic
Squat (short term investment)	Drive by the past trends. Buying the winners and selling the loser	Opposing the crowd for individual stock	Highly aggressive investment in most efficient products
Intermediate (medium term investment)	Buying the consistent winner in last few months	Buying after bad announcement and holding for few months	Arbitrage investment : buying paired stock
Protracted (Long term investment)	Passive investment in grown securities	Buying stock with widespread pessimism and holding for future, avoiding investment in over hyped stock	Buying stock of a poorly managed company and pushing for a change

Based on information available mutual fund managers may react in three ways either anticipating the announcement of positive information and starting purchasing securities before the prices are actually shoot up or reacting to take decision at the time of announcement or following the race when momentum has actually begun (Figure 2). In all the three cases different risk level and expected return can be estimated. Broadly, if markets are efficient stock prices will have a sharp rise or fall before or after announcement. Fama et al (1969) adopted "event study" methodology and studied the stock market reaction to announcements of stock splits. Highest degree of risk is involved when the fund managers

have to anticipate availability of information but the gap in the existing prices and price after announcement are expected to yield improved return than momentum investor who follow the race after other investor start reacting to the information.

IV. RESULTS AND DISCUSSION

Study conducted for accessing whether mutual fund managers can analyze stock market movements and use their specialized skills to calculate and forecast future prices Sensex data and NAVs of four Mutual funds was analyzed. In Indian context mutual fund investors are found to be more conservative and generally they rely on past performance to select any mutual fund. On the other side fund manager have varied obligations with regulatory constraints of taxes, transaction cost, and fees etc that restrict their performance. Finally the question was if mutual fund can outperform that rest of investors struggling to get excess return? To examine performance of fund managers we took four funds namely SBI Mutual fund, UTI Mutual fund, Reliance Mutual fund and ICICI Mutual fund. Time constraint and complexities of analysis forced us to restrict our study on three schemes i.e Equity based fund, Balanced funds and income Funds. Period of this study was taken as 36 months ranging from January 2007 to December 2009. Secondary data pertaining to Sensex and Mutual fund NAVs was collected and analyzed using various statistical measures.

A. Contradicting Anomalies

An anomaly or regularity is where empirical evidence contradicts the EMH and provides that if a share price rises one day, it is expected to rise the next day and if it falls one day it is expected to fall the next day. Previous literature has identified predictable pattern in stock return yet these patterns are not robust and some of the patterns based on fundamental valuation measures of individual stocks may simply reflect better proxies for measuring risk. Presence of anomalies in any series enables prediction of future price movements with some accuracy. Most of the studies in the seventies focused on predicting prices from past prices, studies in the eighties also looked at the possibility of forecasting based on variables such as dividend yield (e.g. Fama & French [1988]), P/E ratios (e.g. Campbell and Shiller [1988]), and term structure variables (e.g. Harvey [1991]). Even though there is sufficient evidence supporting EMH, study by Haugen & Baker (1996) in their analysis of determinants of return in five countries concluded that none of the factor related to sensitivities seem to be important determinant of expected stock returns. In our study to validate EMH and to conclude whether there exists any pattern in stock market movement an attempt was made using Run test to examine randomness in the movement of Sensex and NAVs of Mutual fund. Results provided by this test (Table 1) validate that high degree of randomness exist among almost all the mutual fund schemes except Reliance Income-Growth fund ($R=2$) and SBI Balanced- Growth fund ($R=3$). For rest of the fund scheme $R=6$ or $R=4$ has been validated by run test for randomness which is significant at 1% level. Z score < 1.96 of the entire fund

scheme indicates that high degree of randomness prevails in the movement of NAVs and Sensex during 36 months study period. Further, in case of 12 Mutual fund schemes under study, random behavior of NAVs guide investors not to rely mutual fund performance based on their past trend as generally mutual fund investor react to past performance (Ippolito, 1992).

B. Evidence supporting Semi strong form

Graph 1 shows comparative analysis of volatility existing in Sensex and performance of equity based four fund schemes under study. Examining these movements it is revealed that these entire equity based fund perform almost in the same direction with r coefficient very high. $r = 0.948$ for ICICI Aggressive fund and $r = 0.952$ with SBI equity fund has been showing very high degree of relationship among Sensex volatility and equity based mutual fund schemes. Results of correlation gave evidence of existing very high degree of correlation between all the fund schemes and Sensex volatility (Table 3). Presence of high degree of correlation among equity based mutual fund and Sensex supports the semi strong form of EMH and conclude that share prices adjust to publically available information and conclude that no one can earn excess return using some information. Even Graph 1 clearly depict that during January 2008 when Indian stock market was following bullish trend all equity based funds were at their peak NAV and same way during February 2009 when Indian stock market was facing bearish trend equity based mutual fund did not remain unaffected. Graph 2 provides a comparative analysis of Balanced Funds and Sensex and results of study reveal that even these funds are also responding to market volatility. Existence of moderate and even high degree of relationship is revealed whereby ICICI Balanced-Growth shows very high degree of correlation with $r = 0.958$ and UTI Balanced provides $r = 0.939$ and proves that these fund respond immediately to market movements (Table 3). However, last categories of Income Fund under our study have shown that NAVs of these funds are not related to stock market volatility in any way. Negative relationship of $r = -0.277$ as shown by ICICI Income fund-Growth and $r = -0.26$ given by UTI Bond fund shows that performance of these funds is independent of Sensex volatility. Existence of high degree of correlation among all equity system shows that there exist a similarity in the direction of movement in these funds. Further, Graph 3 shows the movement of NAVs of Income Fund for 36 months study period along with Sensex and this graph clearly depict that despite the downtrend in the stock market during February 2008 to December 2008 NAVs of income fund have been continuously rising. Analysis of adjusted $\bar{R}^2$ for variability in data set provides high degree of influence between Sensex and mutual fund schemes particularly where fund portfolios contain Equity stock. Highest fine tuning exists between SBI Equity-Growth fund $\bar{R}^2 = 0.903$ and ICICI Aggressive-Growth fund with $\bar{R}^2 = 0.896$. Additional results of adjusted $\bar{R}^2$ reveals ICICI Balanced-Growth is highest

influenced by Sensex with $\bar{R}^2 = 0.915$ and UTI balanced – Growth $\bar{R}^2 = 0.878$.

C. EMH AND EQUITY DILEMMA

Generally a debate of getting extra return by investing heavily in equity shares is supported based on the fact that higher the risk higher is return. Results provided in our study (Table 2) have been showing that although equity based mutual fund schemes have been performing well with ICICI Aggressive-Growth NAV growing as $g = 14.66$ and SBI equity growing $g = 14.46$. But evidence provide that selective and smart fund managers can outperform than those who prefer to assume high risk as NAV of SBI balanced-Growth is $g = 15.59$ despite they take calculated risk and similarly UTI Balanced fund –Growth provides $g = 14.35$ during the 36 months study period. Results of NAV growth rate of Income Mutual fund is showing comparatively slower growth with ICICI Income fund-Growth resulting in $g = 6.58$ and Reliance RSF Income Fund-Growth resulting $g = 5.19$. Outcome of our study proves that although picking up equity fund schemes in your portfolio accelerates the return on portfolio but fund managers can also get benefit of rapidly increasing growth rate picking up selective stocks and blending equity with debt. Moreover Sensex $g = 14.57$ is not found to be abnormally different as almost all equity based mutual funds were following nearly same growth rate. Out of all the four equity based funds ICICI Aggressive-growth fund yield $g = 14.66$ which is not abnormally higher than what an individual investor would have got investing in stocks. Empirical evidences given by study support EMH that all funds investing in equity stock or blend of equity and bonds perform almost at the same rate and no single fund manager can outperform using unique information available to him.

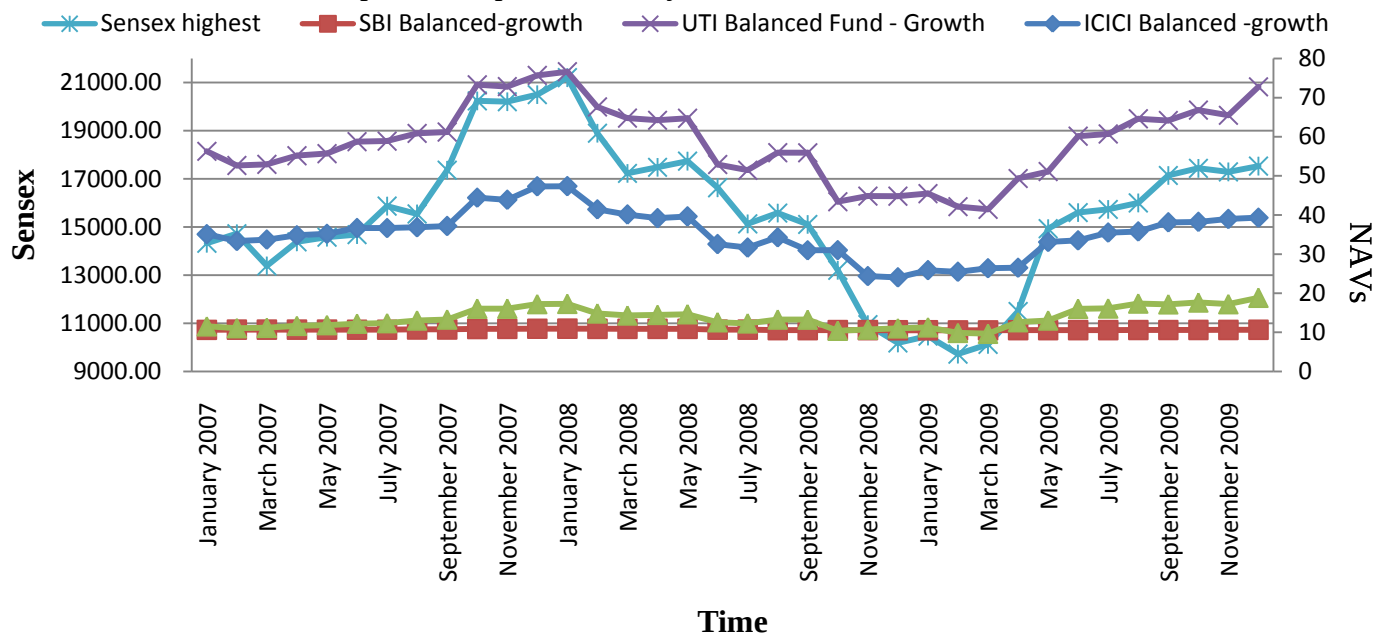
V. CONCLUSION

The study concludes that any pattern for predicting stock market movement is near to impossible because of its random behavior. Any existing pattern in stock market movement is too late to respond. Thus, EMH evidence support that maximizing return based on scope of predicting price behavior has got no scope in financial markets. However, existing literature on EMH somewhere contradict market efficiency and points out that EMH may not be generalized but our results for a short period study conclude and Support EMH. Further results of study has also shown that mutual fund managers based on their composition of funds are completely affected by stock market volatility which leaves a further scope of analyzing distinctive strategies to manage risk in financial markets beyond predicting price behavior.

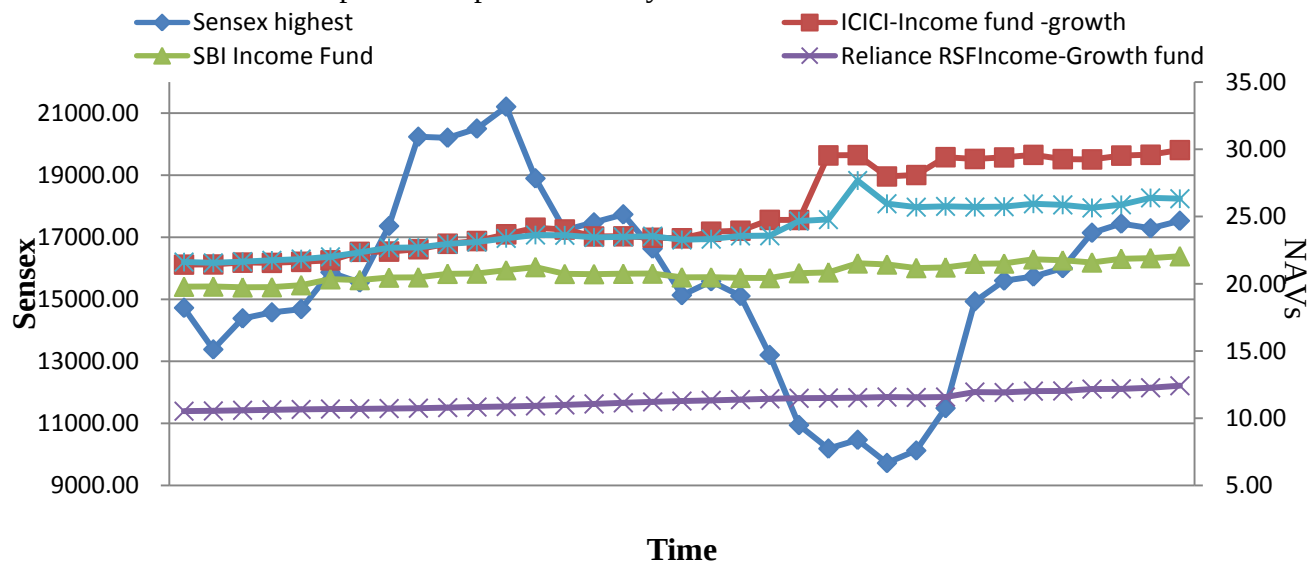
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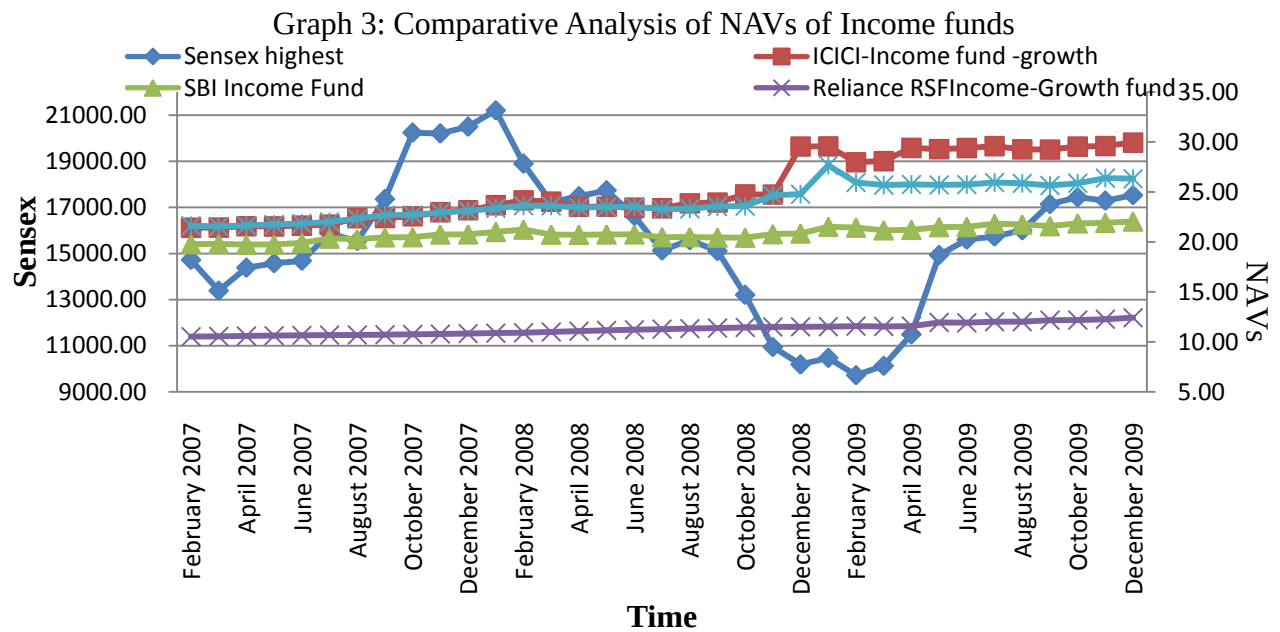
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Graph 1: Comparative Analysis of NAVs of Balanced funds



Graph 2: Comparative Analysis of NAVs of Income funds



**Table 1: Run Test Runs Test**

	ICICI Aggressive	SBI Equity	Reliance Equity	UTI-Equity	Sensex	ICICI Balanced	SBI Balanced	Reliance RSF Balanced	UTI Balanced	ICICI Income	SBI Income	Reliance Income	UTI Income
Test Value ^a	22.63	30.64	12.81	35.81	155.89	35.33	10.67	13.15	58.82	23.91	20.76	11.25	23.55
Total Cases	36	36	36	36	36	36	36	36	36	36	36	36	36
Number of Runs	4	4	4	6	6	4	3	6	4	4	6	2	4
Z	-4.904	-4.904	-4.904	-4.227	-4.227	-4.904	-5.242	-4.227	-4.904	-4.904	-4.227	-5.580	-4.904
Ho	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Rejected	Accepted	Accepted	Accepted	Accepted	Rejected	Accepted

a. Median

Table 2: Growth rate and regression

Mutual Funds	G	$\bar{R}^2$	t value	b
ICICI Aggressive –growth	14.66	0.896	6.349	17.437
SBI equity-growth	14.46	0.903	-2.748	18.067
Reliance Equity-Growth	14.34	0.890	1.770	16.932
UTI Equity-Growth	13.81	0.856	1.246	14.537
ICICI Balanced –growth	14.33	0.915	3.457	19.499
SBI Balanced-growth	15.59	0.607	133.670	7.427
Reliance RSF - Balanced - Growth	10.96	0.609	2.249	7.465
UTI Balanced Fund – Growth	14.35	0.878	3.657	15.943
ICICI-Income fund –growth	6.58	0.049	10.629	-1.679
SBI Income Fund	4.36	-0.020	33.348	0.379
Reliance RSF Income-Growth fund	5.19	-0.066	22.810	-0.870
UTI Bond Fund-growth	5.060	0.039	17.510	-1.568

Table 3: Correlations

		Sensex	ICICI_Aggressive_growth	SBI_equity_growth	Reliance_Equity_Growth	UTI_Equity_Growth	ICICI_Balanced_growth	SBI_Balanced_growth	Reliance_RS_F_Balanced_Growth	UTI_Balanced_Fund_Growth	ICICI_Income_fund_growth	SBI_Income_Fund	Reliance_RS_F_Income_Growth_fund	UTI_Bond_Fund_growth
Sensex	Pearson Correlation	-	.948**	.952**	.946**	.928**	.958**	.787**	.788**	.939**	-.277	.065	-.148	-.260
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.102	.707	.390	.126
ICICI_Aggressive_growth	Pearson Correlation	.948**	-	.987**	.981**	.972**	.953**	.770**	.836**	.988**	-.227	.086	-.138	-.225
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.182	.617	.421	.187
SBI_equity_growth	Pearson Correlation	.952**	.987**	-	.996**	.970**	.955**	.792**	.835**	.985**	-.209	.113	-.134	-.193
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.221	.511	.435	.259
Reliance_Equity_Growth	Pearson Correlation	.946**	.981**	.996**	-	.968**	.942**	.767**	.844**	.982**	-.192	.128	-.113	-.174
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.262	.456	.511	.310
UTI_Equity_Growth	Pearson Correlation	.928**	.972**	.970**	.968**	-	.914**	.682**	.916**	.984**	-.064	.254	.053	-.055
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.712	.135	.757	.749

ICICI_Balanced_growth	Pearson Correlation	.958**	.953**	.955**	.942**	.914**	-	.820**	.739**	.946**	-.331*	-.012	-.246	-.326
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.049	.942	.149	.052
SBI_Balanced_growth	Pearson Correlation	.787**	.770**	.792**	.767**	.682**	.820**	-	.399*	.732**	-.563**	-.253	-.544**	-.501**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.016	.000	.000	.136	.001	.002
Reliance_RS_F_Balanced_Growth	Pearson Correlation	.788**	.836**	.835**	.844**	.916**	.739**	.399*	-	.880**	.305	.559**	.405*	.285
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.016		.000	.071	.000	.014	.092
UTI_Balanced_Fund_Growth	Pearson Correlation	.939**	.988**	.985**	.982**	.984**	.946**	.732**	.880**	-	-.139	.174	-.061	-.141
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.419	.311	.726	.414
ICICI_Income_fund_growth	Pearson Correlation	-.277	-.227	-.209	-.192	-.064	-.331*	-.563**	.305	-.139	-	.899**	.925**	.959**
	Sig. (2-tailed)	.102	.182	.221	.262	.712	.049	.000	.071	.419		.000	.000	.000
SBI_Income_Fund	Pearson Correlation	.065	.086	.113	.128	.254	-.012	-.253	.559**	.174	.899**	-	.889**	.928**
	Sig. (2-tailed)	.707	.617	.511	.456	.135	.942	.136	.000	.311	.000		.000	.000
Reliance_RS_FIncome_Growth_fund	Pearson Correlation	-.148	-.138	-.134	-.113	.053	-.246	-.544**	.405*	-.061	.925**	.889**	-	.905**
	Sig. (2-tailed)	.390	.421	.435	.511	.757	.149	.001	.014	.726	.000	.000		.000
UTI_Bond_Fund_growth	Pearson Correlation	-.260	-.225	-.193	-.174	-.055	-.326	-.501**	.285	-.141	.959**	.928**	.905**	-
	Sig. (2-tailed)	.126	.187	.259	.310	.749	.052	.002	.092	.414	.000	.000	.000	

** Correlation is significant at the 0.01 level (2-tailed).

Money-People's Politics No Money Forget Politics': Voters Perceptions, Attitudes And Behaviours For 2007 National Elections In The Enga Province, Papua New Guinea

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Abstract- This paper is based on my personal experience as a voter, citizen and supporter of candidates for the 2007 National Election in Papua New Guinea. Since the period of colonial era many developing countries have witnessed changes in political and leadership patterns and have interpreted them in their own ways. The paper is focused on two areas. Firstly, the roles of the 'money-people' to give-and-take, and at the same time make political alliance to bring people under their influence. This role has been emerged from 'traditional big-man' behaviour in Melanesian society. Secondly, the research looks at the impact of give-and-take and the mentality of 'you give me money' and 'I give my votes' on politicians that has developed among rural voters. It is unfortunate, but many rural voters think that a candidate must give in order to get votes from the people. For many rural voters, they believe they must make money during elections. Some people are, for example, so fed up with voting and they literally demand to be paid for their votes. The unfortunate expectation that candidates will host big feasts and deliver goods during elections has also made the people expect candidates to demand payments. The final outcome of this might as well be that politics will be left to the money-people and those who have the resource. For those who do not have the resources, forget politics. A further outcome will be that the candidates who have the means can simply buy their votes, which leads to bribery and or undue influence. One can argue that this is not bribery and undue influence, but the emerging tradition of the money-people being applied to gaining influence and winning followers.

I. INTRODUCTION

The Enga Provincial Seat is one of the provincial seats in Papua New Guinea (PNG). The province has six seats in Parliament and the Governor holds one of them. There have been previous studies of the province and electorates in the past by Philip Gibbs, Joseph Lakane and others, but my own participation and observation of the attitudes, perceptions and behaviours of the people are discussed in this paper. The traditional method of 'give-and-take' to attract support for a

leader has continued in many rural villages. . This was observed during 2002 and 2007 parliamentary elections when I observed and supported the campaigns of the Honourable Peter Ipatas (MP) for the provincial seat and Leo Mandeakali for the Kompiam-Ambum electorate. I have heard families and individuals asking for cash and kind from the candidates that I supported and other candidates as well. In modern politics, it should be the other way around; people should be assisting candidates and raising funds to support their election.

This paper gives an overview of the problems and issues raised during the 2007 national election. It discusses the area in general and outlines the current problems for the people in Enga province. I then move on to examine my own involvement in the elections. The next part discusses the traditional role of the big-man and the impact of the give-and-take that emerged and mixed with present day elections. I then draw upon my election observations, discussing the candidates, their policies and the responses of the people, candidates and behaviours that followed. The conclusion and recommendation includes an overview of the general beliefs and some problems and issues that need to be addressed in order to reduce or eliminate the mentality of give-and-take or literally speaking, 'you give me cash or kind' and 'I give you my votes – preferences 1,2 or 3'.

II. BRIEF HISTORY OF ENGA PROVINCIAL SEAT

The Province covers a large landmass and shares provincial boundaries with Western Highlands, Southern Highlands, Madang and East Sepik Provinces. The capital town of Enga is Wabag and it is one of the least-developed towns in the country even though Porgera Gold Mine in the Enga Province is the third largest Gold Mine in the World. In the 2000 census the total population of Enga was 405,804 persons. There are several estimates of the rate of population growth, but most are high, approximately 3% per annum or more. Population densities vary greatly from 5 persons per square kilometer for regions such as the upper Lai valley. The vast majority of the province's residents are Enga speakers, although other languages are spoken in peripheral areas of the province including Ipili, Huli, Hewa, Duna, Net, Kantinja, Mandi, Wapi and Lembena. Enga is divided into nine dialects all of which are mutually intelligible. Over 850 languages are spoken in PNG and of these; Enga is the most widely spoken. How Enga came to be such a large language

group remains a puzzle (Gibbs, 1988; Richard, and Banks, 2002).

The Enga Provincial Seat covers five districts (Wapenemanda, Wabag, Komiap-Ambum, Laiagam-Porgera and the Kandep electorates) with 327 local council wards. The Wapenemanda people are hill and valley dwellers, while the Kandep and Laiagam-Porgera live west, towards the mountains of Southern Highlands and East Sepik. The Komiap-Ambum lives east of the province towards East Sepik, Western Highlands and Madang. In terms of development, most parts of Wapenemanda, Laiagam-Porgera and Wabag are well served by the Highlands Highway, which run through the central valley up to the Porgera Gold Mine. The Komiap-Ambum and Kandep are disadvantaged as they live in mountain ranges and do not have easy access to the main roads. In the case of Komiap-Ambum, the road is in poor condition and regularly needs maintenance. In numerical strength, Laiagam-Porgera has more people and of course voters; followed by Wapenemanda whilst Komiap-Ambum has the smallest number of voters (Gibbs, 2003 and Talyaga, August 1984).

In accord with the emerging tradition more than 30 candidates contested the Komiap-Ambum and Laiagam-Porgera electorates and less than 20 candidates stood in Wabag, Kandep and Wapenemanda electorates. Perhaps, there were also less than 20 candidates in the provincial seat. Logically, should only one candidate stand in Wabag, Kandep or other electorates, he or she would win easily the Provincial and even the Open Seats. I will focus my discussion on the Provincial or Regional Seat and Komiap-Ambum electorate, as I supported the current Provincial Member and a losing candidate and did most of my observation and campaigning there for the Honourable Peter Ipatas and Mr. Leo Mandeakali.

The first election observation for me was in 1982 and my first participation was in the 1992 national elections. My discussion starts from 1982 national election in Enga Province. In the 1982 national election, Paul Paken Torato was elected as the Member for the Enga Regional Seat. In the 1987 national election, Paul Torato lost the seat to the late Malipu Balakau. Malipu Balakau was assassinated in the Western Highlands Province in 1989 and destructive crowds rampaged through the capitals of the Western Highlands and Enga. Public offices and business houses were looted and burnt to ashes. In the 1989 by-election the people of Enga elected Jeffrey Balakau, the late Malipu Balakau's younger brother into parliament. Jeffrey Balakau was re-elected in 1992 but in 1995 the Leadership Tribunal threw him out because of misconduct in office. In the 1997 national election, the Provincial Seat was vacant and Mr. Peter Ipatas, the current Governor won. In the 2002 national election Mr. Ipatas won with a landslide victory over the second most successful candidate, John T. Pundari, the then PNG Advance and PNG Revival Parties leader. Interestingly, in the 2007 national election, Hon. Peter Ipatas also won his seat back with a big margin against the nearest rival, Paul Paken Torato – an independent candidate. As a sitting member, Peter Ipatas was re-elected in the 2007

general election with Sam Abel for Wabag Open, Miki Kaeok for Wapenemanda Electorate and Don Polye for Kandep Open. This study is primarily concerned with the 2007 national election in the provincial and open seats (especially Komiap-Ambum electorate).

Amongst the candidates contesting the provincial seat was Enda Cathy Kakaraya, the only female candidate who has stood for the Provincial Seat since the 1997 General Election. Thus, Enda Cathy Kakaraya was one of the 91 female contestants contesting the 2007 parliamentary election in PNG. Table 1 in the appendix shows the total number of female candidates who contested the 2007 national election in their respective provinces and electorates.

III. ENGA POLITICKING SYSTEM BEHIND POLITICAL DREAMS – 'THE NEW POLITICKING TRADITION'

Electoral competition in Enga and PNG as a whole has increased in every national elections since 1982, with candidate numbers rising to an average of 35 per seat in 2007 (I have an average of about 25 per electorate and Enga is close to the average – a range of 17 to 35). Partly this arises from individuals' dreams of power, recognition and wealth. Just as significantly, it arises from the ambition and pride of entire clan and tribal groups in the emerging political culture in the post-colonial state of PNG. These days, as Joe Ketan a political scientist from the South Pacific University argues, clans and tribes work for years to form alliances in local warfare and peacemaking, all geared to the electoral cycle (Ketan, 1998). Elections are now the main site of inter-group competition, although not every clan has a candidate.

The other cause of exaggerated competition and increasing numbers of candidates is the deteriorating and worsening of government services and infrastructure in many rural areas. Tribesmen in the rural and urban areas see the only method of getting anything much out of government is to have their own person (almost invariably male) become the Member of Parliament (MP). The Member of Parliament has come to control the flow of jobs and resources from the state's pork barrel. The wasteful use of Electoral Development Funds (EDF, usually called 'slush funds') both irritates people and draws more people and clans into elections. The EDF funding mechanism and limited provincial service delivery capacities thus combine to intensify electoral competition and to reduce the sitting Members' chances of re-election. This is particularly so in the Highlands, where often, but not always, clan and tribal groups are far larger, wealthier and better-armed than in the fringe Highlands, Coastal and Islands areas. However in recent years some observers have spoken of the 'Highlandisation' of coastal politics with the mass inflation of the electoral roll, multiple voting and the use of large sums of money and in some cases firearms at election time.

Post-election fighting that has erupted in the Highlands is not a new problem. I saw it start in the 2002 parliamentary election in Enga Province and it has been a major problem

in most of that region since the 1980s national and provincial elections. This is a reflection of the priority given to loyalty to clan law, not state law. Perhaps, as Joe Ketan says, clan law has superior legitimacy over state (2004). Increasingly, however, a new trend has emerged of fighting within clans and tribes. In the recent 2007 and 2002 national elections many highlands' clans have not been able to reach consensus on who should be their candidate. In most elections some people nominate, only to withdraw in order to avoid provoking conflict within their groups after the vote, as ambitious individuals blame other for splitting their potential vote base. In Enga in the 2002 and 2007 national elections this inability of clans to settle on a single candidate led to internal conflict and fighting on voting day itself (also see Standish, 2002). For example; the 2002 election was followed by serious warfare and the assassination of more than 15 people in Par council ward alone; and in 2007 in Yumbilyama council ward was involved in warfare and the deaths of more than 3 people in the Kompiam-Ambum electorate. This breakdown of clan and tribe unity has serious implications and consequences for following elections.

IV. TRANSITING OF TRADITIONAL POLITICS TO MODERN POLITICS: IS IT TRANSITING OR MIXING?

Taking a transitionist view, I argue that the new leadership patterns in this country have emerged, changed and transited from one stage to the next. In doing so, what was desired and hoped for by the former leaders was simply replaced by the next group of leaders. The transition of these leaders also included some who were 'forced or situational' leaders during the transitional process of the leadership patterns. The role of traditional Melanesian 'big-man' to give feasts and assist people in time of need had also continued. A leader had to give feasts and unite people for possible supporters to come under his influence.

Electing leaders by ballot is a Western concept, the ways of influencing possible voters and bringing people under change, but continued to the present political system. (Meaning of second part of sentence unclear) Similarly, villagers today believe that to be a leader, one must produce and give to 'impress' the people before they can vote for him or her.

After the elections many cases have been referred to the Court of Disputed Returns (for example, Alfred Manase against Don Polye in the 2007 national election) and the repeated reasons have been bribery and undue influences (for example, among the 35 candidates who contested the Kompiam-Ambum seat, 34 candidates and voters complained about a particular candidate (named) bringing undue influence and clearly bribing the electoral officer in the 2007 national election). Perhaps, what is wrong with distributing qualifications earned from higher institutions, putting dropouts into colleges and subsidising school fees and people thought that these contestants were a good candidate and, as a result, asked new land-cruiser for a provincial high school and sponsoring church groups to attend meetings in Rabaul? (This sentence makes a good

point but needs rewriting) What is wrong with distributing club uniforms for teams just before the elections? Is this bribery or undue influences? For many villagers, this is neither bribery nor undue influence. It is part of their tradition and they expect a leader to give in order to impose influence over his or her people. This paper focuses on this with concrete evidences of what happened among the Yakani and Malipini voters of Kompiam-Ambum electorate during the 2002 and 2007 national elections.

The tradition of 'give-and-take', as was done by traditional Melanesians' 'bigman', has been applied to modern politics. A leader must give in order to acquire power and status, and at the same time, win favour among the voters and supporters. This paper, therefore, asks whether it is bribery or undue influence, as defined in modern politics, when the practice is traditional. There is no option, but to conform to tradition where you either pay or you will never get a vote.

There is a danger in this demand and payment system. That is, if the leader spends a lot of money during a political campaign, he or she will be forced to recoup the lost money after the election. The question is how and when is this possible? It is when the leaders may be forced to take brides or misappropriate the electoral 'slush funds'. We have, for example, seen many such cases in the past, where leaders have faced leadership tribunals. Thus, in giving in to the demands of the voters, leaders have felt obliged to give to their voters to ensure they get voted in again in the next elections.

V. THE EMERGING CULTURE OF EXCHANGE: 'YOU GIVE ME I GIVE YOU'

The styles of management and administration are changing frequently and transiting from old concepts to new methods because of emerging dynamic leaders and managers. The methods of politicking and electoral processes are also in a transitional stage, where traditional politics has mixed with modern politics and transited further. In the political arena a new culture has emerged in line with the old notions of, 'you scratch my back, I scratch your back'. In other words, 'you give me money; I give you my votes'. If you (as a candidate) do not give money or any form of gift to the voters, you will never get a vote. This emerging culture is like a 'cargo cult' practice that Sam Kaima (2004) stressed in one of his papers. The idea of 'you give me; I give you' emerged in the highlands during the 1997 and 2002 and was deeply rooted in the 2007 national election. Without doubt, it has seeped down to the coastal and island villages in PNG, where Sam Kaima (2004) wrote; 'The Politics of Payback'. There is not much difference as practiced by traditional Melanesian bigman, where they give and later get assistance from many followers. Therefore, my argument is that these traditions have not died, but have survived and been transferred to the present day political system.

In discussing the emerging culture and impact of 'you give me; I give you' on politics, Sam Kaima (2004), Philip Gibbs (2004), Joseph Lakane and Philip Gibbs (2003), Peter Kanaparo (2006) and Bill Standish (2003) considered causes and alternative solutions. The authors of these articles show

links between 'you give me; I give you' perceptions and attitudes, and the dangers of such a transition on the political process. There is a need to review that perception again today to see if it has continued in the 2007 national election. Taking my transitionist theories, I have followed up, some years later, by two articles: 'Political Scuffle among Engan Leaders: and the Leadership in Transition and Transformation'. The politics of 'you give me; I give you' or in other words 'I give you my votes and you never give me money' is the 'politics of payback'; and it is an attempt by a person who witnessed and saw the impact of this emerging culture on politics in the highlands and other parts of PNG (not clear). In many cases, this has resulted in political developments and force among the rural majority to give 'quick political independence'.

There have been numerous discussions on the impact of 'buying votes' and 'voters asking money for votes' during politicking in the 2002 and 2007 national elections. For the present generation of eligible voters, the 'I give you; you give me' culture has laid the foundation for political advancement and mobilisation for many rural villages; and for sitting MPs to lock up the 'slush funds' to buy votes in the next election. Perhaps, it is also allowing new candidates or contestants to save-up money for the next election. As a consequence of this, many rural and urban people saw the evolution of politicking as a 'transition period for failure of the former to the new' (Kaima, 2004). That is, 'you give me; I give you' has failed the people, but new political parties and leaders will lead them to new and desired development and services. A good example of this is an election campaign speech from Pilyo Maeyokali, a student activist in the 2002 national election in the National Capital District, Port Moresby:

'I am a student activist who hasn't got any money in the bank account. I will not give you money or anything. You try and cast your one vote to me...and if I get in, then every fortnight each one of you will have money in your pockets. 'By law, the five million people in PNG have K4 budgeted, and I will make sure you'll get K56 every fortnight like a 'dole' money that every unemployed Australians get' (Personal Notebook, 2007).

Such a statement will have an impact on the people. Another example of such would be a statement that Joe Lyukaki Tonde made during an interview in Port Moresby before he went to contest the Kompam-Ambum electorate in the 2007 national election, just five days after the issue of writs:

'If I get in, I will pay school fees for all the Yakani and Malipini students from Primary schools to Universities, and maintain all existing services like clinics, roads, hospitals, schools and bridges' (Personal Notebook, 2007).

In these cases, both statements above are unrealistic and the aims cannot be achieved in the expected time. However, for a rural villager, they may be seen as true and he or she may want to vote for the candidate. The question then is; what if the candidate wins? Can such promises be delivered within the time period?

Some examples of instrumental political movements and emerging leaders have been David Lambu and Stanley Kaka in the Laiagam-Porgera electorate contested the Enga

Provincial Seat, Benny Tanda and Nelson Mara student activist and candidates, Pati Lafanama and late Fr. Robert Lak of the Melanesian Solidarity Foundation, Ben Micha and Mathew Parep, former student leaders from the University of Papua New Guinea and many individuals and political parties in most parts of the country (Kaima, 2004). It should be remembered that the leaders of modern day political parties have good and sound policies, but the remnants of the crisis and situational leaders, strike leaders and student leaders have made it worse for them. The political preaching and propaganda made it worse for the political parties as the people amalgamated their fantastic and unrealistic perceptions with that of political party policies.

Perhaps, what is needed now is a study of whether remnants of these 'situational' leaders have continued to the present day. This paper presents the influences and impressions exposed by 'situational' leaders and their political parties in relation to the 2002 and also in the 2007 national elections in Enga Province.

Villagers have heard stories and seen the colours of emerging situational leaders during the 2002 and 2007 national elections. The two election experiences proved beyond doubt that the attitudes of 'you give me; I give you' has, and continues to play, a significant part in the politics of many rural communities in Enga even though the situational leaders come up with unrealistic and fantastic influences. The people of Enga have been misled into waiting for the election and then go racing after a candidate who hopefully will lead them to a desired destiny. The destiny of hope is when their candidate wins the election and then the expected promises made during campaign time will come from the candidate.

VI. NATIONAL ALLIANCE AND OTHER PARTIES' IMPACT IN THE ENGA PROVINCE

Party campaigning is not new in Enga. It has been instrumental (not clear what 'instrumental' means here) since Independence and remnants of the parties have risen and declined in the area over the years. Political parties and some individuals have had an impact on the Enga province from the awareness campaigns carried out by political parties, student groups and NGOs. There were also the party representatives in the electorates and council wards who preached the goodies of socioeconomic developments in the villages. Whilst campaigning for Peter Ipatas (Enga Regional Seat) and Leo Mandeakali (Kompam-Ambum Open Seat), I have also discussed the rise of money cults in Enga during the 2002 and 2007 national elections. Being convinced by these 'goodies', many of the people have not forgotten these fantastic ideologies preached as memories have lingered on to this day. Someone out there must come to save them. In other words, a 'saviour' must be found to replace the former. In fact, many people think and see 'situational' political candidates as the only ones who will lead them from destruction without knowing that planning and budgeting is necessary for honest development to take place in the province.

The message of deliverance and the road to political independence from colonial rule were rampant during the years prior to Independence, as Pangu Party's politics drove the nation to political independence on September 16th 1975. Many village people in Enga Province became members of the Pangu Party and thought the membership fee was part of their registration with Somare. Somare and Pangu were the 'saviours' of the rural majority in the province even though the United Party dominated most of the highlands provinces. It is no wonder that Pangu dominated Enga politics till the mid 1990s, when the party politics was instrumental and the revival of politics and a mixture of different awareness groups came onto the scene when Pangu lost badly after the founding Father – Sir Michael Somare's resignation from the party to form his new party – National Alliance.

Since then, the rural people's trust for Pangu started fading away, and it has transferred when young politicians like Peter Ipatas, Sam Abel, Leo Mandeakali, Enda Cathy Kakaraya, John Pundari, Don Polye and few others emerged. However, the word 'development' is preached by today's political parties and candidates and is part of party policies. Thus, for a villager, Stanley Kaka and Joe Tonde, as did many candidates, preached the message of development as political parties do today. What happened was when the rural parts of Enga saw that there was a lack of development, they opted for Don Polye, Sam Abel, Philip Kikala and Mike Kaeok and National Alliance, which in light of this discussion, was the only way for them to get the desired development. In Kandep, Laiagam-Porgera, Wapenemanda and Wabag; Don Polye, Sam Abel, Philip Kikala and Mike Kaeok have an impact too where people felt that they were the 'rot bilong developmen'. Many villagers joined them and campaigned for National Alliance candidates even though Peter Ipatas, the 'action governor' endorsed his candidates under his newly established 'Peoples Party' the villagers had high hopes for future success. Unfortunately Governor Ipatas' Peoples Party lost terribly in his home province except for the provincial seat which he won back whilst Kandep, Laiagam-Porgera, Wapenemanda and Wabag open seats were won by National Alliance candidates. Thus, a new leader has to replace the former politicians who fails to deliver the desired goods and services that they have preached in the name of 'development'. The voters saw that National Alliance was their saviour, where National Alliance would lead to the 'rot bilong developmen'.

In the late 1990s and early 2000s, a firebrand by the name of John Pundari and leader of the then PNG Advance and PNG Revival Parties, completely wiped out the politics and policies of Pangu, National Alliance, United Party and a few others in the province. The people had observed and listened to these movements and activities and in 2002, they wanted another person to lead them, being fed up with Peter Ipatas, who had not fulfilled some of his policies since he was elected in 1997. It seemed to me that 2002 and 2007 parliamentary elections were to be different, but any candidate this time had to deliver the goods, especially give money before he or she was elected. The generous person was, for the people, their candidate. They had not thought of the hardships candidates and political parties may face in raising money for the goods people wanted.

However, as the previous candidates and parties had done in the 2002 and 2007 national elections, the people thought the delivery of money and goods during these election campaigns were a token of 'more to come from the candidates'. Perhaps, it is not only the candidates but expectations were also high from those working-class supporters of candidates in the 2002 and 2007 national elections, where more expectations would be expected from voters in the future elections.

Therefore, the votes would ideally go to candidates who could give cash and deliver goods at the time of campaigning. Unfortunately, these attitudes and perceptions have been developed over the years as politicians, working-class supporters and political parties delivered speeches and at the same time, delivered desired goods and cash, for a development project, during the campaign time. What sort of a practice is that? Is it bribery? Or is it our Melanesian ways of helping each other? I think it is bribery, at its best, changing the public view and perception into, 'you give me, I give you' expectation. Having witnessed and researched these transitional stages, a leader will have to 'buy his or her votes'. Is this bribery or not?

VII. THE CANDIDATES, SUPPORTERS AND THEIR CAMPAIGN IN THE ENGA PROVINCIAL SEAT

Out of the 16 candidates, Enda Cathy Kakaraya was the only female contestant in the provincial election. All the provincial seat contestants are categorised under their respective electorates and they are listed as follows in the table.

Table 2 represents the progressive preference results as at 31st July 2007, 3: 01pm.

Ballot Order	Name	Party	Origin District	of First Prefs	Percent	Current Count	Percent
16	PETER IPATAS (Sitting Member)	Peoples Party	Wabag	103932	42.41%	116670	49.45%
23	PAUL PAKEN TORATO	Independent	Laiagam-Porgera	45612	18.61%	59890	25.38%
14	MICHAEL YANGAO YAI-PUPU	National Alliance	Wapene-manda	22377	9.13%	30087	12.75%
13	Fr. PAUL KANDA	New Generation Party	Wabag	20184	8.24%	29294	12.42%
25	KALA POKO KANDAPAKI	Independent	Wabag	17122	6.99%	Excluded 12	
19	DAVID LAMBU	Independent	Laiagam-Porgera	10717	4.37%	Excluded 11	
22	NATHAN PAUL PIARI	Independent	Laiagam-Porgera	9365	3.82%	Excluded 10	
12	ENDA KATHY KAKARAYA	People's Progress Party	Wapene-manda	8466	3.45%	Excluded 19	
11	MATHEW PAREP LMP	Stars Alliance Party	Wapene-manda	5182	2.11%	Excluded 18	
10	STANLEY S KAKA	Independent	Laiagam-Porgera	336	0.14%	Excluded 7	
15	PAUL NILI	Independent	Wabag	671	0.27%	Excluded 6	
20	WARAPUN LOTAN	Stars Alliance Party		489	0.20%	Excluded 5	
17	STANLEY KAM KUNDAL	Independent	Laiagam-Porgera	368	0.15%	Excluded 4	
24	GIUWI KAMBI	Independent	Kompiam-Ambum	121	0.05%	Excluded 3	
18	JACK MAIS	PNG Labour Party		101	0.04%	Excluded 2	
21	BUI LEE WETAO	Independent	Kompiam-Ambum	22	0.01%	Excluded 1	

Total Remaining	235941
Absolute Majority	117971
Exhausted Ballot papers	9124
Total Allowable Ballot Papers	245065
Informal	3620
Grand Total All Ballot Papers	248685

Source: Papua New Guinea Electoral Commission, October 30th 2007.

Table 2 reveals that all the provincial candidates secured votes (1st, 2nd, and 3rd preferences) from all the five electorates except for Bui Wetao and Juwi Kambi who did not go out to the electorates to campaign due to lack of funds and logistical support. A political party supported each (not clear who each is) of them. National Alliance supported Michael Yangao Yai-Pupu, New Generation supported Fr. Paul Kanda, Peoples Party supported Peter Ipatas, Labour Party endorsed Jack Mais, and Peoples Progress Party supported Enda Cathy Kakaraya. To the surprise of many, Mathew Parep was endorsed at the last minute by the Stars Alliance Party, a party that was not popular in the Province. Peoples Party was one of the parties that were opposed by most voters but the Enga people for voted the Party leader because he is the 'Action Governor' who makes decision straightaway. But, sadly, most of his candidates contested under the banner of Peoples Party were opposed due to the party; where the people perceived the party differently basing on the notions of the two letters – 'PP'. The campaign for all of them was similar, but their approaches to win votes differed. To begin with, although the political parties' funding supported them, it was a problem, as most were told after the elections.

By 2006, the people of Enga already knew that Paul Torato was contesting again. It spread out like a bush-fire that Paul was going to be a candidate and the other Engans perceived that the West Enga votes would be blocked or 'tanim tebol'. The perceptions spread throughout the province that one of Torato, Enda Cathy and Kanda might win the provincial seat. They entered the political race with wide experiences in politics except Kanda and made their intentions known towards early 2006. Party policies and ideas were used in each of their campaigns and people were visited in all villages in the province. There were many public forums during the campaign periods and before the voting for all

candidates in most council wards to outline their policies. They all spoke and outlined their policies during campaign rallies. While most of them were talking and outlining their policies, some people had been expecting money. There were regional candidates who also attended campaign rallies organised by open candidates and there they had the chance to express their views and policies. Most of the speeches evolved around the lack of socio-economic development, free education and law and order issues in the area. They also stressed on the need to improve infrastructure development in the area and the need to improve infrastructure and communication.

This is understandable, as the area is one of the least developed provinces in the country, due basically to the law and order problem, tribal fighting and geographical terrain. It was interesting to note the speeches made by David Lambu, who said that if he were elected, he would push to punish Governor Ipatas and other candidates who are not accountable with the public funds. A big incredible promise since 1997 and 2002 national elections (not a complete sentence).

VIII. MY OBSERVATIONS, EXPERIENCES AND CAMPAIGN FOR GOVERNOR PETER IPATAS AND LEO MANDEAKALI

On June 2007, Leo Mandeakali had his final rally amidst festivities and several pigs were slaughtered for the many expected visitors. My village boys were asked to record a head count of the possible total. There were many singing groups from my area and Leo's place singing songs for Peter Ipatas and Leo, and more than ten pigs were slaughtered overnight for the last rally. This was typical of a Melanesian bigman hosting possible voters. After the rally, a campaign committee and scrutineers were selected from

my place and his area to take a lead in walking to villages and campaigning for him.

However, supporters from all parts of the area experienced dreams and visions of Peter Ipatas and Leo Mandeakali. Many of these dreams and visions were interpreted according to traditions and the dreams were in Peter and Leo's favour. Many of their supporters thought that Peter and Leo were going to win the election outright based on these dreams. Dreams, visions, and use of religious values were also common among the people; especially my own tribesmen who were supporting Peter and Leo. They came up with many dreams of Peter and Leo winning the elections easily. Finally, after losing, one of Leo's supporters (my tribesman) eventually told me: *'Apange, endapi akalipi kombea piliyo, visiname kandelyo ongo akali andake-em meyea delyamo lapumu akaita samboo lamono kai'* (Uncle, women and men who dreamed, seeing in visions that God is freely giving us are liars). Here indeed, was the use of religion for high achievements, without knowing that we can lose. For him, the blessing of the gods and our dreams were true and must come to fruition.

I started campaigning in November, December 2006 and April 2007 during my holiday and research trips. However, my own village boys had visited several villages during those months and told the villagers that we were campaigning for Ipatas and Mandeakali. Judging according to 'actions', concern for the future of Enga, education, students and educational qualifications, Leo and Ipatas were the best candidates for the people of Enga and Kompam-Ambum. Unfortunately for me, no funding from Leo and Peter supported me and I wasted a lot of time and money even for buying *buai*, smokes and food for my tribesmen who were supporting Leo and Ipatas. I spent my own money to fly to Enga to cast my votes for Peter and Leo.

My speeches were straightforward and clear supporting Ipatas and Mandeakali focusing on their policies. Their implementable policies were really practical based on 'free education' and 'economic endeavour'. They were the best candidates for the entire province with the necessary education and experience, but people thought only of Ipatas; whilst Mandeakali was forgotten during the voting. Ipatas won and Mandeakali lost. Perhaps, Leo did not have the money to campaign, but the money should not have been seen as a means for one to be elected. The traditional handout by parties and independent candidates must be stopped. The voters must vote according to party policies and speeches of individual candidates who have good and sound policies.

It is good to host people who would come to a candidate's house to hear his or her policies. How does one decide whether it is bribery or 'vote buying' for a candidate to host a party and then give out money for campaigners to go out and campaign for the candidate? Many people from all over the area came to Mandeakali's house and spent a night or two before his final rally on June 28th 2007. It seemed that all the people who attended were pleased, but messages and letters for funding assistance came after they had left Leo and Peter's villages or rallies. Directly or indirectly, the idea

of 'buy us first before we vote for you' was implied in the letters that they received.

IX. VOTES (1,2 & 3) BILONG MIPELA I STAP LONG MARKET' (OUR VOTES (1,2 & 3) ARE ON THE MARKET

In many villages in the five electorates that I visited, the attitudes, perceptions and behaviours have been that of political prostitution in both 2002 and 2007 national elections. That is, they wanted candidates and core supporters to 'buy them' before they voted for the person. Perhaps, it was clearly evident in the 2007 national election where I was asked by many voters because they knew that I was supporting Peter Ipatas and Leo Mandeakali. One would expect voters to campaign for the candidate and help meet the cost of campaigning, but this was practically the opposite.

We are on the market, buy us and we will give you our first vote'. It is interesting to note that many village leaders wanted to be 'on the market' before a vote was made by his people. This is simply to say: 'if you do not buy me, I will not vote for you'. This also applies to all votes (vote 1, 2 and 3) in the new preferential system. There seems to be a general attitude that voters often expect money before they make a vote for the person who gives support in the first instance.

Like the 2002 national election, the 2007 national election was an election where people's attitudes and behaviours were completely different compared with the previous parliamentary election behaviours and attitudes. Votes 1, 2, and 3 are 'on the market' was the normal language I heard and saw in most campaign houses and rallies and in polling areas. However, most of the open electorates and the regional seat were occupied by tycoons with cash. People without money just marketed their policies for the people to choose, but those candidates with money took the upper hand where buying of votes (vote 1, 2 and 3) was clearly seen and predictable. In the Wapenamanda electorate, three tycoons took the stage, namely; Yangakuni Miki Kaeok – sitting member and National Alliance candidate, Rimbink Pato – a prominent lawyer and United Party candidate, and Masket Iangalio – former open member and New Generation Party candidate. The hardcore supporters of these three candidates dominated almost all polling areas with cash and rates of buying votes. Before buying votes with cash, supporters watched each other, for example, when Yangakuni Kaeok supporters bought the 1st vote with K100, 2nd vote K50 and 3rd vote K20; then the supporters of Pato and Iangalio bought the 1st vote with K150, 2nd vote K100, and 3rd vote K50. The rates were visa-versa depending on who bought first and with what amount of money. Likewise, tycoon candidates in the regional seat and the other four electorates also took the stage with their cash and rates. And there is even clear evidence that the tycoons went as far to bribe the electoral officials and the security personnel on the ground. This precedent emerged due to people's attitudes and behaviours of 'our votes are on market'. There is a clear danger of democratic ways of electing leaders being hijacked by candidates and

supporters; and even clear evidence of democratic ways of electing leaders being abused and degraded by voters.

In this way, the candidates are forced to buy a vote, which often leads to candidates being bribed and held to ransom by the voters. There is a danger in this sort of attitude. The villagers will continue to expect the leader to deliver the desired goods without thinking about the planning and budgetary processes involved. In the long run, it will be a precedent for the leaders to pay the voters as soon as they are elected to Parliament. That is, if the candidate wins, the voters will expect him to continue to deliver the goods as he had done during the elections. If the candidate does not provide, then voters go against him and demand more of what he had done during the elections.

In most case, I witnessed a lot of letters asking for favours from the village people. They wanted money for school fees and compensation payment, roofing iron, money to build churches, one councillor wanted K30,000 to help meet his campaign costs so that his people could, in return, vote for Ipatas and Mandeakali in the 2007 national election. The other said he and six (6) families voted for Leo and Peter and so I as the core support for these two candidates must pay him K400 to give the six family members. This demand is still there, despite Leo losing and Peter winning the election, as he approached me recently with his request before I left for Port Moresby during the counting for the 2007 parliamentary elections.

X. HANMAK BILONG OL WE?' (WHAT HAVE THEY DONE FOR US?)

Enga people are very critical during election periods. They judge the sitting members before they re-elect or change them. If they are satisfied with the sitting member or even a former member they do not make comments. However, if they are not satisfied with the candidate, they burst out and tell them directly with such questions like; 'what have you done for us?', 'what have you done for your electorate?' This really has an impact in Enga during politicking. These attitudes and perceptions have not changed whilst other politicking patterns in the province have changed. The most obvious of all changes is that 'I give you – you give me'. Meaning, you buy my votes and I will vote for you.

People often want goods and money from the leaders before they vote for them. They demand a candidate show what they can do before they vote, and so hold a candidate to ransom. How and where are the candidates going to get the money to display what they are capable of doing? On the other hand, if the sitting member has delivered the goods during his or her term in office, they are sure to get their votes in future. They have an advantage over any new candidates in this regard. In demanding such, the villagers have unfortunately developed a mentality that the candidates must have money, thus, demanding that they be paid before they can vote for the candidates. People want to see what a leader is capable of delivering, before they cast their votes. Unfortunately, many people have this notion without knowing that money is involved in order to provide for the community. This is like putting the cart before the horse, as

candidates are not able to deliver during the campaigns, but only after they have been elected.

'What have you done for the community in the past, and how can you prove that you are capable of delivering goods and services?' Is it bribery or providing a service, if one who intends to be a candidate distributes a brand new truck to a health centre for the purpose of providing health services? The village people were asking candidates for all sorts of things after they had nominated. Request letters come from family members, village leaders and other voters asking for arrangement for their kids to study in the colleges. Even after the election, people kept asking me because I was a supporter of Mandeakali and Ipatas to secure a space at the University of Papua New Guinea for their kids, especially grade 12 dropouts to come and study not knowing that I was just a simple tutor. And also people were asking Leo Mandeakali to give them what they wanted if he wanted to recontest the next general election.

Eventually, a possible leader is sucked into the system. They have no choice but to 'give and take'. Surely one must be seen to have established him or herself before the next general election, otherwise the people will not vote for the person. If you have money, think and dream about politics, but if you have no money, forget politics because of the emerging political perceptions, attitudes and behaviours in Enga. Thus, the village people expect a leader to provide something for development projects in the village before they have a chance of winning the election.

I believe the villagers too have been smart in demanding their leaders to pay them first before they vote, due mainly to past experiences. They had voted and voted, but results from their votes had not been forthcoming. The false election promises by previous candidates and members and even supporters have made the people reluctant to vote when the time comes. Frustrations then lead to demands for payment before one can vote for the person. Maybe we have tricked the people. We must find alternative means and also educate the voters to tell the difference between political propaganda and reality. Can, for example, a political leader be completely honest? Who knows? The honours are with the people who choose and elect leaders to represent them in the parliament and bring back development and service.

XI. CONCLUSION AND RECOMMENDATION

The 2007 national election in the Enga province was marred by many issues, unlike the 2002 national election where problems accelerated and the election process was hijacked. In many polling areas, many voters were not on the newly updated common roll and electoral roll. In my own council ward, at least 200 people voted because their names were on the electoral roll, whilst more than 500 eligible voters did not vote because their names, including mine, were not on the electoral roll. Despite the name list, most polling areas went well even though grievances were raised and fights broke out. This was because of the presence of the security personnel, especially the PNG Defence Force.

The first week of voting had gone ahead as planned, except for delays I Zn Kompam-Ambum, Laiagam-Porgera and

Wabag electorates, which were hampered by lack of helicopters and trucks to help security personnel and polling teams over the mountains. In these areas, polling was delayed by some days, but went well. All candidates (open and regional seats) have scrutineers in all the polling areas and they were told to provide quick reports of voting in their respective areas. By the middle of the next week, it all seemed that the voters had decided who their favourite candidates were. It seemed that the people had gone for Governor Ipatas even though they were against his party, but there were spilt votes among all regional candidates in most council wards in all the electorates except for only a few votes for Governor Ipatas in the Kandep electorate.

Perhaps, the Melanesian ways of politicking and campaigning are difficult to understand unless one is involved in the political process itself. Very often, candidates and political parties will have good and sound policies, but the villagers have different notions of the ideas and policies being portrayed during the campaigns. Many young people in Enga, for example, jump from candidate to candidate looking for 'free handouts'. They are not so committed to a particular candidate, and look at who can give money for their own personal use.

The syndromes of 'our votes are on the market' and 'what have you done for us' are very common among the people, as shown in this case study. Such is, or may be, similar in other parts of the country. However, this goes to prove that the voters do not often vote for the best candidate but for the person who can give the people what they want; satisfying their immediate needs. The main problem with this attitude will be that those of us with no funds cannot enter politics, but must leave it to those who have the money. It becomes the politics of the rich. The danger of this developing is real, and that a political elite will rise in Melanesian countries where it will be a father and son becoming leaders. In other words, inherited leadership patterns may rise, as we have seen with two examples (Somare and Chan) already in PNG. 'Big man' giving in order to get more support is an old Melanesian tradition. This pattern had unfortunately transferred into the modern political system and the voters have been led to feel obliged that the leader must give in order for the voters to return favours. Whether this is bribery or not, one must take the precaution to observe. Perhaps, there are dangers in this system in that the winning candidates will be put under pressure to give more to the people. The problem will be that if there are no funds and no delivery of goods and services, the voters will then change allegiances and vote for another candidate in the next election. This will often mean a complete turn over of candidates and new members every time there is an election. In the end, there is no continuity and stability in government.

The ideology of 'you give me – I give you' is not modern politics at all, but an old tradition being applied to modern politics. Thus this attitude emerged during the transition of traditional to modern politics. Or in other words, it emerged from the syndrome of 'bigman giving in order to get more support' to 'you give me money, and I give you my votes'. A candidate will however, have no option, but to give, in

order to get votes. This, in a way, can be seen as bribery in context, but for the villager, it is not. The only problem is that many villagers will continue to expect the leaders to give and, thus, the handout mentality will continue to survive. On the other hand, if there is continued demand for payment before a vote is made, then we might as well 'leave politics to the rich people' and those who have the money. While on the other hand, one has to have a million kina in order to contest any elections to come. The politics of 'you give me – I give you' can also be applied in bureaucracies where leaders often pick their own supporters for the government department positions. Nepotism, as it may seem, is a traditional method being used. Such scenarios often create fear and favour among the politically appointed positions in the country as well.

Unfortunately, the other problem for the candidates and their parties is to campaign honestly and not give out policies and deliver empty promises that cannot be achieved overnight. The village people will remember what a leader has said during the campaign and they will therefore demand that the person deliver what was promised during the campaign. Perhaps this was clearly witnessed and seen in most rallies where villagers asked those candidates and MPs who gave empty promises to their people.

There is a need for education and re-education of politics, review and amend electoral laws and in particular, candidates and political party leaders must be honest in their policies and avoid language that will lead to high expectation among the voters. The notion that a leader must provide the goods and services soon after the elections are a mistake, as there is planning and budgeting involved. There is planning and budgeting to be done before the project is finally approved and funded. This is one of the main reasons why you read many letters in the two daily newspapers asking for the leader to deliver if the people have not seen the promises delivered. It is not a surprise that one sees letters to the editors of the two dailies asking where the member has been since he or she was elected. In fact, most of the time he or she is a resident of Port Moresby and only goes to the electorate when the next election comes around. How can MPs, for example, live in expensive hotels and drive expensive cars, when the rural majority of the people do not have basic health services and schools? The politicians are living in a different world from their own people.

Candidates, political parties and to an extend the hardcore supporters must be honest in order to avoid the attitude of 'you give me – I give you' and get votes. Political campaigns must set limits like not throwing out money and giving feasts house by house during the campaigns, as this, in many cases, reinforces and strengthens the emerging culture of 'our votes are on the market'. Once again, this encourages unwanted electoral behaviours, perceptions and attitudes among the village people.

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XIII. APPENDIX

Table 1 reveals the total number of female candidates contested in the 2007 parliamentary election

No.	Name of Candidates	Provinces	Electorates	Political Party	Number of Candidates
1		BOUGAINVILLE	CENTRAL BOUGAINVILLE OPEN		1
2		CENTRAL	CENTRAL PROVINCIAL		2
3		CENTRAL	GOILALA OPEN		3
4		CENTRAL	KAIRUKU-HIRI OPEN		3
5		CENTRAL	RIGO OPEN		1
6		CHIMBU	CHIMBU PROVINCIAL		1
7		CHIMBU	KARAMUI-NOMANE OPEN		1
8		CHIMBU	KARAMUI-NOMANE OPEN		2
9		EAST NEW BRITAIN	GAZELLE OPEN		1
10		EAST NEW BRITAIN	RABAU OPEN		1
11		EAST SEPIK	EAST SEPIK PROVINCIAL		1
12		EAST SEPIK	WEWAK OPE		3

13		EAST SEPIK	WOSERA GAUI OPEN		1
14		EAST SEPIK	YANGORU- SAUSSIA OPEN		1
15		EASTERN HIGHLANDS	DAULO OPEN		2
16		EASTERN HIGHLANDS	EASTERN HIGHLANDS PROVINCIAL		1
17		EASTERN HIGHLANDS	GOROKA OPEN		1
18		EASTERN HIGHLANDS	HENGANOFI OPEN		2
19		EASTERN HIGHLANDS	KAINANTU OPEN		4
20		EASTERN HIGHLANDS	LUFA OPEN		1
21		EASTERN HIGHLANDS	OBURA- WONENARA OPEN		1
22	ENDA CATHY KAKARAYA	ENGA	ENGA PROVINCIAL	Peoples' Progress Party	1
23	JULIE DANIEL	ENGA	WABAG OPEN	PNG First Party	1
24	MARYANNE TOKOME AMU	ENGA	WAPENAMANDA OPEN	Independent	1
25		GULF	KEREMA OPEN		1
26		GULF	KIKORI OPEN		2
27		MADANG	MADANG OPEN		2
28		MADANG	MADANG PROVINCIAL		1
29		MADANG	USINO BUNDI OPEN		2
30		MANUS	MANUS OPEN		2
31		MILNE BAY	ALOTAU OPEN		2
32		MILNE BAY	ESA'ALA OPEN		1
33		MILNE BAY	KIRIWINA- GOODENOUGH OPEN		1
34		MILNE BAY	MILNE BAY PROVINCIAL		1
35		MILNE BAY	SAMARAI-MURUA OPEN		1
36		MOROBE	BULOLO OPEN		1
37		MOROBE	FINSCHAFFEN OPEN		1
38		MOROBE	TEWAE-SIASSI OPEN		1
39		MOROBE	NAWAE OPEN		2
40		MOROBE	LAE OPEN		1
41		NATIONAL CAPITAL DISTRICT	MORESBY NORTH- EAST OPEN		2
42		NATIONAL CAPITAL DISTRICT	MORESBY NORTH- WEST OPEN		1
43		NATIONAL	MORESBY SOUTH		1

		CAPITAL DISTRICT	OPEN		
44		NATIONAL CAPITAL DISTRICT	NATIONAL CAPITAL DISTRICT PROVINCIAL		1
45		NEW IRELAND	KAVIENG OPEN		3
46		NORTHERN	IJIVITARI OPEN		1
47		NORTHERN	NORTHERN PROVINCIAL		5
48		NORTHERN	SOHE OPEN		4
49		SOUTHERN HIGHLANDS	MENDI OPEN		1
50		SOUTHERN HIGHLANDS	TARI OPEN		1
51		WEST SEPIK	TELEFOMIN OPEN		2
52		WEST SEPIK	VANIMO-GREEN RIVER OPEN		2
53		WEST SEPIK	WEST SEPIK PROVINCIAL		1
54		WESTERN	MIDDLE FLY OPEN		1
55		WESTERN	NORTH FLY OPEN		4
56		WESTERN HIGHLANDS	JIMI OPEN		1
57		WESTERN HIGHLANDS	WESTERN HIGHLANDS PROVINCIAL		1
				Total =	91

Sources: Post Courier 19th July 2007 and PNG Electoral Commission, October 19th 2007

User's Interaction with Information Systems: A Case Study in a Collaborative Network of the Pharmaceuticals Retail Sector

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GJMBR Classification (FOR)
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Abstract- One-Way to minimize the threats and optimize the opportunities has been active participation in cooperative networks. Join a network, means a process of professionalization of the management system, providing information and promoting a process of generation of collective knowledge, and thus an improvement for all participants of the network. This includes the individual capacity of unfolding of the technological potential of hardware and software. This study conducted a quantitative survey in a network of cooperation between the network of retail pharmacists, object of this research, which is located in the Serra Gaúcha - Brazil, consisting of a set of 26 pharmacies. The main objective of this study was to identify, through a case study, the user satisfaction with the integrated management system in use, observing their weaknesses and training needs of workers. This can be seen from the results that the work that the network should provide training to their employees. But the network must make a reassessment of the situation.

Keywords-Cooperation Networks, Satisfaction, Software.

I. INTRODUCTION

The micros and small companies suffering market pressures, each day more intense, because of large business groups strengthen and expansion. One manner to minimize those threats and optimize the opportunities exploit have been the active participation in Cooperation Networks, program promoted by the Rio Grande do Sul State, after 2000. Arranged in this associative concept of networks, the companies involved take advantage of the competitive vantages developed together, most of them went to external relationships, like joint negotiations and marketing. However, the structural gains diverge according to the nature and segment of the company's business that ingress in a associative network. This joint resulting build considers he thrust and the technologic level of the involved organizations. Also verifies that the pharmacies market is framed by: a) big networks, that are strengthen from expansion strategy, from small networks acquisition.,

detaching the stocks and selling In relation of the remedies market, evidences reveals that are in Brazil about 54.000 pharmacies, which means one pharmacy for each 3.144 habitants. In Rio Grande do Sul, this relation is one pharmacy for 2.510 peoples, that for one hand is favorable to the consumer, because there are more options, but determines a bigger concurrence for the owner of this kind of business

points informatization, above a large buying volume, which assure a small acquisition costs and larges profits. B) Independents pharmacies, that seeks associations with other pharmacies of the same size to gain bargain power, and try to expand their market where the large networks still don't established, like the periphery.

Recording to the pharmacies consumer, verifies the profile is formed by 55% of the feminine public and 45% masculine, which classes A and B have representation of 49%, while the C class has 37% and class D and E, 14%. Is important to mark that the public with more than 50 years comprehends 65% from the total of the pharmacies clients. However, is a public of low fidelity to the company, because the buy decision is based on a immediate need of relief, which is attended by the pharmacy proximity, and the offered products are the same, and the price variation, in general, don't represent significative differences.

Because of this aspects, observes that in Brazil, a tendency of independent pharmacy number drastic reduction, or this ingress stores ingress in cooperation networks or even else other associative models that objective, collectively, generate competitively to the individual operation and bring sustainability to the business. Verifies yet, from this trend, the occurrence of the following events: a) the independent neighborhood stores shall lose market share, and as consequences should opt: been acquired by big networks or arrange in associations – will not be more market share for independent pharmacies. B) Own brands should gain more highlight. C) Managers segment pressure for a new legislation that normatise the medication market: d) the independent stores association shall create juridical person with more investment power and more competitiveness. E) The international players entrance with quick expansion will obligate the national players to hold their positions. F) In the selling point, the products disposition will gain more detach, with the supermarkets expertise been acquired by this sector; g) the marketing practices adoption will be the key-point to establish sustainable competitive advantages. I)

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the strategic management tool will be differential to enhance the operations.

Thus, the independent pharmacies seek, above associate to programs like the Cooperation Networks, to professionalize their management process, because the entrance in this kind of model generate changes in the company. That includes an increase in the capacity of their technological potential, in hardware and software, and how they are aligned with the business processes, making capable the data integration between the associates.

This paper had like main objective to identify the user satisfaction with the management integrated system in use on the network.

The theoretical references related to this paper is presented in section 2. The methodology in section 3. The result analysis in section 4. The conclusion is presented in section 5

II. THEORETICAL REFERENCES

About network enterprises, Nohria (1992) evidences that the network concept is used on the organizational theory since the principles of XX century. This new way of companies union have how main objective to obtain collective solutions that, in a isolated manner will be too hard to accomplish, which is also described by Amato Neto (2000). Also, according Porter (1997) understanding that the every company goal is to reach the maximum profitless. The recipe to reach this goal combines ingredients like maximization of resources, elimination of inefficiencies and productivity improvement with the search of arrangements more efficient.

The relationships between companies don't mean a network, because every and any kind of interaction between organizations could, erroneously, be considered a network (Bakker, 1992). According Pyke (1992), the cooperation system between companies is usually made of small independent companies, organized in a place or region, inside a productive sector specialized in a specific part of the economic sector. Initially, these groups use the local institutions, that in a first moment manages the system development by relationships, building the concept of trust, that, according Cumming e Bromiley (1996), reduces the transactions costs, by reduction of opportunistic behaviors in the work relationships and assuring that the companies involved keep the flexibility and the agility of their small size.

The companies group interest maintenance in remain on this interactions inside a Cooperation Network is directly associated to the economic acting and relational; this denotes a governance needs, and in this model is decentralized, according Jones, Hesterly e Borgatti (1997), although necessary how response to determinate concrete contingencies, to solve practical problems of coordination, according to Araújo (2000)

Due the reason that brings this companies to cooperate among themselves, Amato Neto (2000), highlight as associative advantages: combine competences and use know-how from other companies; split the risks from perform technological researches, share the development

and acquired knowledge's. Split risks and cost of the new opportunities exploits, realizing experiences together; offering a mix of products with superior quality and diversifying; exert a bigger pressure in the market, increasing the competitive force in benefit of the client. Share resources, principally those underutilized; strengthen the buy power and get more power to actuate in market were this companies are inserted, what is denominated by Schmitz (1996), how collective efficiency, what for Piore and Sabel (1984), represent a paradigm of the flexible linkage from competences relation, objectifying broader markets

III. METHODOLOGY

A. Object of Investigation

Kanter apud Candido (2002), to visualize the options and demand to the actual corporate environment, orients to the importance of the many relationships ways which organizations are subjected. The authors believes that in this scenery will occur more alliances, partnerships and a external collaborations by the shape of cooperation networks. With networks more adaptable and flexible, the companies will have support to a quicker increase in every places.

The pharmaceutical retail network, object of this investigations, is located in the Serra Gaúcha – Brasil, emerged by the need of strengthen this business segment, front the new competitors entrance rising, and market changes, that includes technological market aspects. The key-event network creation was the managers group understanding about their choices: or collectively grow or their business will not be sustainable for long. Currently the network has 24 associates and 26 selling-points distributed in six cities, driving US\$ 6.000.000 annually, generating 80 direct jobs. The network have 5 years, and is a consolidate achievement in the regional context.

The main goal of this survey is to identify the users satisfaction with the Cooperation Network management system. The particular goals are: a) identify the users profile; b) verify the qualifications needs; c) verify the satisfaction with the pharmacies management system; d) verify the training received for this programs; e) obtain data about the information's register metrology; f) collect data about other software's existent on the market.

The following hypotheses are defined: a) There are lack of knowledge about the management system used; b) The users keep parallels controls; c) are necessary investments in qualification; d) the used equipments are far from necessity. This was an applied nature study, with quantitative approach, and descriptive goal. The primary data were resultant by collect via direct approach, using a structured forms, containing 14 closed questions and 1 open question for qualitative data. This survey universe was defined how the 26 associated companies, been collected 76 questionnaires.

IV. RESULTS ANALYSIS

The results analysis are divided in users profile, actual applications domain degree, training degree in the moment that ingressed the network, future qualification need, record and storage information methodology, other softwares information, satisfaction with the current platform, hardware aspects and qualitative analysis.

A. Users profile

About the users profile, was an categorization in Owner, Manager, Pharmaceutic and Employee. The correspondence analysis, reveals that the pharmaceutics and owners are, in most cases, postgraduateds or graduateds. About the employees, 50% have junior high completed, and only 26% are undergraduate. The employees, that represent 60,5% of the investigated, have junior high completed (31,6%) and undergraduate (15,8%). Table 1 shown Cross between entre role and scholarship.

Table 1: Cross between entre role and scholarship

Role in the company	Scholarship						
	Elementary Incompleted (%)	Junior High Incompleted (%)	Under-graduated (%)	Post-graduated (%)	Junior High completed (%)	Graduated (%)	Total (%)
Owner	0,0	0,0	6,6	3,9	3,9	9,2	23,7
Pharmaceutic	0,0	0,0	0,0	2,6	0,0	9,2	11,8
Manager	0,0	0,0	2,6	0,0	1,3	0,0	3,9
Employee	1,3	9,2	15,8	0,0	31,6	2,6	60,5
Total	1,3	9,2	25,0	6,6	36,8	21,1	

B. Actual applications domain degree

The softwares used in the pharmacies network is the MercFarma, the management system, and the MercCard, that managed the credit card shops. Also are used offices applications for parallels control's, and online communications applications, like outlook and Messenger. The correspondence analysis, shows that the users have a

basic user profile, specially in the MercFarma and MercCard, the main networks systems. In this case, evidences the Cronbach Alpha (Hair et. al., 2005), that indicates the answers internal coherence is 0,88, indicating a very good association intensity. The table 2 evidences the use degree, by software.

Table 2: Use degree, by software

	Don't use	Little Knowledge	Basic user	Advanced user	TOTAL
3.1)Word	2,0%	2,3%	7,2%	3,1%	14,5%
3.2)Excel	2,7%	3,3%	6,1%	2,3%	14,3%
3.3)Access	6,4%	2,7%	2,7%	0,6%	12,3%
3.4)Merccard	2,9%	2,0%	8,6%	1,6%	15,2%
3.5)Mercfarma	2,3%	0,6%	10,0%	2,5%	15,4%
3.6)Outlook Express	4,1%	2,7%	4,5%	2,7%	13,9%
3.7)Messenger	2,7%	1,8%	7,2%	2,7%	14,3%
Conjunto	23,0%	15,4%	46,3%	15,4%	100%

Applying cross means in the job whtth systems domain, can be observed that the possible answers (don't use, little knowledge, basic user, advanced user), the managers have a higher domains over Merccard and Merccarda, with a significative difference in emploieess relation.

a)Merccard': 3,33 / 2,69 Difference. is significative (t = 2,13, 1-p = 96,3%)

b)Mercfarma: 3,67 / 2,85 Difference is very significative (t = 2,71, 1-p = 99,1%)

This implicates a higher training need for employieess, that situates in a domain range between little knowledge and basic user. The Merccard low value for the pharmaceutical can be explain by he fact him normaly don't oper with this system.

C. Training degree in the moment that ingressend the network

About the training degree in the moment that ingressend the network, can be observed from the correspondence analysis, that any attention was given to the basic office applicaives, while Mercfarma (63%) and Merccard (58%), specific network applicatives, recived a few training attention. However, this percentual suggest that the tratament was not uniform in every pharmacies, specially by the high percentual of respondents that market not have recived any trainament (23,3% for Mercfarma and 19,2% for Merccard). Therefore, the low advanced training percentual is a insatisfiation alert for the system, because the users don't have a clear understandment for his use. This became

	None (%)	Few(%)	Basic(%)	Advanced(%)	Total(%)
Word	69,4	11,3	17,7	1,6	100
Excel	74,2	8,1	17,7	0,0	100
Acess	86,2	8,6	5,2	0,0	100
Merccard	23,2	14,5	58,0	4,3	100
Mercfarma	19,2	12,3	63,0	5,5	100

evident also in reletion to the registred commentaries. The resultins percentuals can be verified in the table 3. The Cronbach alpha for this case is 0,81, and also show inernal coherence between the questions

D. Qualification needs

About the training needs, were realized four crossinf analysis: a) training needs versus programs user profile; b) training needs verus recived training at the network ingress;

c) training needs versus profile; d) profile versus training need;

Was observed that the Mercfarma basic users (65,7%) and Merccard basic users (55,2%), how respondets that marked a need form more training.

The training needs is also observed, and indicates a high percentual of respondenes that didnt recived any trianing in the applications Office ao ingress in the network. (none, few, basic, advanced). Indicates a failure in aspects of basic instruction collaborator. However, related to the management sustem, that percentual is 52,2% to Merccard and 59,7% to Mercfarma, what can be consideren insatisfatory, if be reletad the percentual and training basic type.In the trainting needs versus role analysis, can be observed, that 41 employees, 15 owners, 8 pharmaceuticals and 3 managers evidenced training needs. In percentage, that means 89% of the employees, 88,33% from the owners, 88,89% from the pharmaceuticals and 100% of the managers (46, 18, 9 e 3 respondents, respectively). According to scholarship degree, those whom situate in the junior hight complete range, and graduate and undergraduate, also showed training needs However, can be observed, that compartes the responet role with the training level in the network ingress, tha in a general manner the trainings weren't sufficient. Can be observed that were realized traning of Mercfarma for pharmaceuticals (77,8%) Merccard and Mercfarma to the managers (66,7%) and the same applicatives to the employees (65,2% and 73,9%).

However, the low training percentual to the owners is

because the same not necessarily use that kind of system, operational level. However, 83,3% of the owners appoint that is necessary more trainings, and they could do better use of the analyis tools that Mercfarma dispose.

E. Register and storage information methodology

Acording the information registering, 77,63% of the respondents pointed that is important tho register in the management systema, despite a parallel control

Table 4: Where is more important to register the information, according the users

	Total	%
Paralel Control	9	11,84
Mercafarma	59	77,63
(empty)	8	10,53
General Total	76	100,00

However, to be questioned if they use parallel controls, 60% responded that use such mechanism, been they excel worksheets and annotation books. This practice suggests tha the system may not be attending the pré-requisites of users, according Table 5.

Table 5: paralels controls most used by the users.

		Cash book	Annotation books	Excel worksheet	Acess database	Others
No	27					
Yes	46	15	20	28	1	8
(empty)	3	61	56	48	75	68
Total	76	76	76	76	76	76

When questionated about the backup periodicity, only 11 of 76 respondentes shows that the backuop is diary. Was observed that 19 responde this question, sinalizinh the unknoledgement of this practice. This implies that, in a general maner, the network pharmacies data aren't cleary assured agins contretaps or malicious attacks. Yet, the most of information are registred in parallel controls, the dispoñible data quality in all network became insatisfactory

F. Information about other softwares

Questionated if they have been worked with other managemt pharmacies software, 53,95% respondent no, 31,58% respondent that yes, and 14,47% didt respond. The citeded softwares were: Edm win, Podium, Prodaly; Mg; Módulo; NI; pharmacus (panvel); Delinfo (capilé); Pharmacy, Prospect, Result, Síntese, software do Ipam.

G. Satisfaction with the Mercfarma.

About the software use, was realized a correspondece analysis. Observes that the cash-flow modules (32,4%) and buy and recive accounts (29,6), were not used. For this case, the Cronbach Alpha is 0,90, what indicates an excellent internal consistency. The most used modules are the sells (34,7%) e reports generation (37,2%), while the stocks generation is considered regular (35,2%).Those modules evidences that the users use Mercfarma only for they operational functions, like attendiment, and don't appropriate the modules related to analays and financial management (cash-flow and buy and recive accounts).

Was observed that he owners don't use the cash-flow module (55,6%) and pay e recive accounts (44,4%), what can signalize a deficieny in financial management aspects, or the modules aren't confinable to this porpoise. The employees marked has good (45,7%) the sells module.

Was verified that cross mean evaluation, that consideretes the scale (don't use, poor, regual, good and very good), show the stocks management module how good in the owners opinion. While the cash-flow is considered poor in

the owners opinion. In the general evaluation of means, the sells module has the highest satisfaction, while the cash-flow has the smaller satisfaction level.

H. About hardware

Can be verified, that the most pharmacies has 3 computers, been this quantity betwwen 2 and 4, o excpetend in this kind of business. Acoording the correspondence analysis, that compares the realizes frequencies with the expected, can observes thar companies with 4 computers have equipments of life time higher than 3 yers, the companies with 2 coputers have companies wih life time les than 1 year; the companies with 5 e 7 machines have equiaments with life time bewwen 2 and 3 years. Em percentuals ters, 46,6% of computers have less than 2 yers, while 51,4% have more than 2 years.

I. Qualitative analysis,

The last question of the questionnaire was na open type, and therefore were coleted the foolowing questionaries (76, 75, 31, 63, 10, 47, 48, 49, 37, 35, 17, 29), which answers were categorizated in support, training, software exchange and others. Can be observed bring the questionnaire ansers tha he company that comercialises the Mercfarma have a deficitary support, that summent tho the traininf lacuness user has a consequence a low performance. Also are marked deficiencies about the information consistency, what could indicates not use the cash-flow and pay and recive account.

Table 6: Registered commentaries by question and type.

Quest.	Type	Registered comentary
76	Support	I'm hunappy with some thing from the program, like the reports that don't match, and other's erros. Sometimes wasn't given a feedback from the requests.
75	Support	Ìm insatisfied with this program for many reasons. One is the cash close, don't have, I have to do ir manual. A absurd. Beyond the errors from the system itself. At long last, I have solucionated everytihn alone becouse ìm tired of waiting. I think they should hire qualified peopples to attend their clients, and not interns , we pay for that.
31	Support	I suggest enhancement in the training of the used system, in the satbility, in the information fidelity. Also the support can't continue in this inefficient way and the software with basic errors that impedes a lot of thimes even the negotiatin concretiznes. I'm sure the supplier needs to revise his concepts in relation to services prestation of informatics and also the price formation, because they only onerates the estabeshiment without any return. Cost-benethit = 0.
63	Support	Id like the soliciations would atendend mre quickly or the company gives a feedback when requeste, they are very slow.
10	Support	Programs support don't attend the expectations, that means, peoples only know the systemas implantation, they dont have conditions to solve problems or clarify the operation.
47	Training	The system should be more practiced.
48	Training	Urgent training
49	Training	I would like tha were be offered courses bout taxes and used of every resources form Mercfarma.
37	Exchange of software	It better we change the software Mercfarma by Pharmacy, becouse Mercfarma shows a loto of problems, and they take a long time to be soluted,a few of then dont are. It doesent bring confinable data to manage a pharmacy.
35	Exchange of software	The Mercfarma software is a big problem and will be better to change for another because the ownner dont have the solution to big problems.
17	Others	This report were madeit before, i dont see were the employees help in this report
29	Others	More reunions and causeries about convenies and colegues.

.V. CONCLUSIONS

Based on the realized analysis, was elaborated the table 7, presenting the conclusions and relacionated then with the proposed objectives. Can be verified in a general manner

the network should foment trainings and the tools, but before the same it should have a revaluation, because can't attend the business requisites a long term.

Table 7: Summary of the objectives, conclusion and analysis

Objectives	Conclusions	Analysis
a) Identifiy the users profile	Were mapped the users profile	1
b) very the qualifications needs	Verified the advanced training needs in the Mercfarma and Merccard software, and basic training the in office applications.	2,3,4,5,6,7,8
c) verify the satisfaction with the pharmacies management system	There are insatisfatcion with the management system.	12,13,14,16
d) verify the training received for this programs;	Have bettween 2 and 4 equipments, but the middle age is distribuited in the 4 analises ranges	15
f) obtain data about the information's register metrology	The register methodology is prejudicial in long term.	9,10,11
g) collect data about other software's existent on the market	Caputured other tools names to furhter benchmarks.	Tópico 4.6
Hipotesys	Conclusios	Análisis
a) Há desconhecimento sobre o sistema de gestão empregado; Are unknowledgement about the actual management system.	Confirms. The system isnt exploren in it potentiality, but becouse the unthrust factors.	12,13,14,16
b) The associates keep paralels management controls.	Confirm	9,10,11
c) É necessário investimentos em qualificação para os usuários; Is necessary intestiments in qualification;	Confirm	2,3,4,5,6,7,8
d) The used equipments are far away from the necessity	Don't confirm	15

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Corporate Governance and Market Liquidity: Evidence from the Tunisian Stock Exchange

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Abstract- This paper studies the ownership – liquidity relation in the context of the Tunisian Stock Exchange. In particular, we examine two empirical relationships: The relationship between ownership concentration and stock liquidity and the relationship between the separation of ownership from control and market liquidity. Our empirical findings verify that the structure of ownership remains concentrated in the majority of the Tunisian firms. We find that stock liquidity decreases significantly with concentrated ownership. Different devices used to gain control and hence a significant separation of ownership from control affect liquidity in different ways. Our results indicate that pyramidal structures have a significant negative impact on liquidity for all controlled firms. However, for family firms, nonvoting shares increase liquidity for minority shareholders by reducing the probability of informed trading. Overall, our study reports that nonvoting shares may be a liquidity enhancing device for family – firms.

Keywords: Ownership, Liquidity, Controlling Shareholders, Pyramidal Structure, Voting Rights, Bid – Ask Spread.

I. INTRODUCTION

The relationship between market microstructure and corporate finance has received recently considerable attention in financial literature, focusing on the problem of how corporate governance could be associated with market liquidity. In particular, corporate governance, market liquidity and their effects on the firm's value are usually examined separately. However the informational and operational characteristics of liquidity have a much influence on shareholder value, especially when they interfere with corporate governance mechanisms. Prior research shows that high market liquidity results in lower cost of capital and therefore higher firm values. Liquidity generally refers to the ability to engage in rapidly trading a large number of securities at a low cost with little impact on market prices¹.

Market microstructure theory predicts that informational benefits are reflected in market liquidity through higher trading costs; a large fraction of shareholders exploit information that others would not have when investor interests are poorly protected; this access to private information increases the adverse information that others would not have when investor interests are poorly protected; this access to private information increases the adverse selection component of spread, a wider bid -ask spread and a lower quoted depth.

The focus of most empirical studies on the ownership -liquidity relation is on the effect of ownership structure on market liquidity, while there is a little empirical work shedding light on the effect of separation of ownership from control on liquidity.

Considering this relation, researchers focus on two hypotheses: the adverse selection hypothesis and the trading or free-float hypothesis. The adverse selection hypothesis posits that when informed shareholders possess superior information compared to outside shareholders, information asymmetry arises, reducing market liquidity (e.g., Grossman and Stiglitz, 1980; Glosten and Milgrom, 1985; Kyle, 1985; Easley and O'Hara, 1987). In practice, it is difficult to classify market participants as informed and which as uninformed. According to the Securities and Exchange Commission SEC controlling shareholders at the 10 % threshold are considered as insiders. Institutions, while not having the same access to private information as insiders, can create an informational advantage by exploiting economies of scale in information acquisition and possessing. Following the SEC definition of insiders, this study focuses on controlling shareholder ownership for the Tunisian firms.

The trading hypothesis, on the other hand, supposes that large stakes by blockholders reduce the availability of floating shares; therefore the monitoring role of insiders' blockholders has a high cost in terms of market liquidity. Specifically, when a firm's ownership is concentrated, there are fewer trade, therefore the free-float is limited and liquidity is reduced (Demsetz, 1968). Furthermore, ownership structure may affect liquidity through the production of information. Moreover, ownership concentration decreases the benefits of monitoring the firm by stock market participants, thereby reducing the amount of public information available about the firm (Holmström and Tirole, 1993).

Given these two hypotheses, this paper analyses the effect of ownership structure and corporate governance on market liquidity. Using a sample of Tunisian firms, we examine on the one hand the relation between concentrated ownership and stock liquidity. On the other hand, we investigate the impact of separation between control and ownership on adverse selection and therefore on liquidity; specifically, we investigate the impact on liquidity of how the firm chooses to enhance control. The two main ways to achieve separation of voting rights from cash flow rights are pyramidal structures and different classes of shares that provide different voting rights for given cash flow rights. We think that it would be of great interest to conduct this study for many reasons. First it contributes to extent existing empirical work on emerging markets by examining

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a new database given by the case of the Tunisian Stock Market. This lead us to identify if the empirical results concerning other market hold for the Tunisian Stock Exchange .Second , the focus of most empirical studies on the ownership-liquidity relation provide evidence on quote-driven market . It would be interesting to provide a contribution to the literature by releasing new ultimate ownership data for a sample of firms listed on pure agency market such as the Tunisian Stock Market , and documenting the nature of controlling owners and the separation of ownership from control . Finally, the findings may be helpful for market participants to understand the influence of trading practices on stock price and for stock exchange authorities to adopt optimal regulatory policies and choose efficient trading systems in response to information asymmetry.

Consistent with the trading hypothesis, we find a positive impact of free float on liquidity. Stocks with a greater deviation between control and ownership, have a positive impact on spreads .However, this impact on spreads of ownership-control deviation depends on the control devices used by the firm. Pyramidal structures are positively related to spreads as well as on the adverse selection component of the bid-ask spread and therefore have a negative impact on liquidity. On the contrary , nonvoting shares decrease spreads. In accordance to the adverse selection hypothesis, pyramidal structures enhance information asymmetry component of the bid –ask spread and decrease liquidity for all pyramiding firms ,whereas nonvoting shares prevent insiders to trade on their private information ,they reduce information asymmetries and therefore the bid – ask spread ; this positive effect is limited to small family –firms .

The remainder of the paper proceeds as follows. In Section 1, we start with the literature review. In section 2, we describe the institutional and legal environment of the Tunisian firms' ownership, and present the structure of the TSE. In section 3, we describe data. In section 4, we report liquidity measures and methodology. In section 5, we analyze empirical results. Section 6 concludes.

II. LITERATURE REVIEW

Berle and Means (1932) argue that professional managers are effectively in control of widely – held firms at the expense of shareholders. However, when one shareholder takes control of management by holding a large block of shares, he can exploit other shareholders (Shleifer and Vishny (1997), La Porta and al. (1998, 1999 and 2000)). To increase the chance of executing his plans, the large shareholder would minimize and delay the disclosure of information so that other shareholders can not intervene, or must base their decisions on inadequate information. Poor disclosure worsens the information asymmetry problem, and the large shareholder may even trade on his insider information to extract the private benefits of control. Keeping other factors constant, these will result in a wider bid – ask spread and lower stock liquidity.

Prior empirical studies, have attached great importance to the relation between stock liquidity and the fractional

ownership of insiders and institutions. Glosten and Milgrom (1985) document that one cause of illiquidity is the presence of privately informed traders. Bhidé (1993) further reports that active stockholders who reduce agency costs by monitoring managers may also reduce stock liquidity by increasing informational asymmetries. Most of these studies, lead to ambiguous results, partly because they do not distinguish between institutional and insider blockholdings. Sarin, Shastri and Shastri (2000) report that higher institutional and insider ownership are both associated with wider spreads and smaller quoted depth. Heflin and Shaw (2000) find a positive association between spreads and block ownership (including insiders and institutional blocks).Along a similar vein, Dennis and Weston (2001) show a negative relation between spread and both insider and institutional ownership , whereas Kini and Mian (1995) document no support for a significant relationship between spreads and blockholdings. Rubin (2007) finds a positive relation between spread and institutional blockholdings, whereas spreads is negatively related to both institutional and insiders 'holding. In Australia, Comerton-Forde and Rydge (2006) report that insiders 'holdings greater than ten percent of issued capital reduce liquidity, whereas insiders' holdings of less than ten percent enhance liquidity. Institutional blocks have no impact on liquidity. For Norway, Naes (2005) reports a positive relation between spreads and block ownership, but institutional ownership concentration has no effect on spreads.

To examine the nature of ultimate controlling owners and the means used to enhance control, La Porta, Lopez-de-Silanes and Shleifer (1999a) show that ownership and control can be separated through deviation of one-share-one-vote, pyramiding and cross-holdings to the benefit of the large shareholders. Claessens, Djankov, and Lang (2000) confirm a significant separation of ultimate ownership and control, and report the overwhelming control of wealth by a small number of families. In the same way, Faccio and Lang (2002) argue that families are the most pronounced type of controlling shareholders in Western European countries and find a significant concentration of wealth within a small number of families. A discrepancy between ownership and control implies higher agency costs, as those in control exploit their superior information. Claessens and al. (2002) document that deviation of control from ownership leads to agency costs that decrease firm value. Furthermore, using a Canadian sample of publicly - traded firms, Attig , Fong , Gadhoun

and Lang (2006) report that the deviation between ultimate control and ownership widens the bid-ask spread .Control is often enhanced via devices like corporate pyramids , cross – holdings , multiple class shares ,etc .A pyramid structure allows the ultimate shareholder to own and to control indirectly some shares of a firm ,but does not control directly the intermediary firms. Cross-ownership allows separation but increases the difficulty to evaluate the integrated ownership and control of a company. Both

devices allow separation. However, dual-class shares, allows insiders to hold superior voting rights shares, holding a lower fraction of shares. This implies, that they may not sell shares with inferior or no voting right. As a consequence, the probability to trade against insiders may be reduced and therefore the float will be more important and liquidity increased (Becht, 1999).

Ownership structure and market liquidity relationship can be examined with two potential explanations. First the trading hypothesis posits that stock liquidity is increasing in the market capitalization of a firm. Average transaction costs depend on the number of shareholders participating in trade. The number of market participants willing to invest in information acquisition in a firm is larger, the larger the anticipated gains from the trade, which are directly related to the stock's free float. When the ownership structure is concentrated, only the shares included in the free float are likely to be traded and therefore the free float is a better measure of the market size for the firm's share. A large shareholder controlling a listed company takes into account private control benefits and therefore trades differently than small shareholders. When a firm's ownership is concentrated, the availability of shares is limited, there are fewer shareholders who can participate in the trading of the stock and the frequency of trades is reduced and therefore liquidity is decreased.

Second, the adverse selection hypothesis supposes that ownership concentration is potentially costly, because blockholders may have private information about the firm value. In response to a higher probability of informed trading, liquidity providers may widen spreads. While the focus of most empirical studies on the ownership-liquidity relation is on the adverse selection hypothesis (e.g. Kini and Mian, 1995; Heflin and Shaw, 2000; Sarin, Shastri and Shastri, 2000). There is no consensus in the literature about which entities constitute the informed group of investors. Some studies focus on insiders, some focus on institutions, and some focus on block holders. In view with the informed trading, large shareholders are more likely to be informed; their presence should increase the adverse selection discount associated with the trading of the stock, which implies a reduced liquidity. The ultimate owner may adopt a poor disclosure policy, to be able to trade on his private information. In the presence of large private benefits, outside investors may not buy the stock, reducing market liquidity.

Our study concentrates on the impact of controlling owners on market liquidity. We take into account institutional shareholders if they control the firm. We suppose that controlling shareholders are informed and therefore the spread is larger and depth is lower reflecting the high probability of informed trading.

Second, we examine the effect of deviation of ownership from control on liquidity. Third, we investigate how the method shareholders use to separate ownership and control affects liquidity. Pyramids have typically a negative impact on liquidity. On the other hand, nonvoting shares generate

a transparent divergence between cash-flows rights and voting. Nonvoting shares spread is smaller because insiders hold shares with high voting rights.

Our hypotheses are thus sum up as follow :

H1. Market liquidity is positively related to the float: The liquidity of a closely-held firm stock is lower because the float is smaller.

H2. Concentrated ownership is negatively related to market liquidity: The liquidity of a closely-held firm is lower because of a higher probability of informed trading.

H3. In the presence of family shareholding, the impact of the separation of control from ownership depends on the device used by the firm. Pyramidal structure should reduce liquidity whereas shares with no voting right, which deter informed trade, increase liquidity.

III. CORPORATE GOVERNANCE CHARACTERISTICS AND TSE MARKET STRUCTURE

A. *Corporate governance characteristics in Tunisia*

Compared with other Anglo-Saxon economies, ownership structure is highly concentrated in Tunisia. On average the five largest shareholders holds more than 80 % of the

capital². Several studies show that only 8% of the Tunisian firms are widely held, whereas in European firms this percentage increases to 36.93 % (Faccio and Lang, 2002). Family control and pyramidal holdings have long predominated the Tunisian corporate sector. Further, this concentration of ownership in Tunisia differs appreciably from that prevailing in the US. Heflin and Shaw (2000) report that the average total blockholding is 12.3 % of shares outstanding. In, Dennis and Weston (2001) insiders ownership is on average 9.97 % of the US firm's stock while institutions own 31.06 % of the firm's stock.

According to the Tunisian Commercial Companies Code, there are two types of general meetings. Decisions by ordinary meetings, which approve the accounts, decide bond issue, appoint and dismiss directors, require a majority of 50 % of voting right to be adopted. Decisions by extraordinary meetings pertain to all decisions amending the charter and issuing shares and require a two-thirds majority of voting rights. Following many prior studies as Claessens and al (2000) and Faccio and Lang (2002), we use 20% of the voting rights cut-off to classify firms into two groups widely-held versus closely held. Accordingly we consider firms with more than 20% of voting rights as closely-held. Furthermore, we take into account pyramidal structure to determine ultimate control right. We measure ultimate control and ownership in terms of voting rights and cash flow using the weakest link along the control chain. For example, if a firm X owns 30% of the firm A which owns 20% of the firm B, then this firm X owns 6% of the cash flow rights of firm B and controls 20% of the firm B.

Ultimate ownership can deviate from ultimate control through the use of nonvoting shares which are another common device to enhance control in Tunisia. The firm's

charter can authorize priority dividend share, which provide a higher priority in dividend distribution to the shareholder, and limit his voting rights in general shareholders' meetings. Preferred shares are also shares without voting rights and provide only a fixed dividend. Voting certificate provide other share's rights. Shares with no voting rights structure has not been taken into account in previous studies examining the case of Tunisia.

B. TSE market structure

The Tunisian Stock Exchange is a pure order driven market without market makers. Orders are submitted by brokers on the behalf of investors and executed through an automated trading system, using a computerized limit-order book, known as SUPERCA³.

Trading is carried out from 9:00 to 11:00 from Monday to Friday. It starts by a pre-opening session (from 9:00 a.m. to 10:00 a.m.) during which investors can place, modify or cancel orders but no trades are permitted. A theoretical opening price is displayed in real time to show the market tendency. The TSE operates as continuous market for the more actively traded stocks and a call auction "fixing" for the less liquid stocks. A call auction determines the opening and closing price in the continuous market. Orders are executed using time priority at a given price and price priority across prices. Investors can choose between market and limit orders, so as liquidity is only provided by limit order traders. A limit buy (sell) order specify the maximum (minimum) price at which the investor will accept to exchange. However, a market order is executed immediately against the best quote on the opposite side, but the quantity that cannot be executed at that price, will remain in the order book as a limit order at the transaction price.

TSE offers substantial transparency. The five best bid / ask limits (price and quantity) in the order book are publicly released although the identity of the broker is not shown. Orders and trades' information are updated and disseminated in a real time. However; the electronic limit order book is fully visible to brokers and regulatory authorities.

IV. DATA

This study uses intraday data for 40 listed firms on the TSE. Our dataset contains a time-stamped record to the nearest second of all transactions and orders submitted to the market from January 2001 to December 2005. The transaction data include the date and time of transaction, transaction prices and the number of shares traded. The order data display the date and time of order entry and execution, the price, the quantity and the best limits of the order book (bid and ask prices, and bid and ask size). These data include as well as market capitalization.

There is no electronic database on Tunisian firm ownership, including information on control rights and corporate governance characteristics. These information were collected manually from the annual reports of listed firms for three years 2001, 2003, 2005. The ownership

stakes are those available on the 31st December of each year. Our sample includes all Tunisian firms, for which the annual reports provide information on the ownership structure of all major shareholders. Our definition of ownership from control relies on cash flow and voting rights. Table 1 reports characteristics for 220 firm-observations of our database.

[Refer to Table 1]

These data reports that Tunisian firms are mainly closely-held. On average; the largest shareholder holds directly 49.56% of the capital and 51.48% of the voting rights. The second largest shareholder owns on average 15.25 % of the capital and 16.42% of the voting rights. The float, which corresponds to the fraction of listed share capital that is freely traded on the market, amounts on average to 31.65 % for the total sample.

We further identified the ultimate controlling shareholders in the presence of pyramidal structure, for a threshold of 20 % of the voting rights, according to Faccio and Lang (2002). On average, the largest shareholder has 39.56% of the capital and 41.34 % of the voting rights. We also take into account the identity of the controlling shareholders. We find that 39% of the companies are controlled by a family, which own on average 53.44 % of the capital and 55.57 % of the voting right. The Tunisian listed firms are therefore largely controlled by families. Apart from family control, 28% of controlling shareholders are financial institutions and 21% of listed companies are controlled by the Tunisian state. However, for the total sample, only 7% of the firms are widely-held.

We then investigate the devices used by the Tunisian firms to separate ownership and control (Table 2). Pyramidal structures are the most frequent method used by 15.55% of the firms. Cross-holdings are used by 11.11% of the firms, Priority dividend shares by 4.5 % of the firms, and preferred shares and voting certificate by 2.5%. However 63.48 % of firms don't adopt any devices and they are in the "one share –one vote" setting.

Controlling shareholders identity seems to affect how firms ensure separation between ownership and control rights. Families frequently prefer pyramiding, the other controlling shareholders (financial institution, State and another widely held firm) use typically cross-holding and shares with no voting rights.

[Refer to Table 2]

Liquidity measures and methodology

In this section, we present liquidity measures used for intraday variables and the adopted methodology

A. Liquidity measures

Liquidity measures used in this study are divided into trade-based measures and order-based measures. Trade-based measures include the turnover and the number of trades. Order-based measures include effective relative spread and depth. Depth is measured by the number of shares to purchase or to sell, respectively at the quoted bid

and ask prices. The daily average relative effective spread, is calculated using full day data records. The effective relative bid-ask spread takes into account the possibility of a transaction within the spread. The effective relative spread is related to the midpoint of the spread⁵

Effective Relative Spread

$$\frac{2 \times |TradePrice - Midpoint|}{Midpoint}, \text{ Where}$$

$$Midpoint = \frac{Ask Price + Bid Price}{2}$$

The variables considered are measured at the end of each 15-min interval from the limit order book. We average all liquidity variables over 12 months around the date of ownership structure for each year.

B. Methodology

We adopt in our analysis panel data in order to explore ownership-liquidity relationship, using ordinary least square (OLS). We consider the empirical model describes as follow:

$$LIQ_{it} = \beta_0 + \beta_1 \log(CAPB)_{it} + \beta_2 VOLT_{it} + \alpha YEAR2003_{it} + \gamma YEAR2005_{it} + \beta_{3-6} (corporate\ governance\ variables)_{it} + u_i + \varepsilon_{it}$$

Liquidity (LIQ) is the dependent variable represented by either relative effective spread or depth⁷. As independent variables, we use a set of corporate governance variables and a set of control variables. Among the corporate governance variables, we include:

AMAJ is the percentage of equity owned by the main controlling shareholder.

ASEC is the percentage of capital owned by the second largest shareholder.

SEPAR measures the discrepancy between cash flow and control rights for the main shareholders. It is defined as the ratio of voting rights minus cash flow rights to cash flow rights.

CFAM is a dummy variable that takes the value 1 if the controlling shareholder is a family at 20% threshold, 0 otherwise.

CNFAM is a dummy variable, equal to 1 when the controlling shareholder at 20% threshold is not a family, 0 otherwise.

PYRM, CROIS, SNVR are dummies capturing the presence of pyramids, cross-holding and shares with no voting rights, equal to 1 if the provision is present, 0 otherwise.

In order to take into consideration the combined effect of the control variables suggested by previous studies of the determinants of the bid-ask spread, we include:

CAPB is a control variable that measures the size of the firm. It is defined as the log of the market capitalization of

the firm. It is calculated as the logarithm of the daily market value of the firm, averaged over 12 months around the year end.

VOLT is a control variable measuring volatility. It is defined as the average of the daily standard deviation of rate of return over one year round the date of ownership structure.

YEAR⁸ is a dummy variable that takes the value 1 if the liquidity variables (spread, depth) refer to the year 2003 or 2005, 0 otherwise.

V. EMPIRICAL RESULTS

A. The effect of controlling shareholders on liquidity

In this section, we examine the effect of controlling shareholders on stock liquidity. We expect liquidity measures to be higher for widely-held firms than for firms with controlling shareholders. Table 3 reports liquidity measures and market characteristics by subsamples of family-controlled firms, non-family-controlled firms and widely-held firms. The last columns provide parametric and non parametric tests to compare family-controlled firms, non-family-controlled firms and widely-held firms.

[Refer to Table 3]

Our results confirm that widely-held firms are the largest firms in the market value, are involved in the most transactions, are more volatile and are more liquid than family-controlled firms. The average market capitalization of widely-held firms is 2622 MD, compared to 1580 MD (1842 MD) for family-firms (non-family-firms). Their turnover and their number of transactions are significantly larger than the other controlled firms ones, which are larger than the turnover and the number of transaction of family-controlled firms. The average relative spread is 5.83% for family firms, 5.35 % for non-family controlled firms and 5.22% for widely-held firms. The average depth is 125 shares for family-firms, 163.67 shares for non-family controlled firms and 174.25 shares for widely-held firms. The breakdown of the sample indicates that the volatility and the size of listed companies on the same market segment show only limited differences according to the existence of a controlling shareholder. Indeed, family-controlled firms are still characterized by wider spreads and lower depth. Generally, the descriptive statistics show that family firms are the smaller and less liquid companies. Moreover widely-held firms are the largest and the most liquid.

We use further several regression models to complement the univariate analysis using ordinary least square (OLS)

⁹ We use either the relative effective spread or the depth as the dependent variable to explain liquidity. Table 4 presents the estimation results. Regardless of measures, liquidity increases with market capitalization and decreases with volatility. This result confirms the previous findings

on the determinants of the bid-ask spread¹⁰.

[Refer to Table 4]

We regress in the first column, the spread on the free float, and we find a negative relationship (-0.0009). This result is consistent with the trading hypothesis. Information production and trades frequency decrease when the market size of the firm's shares is reduced and therefore liquidity is decreased. We include in the second column two dummies for controlled firms (**CFAM**, **CNFAM**) to test more directly the role of controlling shareholders on liquidity. Spreads of family-controlled firms (other controlled firms) shares are 13.05% (14%) larger on average than widely-held shares spreads. We then include the percentage of capital owned by the first and the second shareholders. We find that the percentage of the capital held by both the controlling and the second shareholder increases the spread (0.0010) and depth decreases (-2.6017) confirming the free-float hypothesis and also the adverse selection hypothesis if we consider controlling shareholders as informed traders.

We also examine the impact of separation of the ultimate ownership and control on liquidity. We find that the discrepancy between cash flow rights and voting rights have a positive impact on spread (0.0200) but the impact on depth is negative and insignificant. This result can be explained for several reasons. First, when minority shareholders suspect private benefits to become a large part of the firm's value, they may renounce to buy the shares and prefer selling them. Second, the controlling shareholder may choose a poor disclosure policy, to prevent outside investors to trade on his private information.

Our results remain robust when we consider subsamples by control type (family control, non-family control). The presence of a controlling shareholder at the 20% threshold increases the bid-ask spread, for all controlled firms. The separation between ownership and control reduces liquidity, whether he is a family firm or not. One explanation is that in the existence of a large deviation between ownership and control, most institutional investors do not invest. Therefore, transactions are mainly initiated by individual investors with smaller order size. Indeed, as a fraction of these investors are informed, liquidity decreases. We therefore find evidence for the adverse selection hypothesis which suppose that liquidity is reduced in the presence of controlling shareholders.

B. Market liquidity and enhancing control devices

The main devices used by Tunisian firms are pyramids, cross-holding and non-voting shares. We examine how these mechanisms affect liquidity. Table 5 (panel A) presents the characteristics of firm-year observations using pyramidal structures by control type (family control / non-family control). We find that pyramids have not a significant impact on non-family controlled firms characteristics. On the contrary, for family-firms, the free-float is significantly higher (35.41% on average, compared

to 22.55% for non-family controlled firms). They are more liquid than other controlled firms. The average relative spread is 1.78% for family firms with pyramids (1.96% for other firms without pyramids). The median depth is 140 shares (125 shares for other controlled firms). This finding confirms that families want to keep the control of their firms anyway, and the use of pyramids allow them to enhance control for a small cash flow stake.

[Refer to Table 5]

Table 5, Panel B compares controlled firms using cross-holdings to controlled firms without cross-holdings. Cross-holdings do not affect significantly the characteristics of non-family controlled firms. However, family-firms controlled by cross-holdings are larger, have a higher turnover and a larger free-float. They are more liquid: the average spread is 1.64% for cross-holding compared to 1.95% for other firms and the median depth is 149.5 shares compared to 97 shares for firms without cross-holding.

We then run regressions, to examine the impact of the different enhancing control means on market liquidity. Table 6 displays the regression results for the total sample.

[Refer to Table 6]

In the first set of regressions, we examine the impact of direct ownership variables:

(**AMAJ**, **ASEC**, **SEPAR**) respectively the percentage of capital owned by the main and the second shareholders, deviation between cash flow rights and control rights. The effect of the two direct ownership variables (**AMAJ**, **ASEC**) is the same as those of the ultimate ownership variables in Table 4. On the contrary, the direct ownership/control deviation has a significant negative impact on spread; however, in Table 4, the ultimate exhibit a positive impact. Nonvoting shares are the main origin of direct deviation. Ultimate deviation is the consequence of both pyramidal structure and cross-holdings. This finding confirms that the different means of enhancing control have different impact on liquidity.

To examine this hypothesis, we include in the next regressions dummies (**PYRM**, **CROIS**, **SNVR**) equal to one if the firm has used one of the following control enhancing means: pyramidal structure, nonvoting shares and cross-holding. The regression results report that pyramids have a positive impact on spreads, however nonvoting shares lead to increase spreads. These results confirm that family-firms preferably use nonvoting shares, and other controlling shareholders use frequently pyramids and cross-holdings. To verify these findings, we run regressions for subsamples by control type (table 7), to check whether this result is invariant whatever the identity of the controlling shareholders.

[Refer to Table 7]

For family-firms, we find that direct deviation between ownership and control is negatively related to spreads. However, pyramidal structures increase spreads and nonvoting shares decrease spreads. Whereas, for non-

family controlled firms, neither the impact of direct ownership/control deviation nor the nonvoting rights dummy impact is significant. Indeed, spreads increase with pyramidal structure. These results confirm that non-voting shares may have a positive effect for family-controlled firms. In fact, the free-float is greater for family-firms with non-voting shares. Furthermore, non-voting shares allow family shareholders to control their firms by holding a lower stake of shares; as non-voting shares provide a higher priority in dividend distribution to the shareholder, and limit his voting rights.

C. Adverse selection spread component and ownership structure

We further examine the effect of ownership structure on the adverse-selection component of spread. Particularly, we check if there is a variation in the adverse selection spread component in the presence of a large shareholder or when the deviation between ownership and control is higher.

To measure the adverse selection spread component, we use the Huang and Stoll (1997) model.

$$p_t - p_{t-1} = \frac{S}{2} \times (Q_t - Q_{t-1}) + (\alpha + \beta) \times \frac{S}{2} \times Q_t + e_t \quad (2)$$

We denote:

P^t : the price of the transaction at time t .

Q^t : the buy-sell trade indicator variable for the transaction price, P^t . It equals +1 if the transaction is buyer initiated and -1 if the transaction is seller initiated. As the TSE is an electronic order driven market, the direction of the transactions can be identified in a precise way by comparing the price and the immediately preceding spread¹¹

α and β : cannot be estimated separately, and represent the adverse selection component and the cost of inventory component of the spread.

S : the traded spread is estimated with the Huang and Stoll's

model¹².

The adverse selection component of the spread is estimated as follow:

$$\frac{\text{Adverse selection component}}{\text{Quoted spread} - \text{estimated spread}} = \frac{\text{quoted spread}}{\text{quoted spread}}$$

We average the adverse selection component of spread for each share and each of our three periods (2001, 2003, 2005)¹³.

These variables are estimated using GMM method¹⁴. Table 8 compares the characteristics of firm-years for which the adverse spread component are calculated and the other observations.

[Refer to Table 8]

We find that the firms for which the adverse selection component of the spread is calculated are characterized by a larger average market capitalization (1262 MD compared

to 76 MD for the other firms). The free float is significantly greater (32.85% compared to 17.75%), the main shareholder holds 40.76% of the capital (44.07% for other firms), and the average spread is 1.08% compared to 1.20% for the other firms. In general, firms for which the adverse component of the spread is calculated are larger and more liquid than the other firms. We next run regressions to examine the relation between the adverse selection component of spread and ownership structure. More precisely we test the hypothesis that information asymmetry increases with both large shareholders and ownership/control deviation.

[Refer to Table 9]

Our results confirm that the direct and ultimate percentage of capital held by the main and the second shareholders are associated with a higher adverse selection component of the spread. This finding is consistent with the fact that controlling shareholders are typically informed traders. Furthermore the deviation between ownership and control increases the information asymmetry. In particular, by adopting a poor disclosure policy, the controlling shareholder extract private benefits from his private information and therefore information asymmetry arises. However the cross-holding and nonvoting shares dummies have an insignificant impact on the adverse selection component of the spread.

VI. CONCLUSION

This paper provides an empirical examination of the ownership-liquidity relation in the Tunisian stock exchange. The major objective of this study is to investigate the impact of ownership concentration and the separation of ownership from control on market liquidity. To reach this objective, we have used a sample of 40 firms, selecting the actively traded stocks on the TSE over the period 2001-2005. Liquidity is represented by either effective relative spread or depth, measured at the end of each 15-min interval from the limit order book. Our definition of ownership from control relies on cash flow and voting rights.

Our results indicate that Tunisian companies are characterized by concentrated ownership. More precisely, we find that liquidity is significantly reduced for closely-held firms. This result is robust when we consider the direct/ultimate ownership of the controlling shareholder and taking into account the controlling shareholder identity. For all controlled firms, the separation of ownership from ultimate control increases the spread and its adverse selection, but the effect is more pronounced for family-firms.

The regression results indicate that pyramidal structures and cross-holding have a positive impact on spreads for all controlled firms. Whereas, nonvoting shares permit a greater float for family-firms that want to keep control and deter informed shareholders to trade on private information. Overall, our study confirms that nonvoting shares enhance small family-firms control, deter

information asymmetry and thus may improve stock liquidity for minority shareholders .

Finally, these results suggest that firms may mitigate information-based trading and enhance stock market liquidity by adopting corporate governance standards that prevent insider trading. The results raise questions for future research. First, recent availability of intraday data from the TSE allows for a multitude of new research questions and can deepen the understanding of the order book as well as enhance the preciseness of practical applications. Furthermore ,it would be interesting to extent this analysis and explore other emerging stock markets .Second, the non availability of electronic database on Tunisian firm ownership, including relevant information on voting rights and corporate governance characteristics explains the rarity of studies on governance attributes.

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VIII. FOOTNOTES

- 1) See Acharya and Pedersen (2005) for more detailed discussion.
- 2) Omri Abdelwahed, 2003, Systèmes de gouvernance et performance des entreprises tunisiennes. Revue française de gestion, 86-100.
- 3) There are no market makers or floor traders with the obligation to supply liquidity.
- 4) We consider only the frequently traded stocks for which information on quotes and trades data are available.
- 5) All the tests have also been conducted with quoted spreads. The results are similar, and thus are not reported in the paper.
- 6) The regressions include individual effects. To check the robustness of our results, we have done the Fisher test and the Hausman test (1978).
- 7) We log-transform the variable depth because of skewness in its distribution
- 8) We include dummy variables for each year to control for yearly variation in spreads or depths.
- 9) The bids-ask spread should increase with volatility; while it decreases with the size of the firm and the trading volume (see Copeland and Galai (1983)).
- 10) We follow the Lee and Ready (1991) algorithm to identify buy and sell transactions. We consider 15-min intervals in order to examine variations in prices, the direction of the transactions and bid-ask spread during trading sessions. We suppose a one-year lag for the adverse selection component of spread to mitigate endogeneity concerns.
- 11) We use GMM method to estimate the traded spread S , the adverse selection and the cost of inventory component of the spread $(\alpha + \beta)$. Our choice of the GMM procedure is motivated by the fact that the Hung and Stoll model is non-linear.

Table1. Descriptive statistics for ownership structure of Tunisian firms

Panel A provides statistics of ownership variables for our sample of 220 firm-year observations (year-end 2001, 2003, 2005). Ultimate ownership takes into account indirect control through pyramiding at the

20% threshold. Panel B presents the percentage of firms controlled by different ultimate controlling owners at the 20 percent threshold, and the mean percentage of capital and voting rights of the controlling owners.

All firm-years		
Panel A .Direct and ultimate ownership and control of Tunisian firms		
Mean (Median)	% capital	% voting rights
Direct ownership / Control		
Main shareholder	49.56 % (46.68 %)	51.48 % (50.12 %)
Second shareholder	15.25 % (13.28 %)	16.42 % (13.44 %)
Float (5% threshold)	31.65 % (33.60 %)	31.35 % 30.35 %
Ultimate ownership / Control (au seuil de 20 %)		
Main shareholder	39.56 % (33.75 %)	41.34 % (35 %)
Second shareholder	25.85 % (22.05 %)	27.17 % (23.45 %)
Panel B. Controlling owners at the 20 percent threshold		
	Percentage of firms	Mean : % of capital (voting rights)

Family firms	39 %	53.44 % (55.57 %)
Financial institutions	28%	45.21% (47.73 %)
State	26 %	37.45 % (39.55%)
Widely –held	7 %	0 (0)

Table 2. Control devices adopted by Tunisian firms

Panel A reports the percentage of firms adopting a given control device: Pyramids, Cross-holding, Priority dividend

shares, Preferred shares, Voting certificate. Panel B presents the control enhancement devices adopted by firms, by identity of controlling shareholders at the 20 percent threshold.

	Pyramids	Cross -holding	PDS	PS	VC	None	Total
Panel A .Percentage of firms using different control devices							
% of firms	15.55%	11.11%	4.50%	2.50%	2.50%	63.48%	100%
Panel B. Percentage of firms using different control devices by identity of controlling shareholder							
Family	16.66%	12.33%	2.11%			68.96%	100%
Financial institution	11.44%	15.04%	4.16%	3.16%	3.16%	63.04%	100%
State		12.50%	12.50%			75%	100%

Note :

PDS : priority dividend share.

CI : Preferred share.

CDV : voting certificate.

Table 3. Descriptive statistics for market characteristics of Tunisian firms

This table contains 220 firm-year observations. The daily market value of the firm is averaged over 12 months around the date of availability of the ownership date (Year-end). Volatility is the annualized estimate of daily volatility. Turnover is the daily average. Spread is the daily average relative effective spread, estimated using full day

data records. Depth is measured using the data closest to the opening of the trading day. All the variables are averaged over 12 months around the year-end. The last columns provide parametric and non parametric tests to compare widely-held firms, family-controlled firms and nonfamily- controlled firms.

Panel	A.	Widely-held firms	Family controlled	- Non -family - controlled	Family-controlled Vs Widely-held	Non-controlled-firms Vs	Family-controlled Vs Non-family-
All firms							

							Widely- held		controlled			
	Media n	Mean	Media n	Mean	Media n	Mean	p- value from Stude nt test	media n test	p- value de Stude nt test	media n test	p- value de Stude nt test	media n test
Market capitalization (MD)	1976	2622	1149	1580	1371.3	1842	0.5034	0.1510	0.5000	0.6146	0.4000	0.0006
Volatility	0.9 %	0.95 %	0.94 %	0.74 %	0.91 %	0.93 %	0.5355	0.3746	0.9991	0.9990	0.0002	0.0011
Turnover	0.5 %	2.24 %	0.1%	1.36 %	0.32 %	0.41 %	0.9998	0.9999	0.9989	0.9998	0.0060	0.0002
Number of transactions	80	721.25	50	587.08	76	234.87	0.6213	0.9999	0.0551	0.0069	0.9209	0.0456
Relative effective spread	5.22 %	8.76 %	5.83 %	9.74 %	5.35%	9.36 %	0.2703	0.8316	0.6434	0.8659	0.1607	0.0568
Depth	174.25	389.99	125	172.95	163.37	281.07	0.0001	0.0005	0.4000	0.3179	0.0447	0.0006

Table 4. Controlling shareholders and liquidity

This table displays OLS regressions that relate liquidity to ownership and governance characteristics for our sample of 220 firm-year observations. Liquidity is represented by either effective relative spread or depth for the firm-year. Spread is the daily average relative effective spread, estimated using full day data records. Depth is measured using the data closest to the opening of the trading day. Both variables are averaged over 12 months around the year end. Log (market value) is the logarithm of the daily market value of the firm, averaged over 12 months around the year end. Volatility is the annualized estimate of daily volatility averaged over

the 12-months around the end of the year. Regressions include year indicators. Other independent variables include free-float (at the 5% threshold) and ultimate cash-flow rights held by the largest and the second shareholder. Discrepancy between cash flow and control rights for the main shareholder is equal to the ratio of voting rights minus cash flow right to cash flow rights. Family control is a dummy equal to one when the main shareholder is an individual or a group of individuals. Non-family control is a dummy equal to one when the controlling shareholder is not a family. P-values are in parentheses.

	All firms					Family -controlled firms			Non-family firms	-controlled	
Models	1	2	3	4	5	6	7	8	9	10	11

Variables	Spread	Spread	Spread	Depth	Depth	Spread	Spread	Depth	Spread	Spread	Depth
Intercept	0.1929 (0.000)*	0.1758 (0.000) *)*	0.0173 (0.078 0)	4.1585 (0.008)*	2.7195 (0.0257)*	0.159 9 (0.028 8*	0.2416 (0.0710)	1.477 (0.0589)	0.2108 (0.0000)*	0.1007 (0.069 7)	4.7607 (0.010)*
Control variables											
Log (market value)	-0.0130 (0.000)*	- 0.0077 (0.019)*	- 0.0012 (0.009 2)*	1.9093 (0.017 1)*	1.1948 (0.050 1*	-0.0086 (0.009 *)	-0.0078 (0.0047)*	4.2356 (0.039 *)	-0.0151 (0.0000)*	-0.0008 (0.0071)*	7.9493 (0.050 9)*
Volatility	4.6852 (0.0000 *)	4.2795 (0.001)*	4.2688 (0.016 0)*	-1.945 (0.008 3)*	-4.322 (0.000 5)*	4.1894 (0.016 *)	0.4161 (0.0081)*	-3.73 (0.0562)	4.9839 (0.0000)*	0.0121 (0.0099)*	-2.1 (0.045)*
Year 2003	0.0095 (0.3440)	0.0358 (0.005)*	0.0351 (0.020 8)*	1.8906 (0.083 1)	1.3619 (0.047 3)*	-0.0086 (0.704)	0.0394 (0.0774)	1.475 (0.0335)*	0.0156 3 (0.181)	0.1199 (0.0280)*	- 1.0188 (0.067)
Year 2005	0.0099 (0.312)	0.0129 (0.300)	0.0003 (0.099 2)	1.7279 (0.070 6)	- 2.9685 (0.070 9)	-0.0135 (0.543)	-0.0168 (0.0879)	2.0265 (0.0758)	0.0191 (0.098)	0.0233 (0.0874)	- 7.6203 (0.925)
Float (at 5% threshold)	-0.0009 (0.043)*					-0.0013 (0.049 *)			-0.0009 (0.048 *)		
Ultimate ownership variables											
Main shareholders			0.0010 (0.050 0)*	- 2.6017 (0.033 3)*	- 0.4687 (0.050 9)*		0.4879 (0.0518)	-3.218 (0.0768)		0.0016 (0.0792)	- 1.8231 (0.470)
Second shareholders			0.0008 (0.004 0)*	- 2.9697 (0.037 6)*	- 2.0280 (0.050 1)*		0.9441 (0.0530)	-1.77 (0.0433)*		-0.0039 (0.0584)	-1.322 (0.587)
Discrepancy between cash flow and control rights			0.0200 (0.030 5)*	- 8.1680 (0.150)	6.9867 (0.350 0)		0.0132 (0.0480)*	1.767 (0.0722)		0.0182 (0.0846)	- 2.4552 (0.007)*
Identity of controlling owner											

Family control dummy		0.1305 (0.001)*	- 0.0046 (0.0863)	- 2.8527 (0.0720)							
Non-family control dummy		0.1400 (0.001)*		- 1.6712 (0.0562)							
Number of observations	106	219	95	93	95	98	99	99	98	96	96
Adjusted R ²	0.7947	0.7932	0.7016	0.7057	0.7220	0.7248	0.6544	0.7073	0.7488	0.7004	0.6949
Wald chi 2	15.41	254.17	41.18	42.40	44.57	61.16	44.72	45.75	42.08	32	49.58
Prob > chi2	0.0087	0.0000	0.0405	0.0324	0.027	0.0208	0.019	0.015	0.0338	0.0596	0.0138

Table 5. Market characteristics according to the means of enhancing control by types of controlling owners

Panel A reports the characteristics of firm-year observations using pyramids compared to those without pyramids. Panel B reports the characteristics of firm-year observations using cross-holdings compared to those without cross-holding. The daily market value of the firm is averaged over 12 months around the date of availability of the ownership date (Year-end). Volatility is the annualized estimate of daily volatility. Turnover is the daily average.

Spread is the daily average relative effective spread, estimated using full day data records. Depth is measured using the data closest to the opening of the trading day. All the variables are averaged over 12 months around the year-end. The last columns provide parametric and non parametric tests to compare firms with and without double voting right

Panel A. Characteristics of the firms using pyramidal structures

Mean (median)	Family-controlled				Non-family- controlled			
	With pyramid	Without pyramid	p-value from Student test	median test	With pyramid	Without pyramid	p-value from Student test	median test
Market capitalization (MD)	1086 (625)	920 (203)	0.7968	0.0000	1980 (798)	2059 (949)	0.2199	0.0622
Float (at 5% threshold)	35.41 (33.27)	22.55 (23.51)	0.0244	0.0019	30.11 (29.39)	35.11 (29.39)	0.4183	0.3494
Turnover %	2.03 % (1.25%)	0.82 % (0.58 %)	0.7827	0.0080	2.53 % (1.38 %)	2.70 % (1.27 %)	0.0431	0.0245
Relative effective spread %	1.78 % (1.51 %)	1.96 % (1.79%)	0.0370	0.0500	0.96 % (0.75 %)	1.83 % (1.47 %)	0.6147	0.8853
Depth	175.4 (140)	167.6 (125)	0.9068	0.036	549.8 (199)	333.9 (150)	0.1925	0.9955

Panel B. Characteristics of firms using cross-holdings

Mean (median)	Family- controlled				Non-family-controlled			
	With cross-holding	Without cross-holding	p-value from Student test	median test	With cross-holding	Without cross-holding	p-value from Student test	median test
Market capitalization (MD)	834 (562)	733 (331)	0.7639	0.0000	939 (629)	749 (454)	0.9992	0.9988
Float(at 5% threshold)	26.75 (26.33)	23.33 (24.55)	0.0120	0.044	25.82 (24.70)	24.62 (24.83)	0.8837	0.1509
Turnover %	0.72 % (0.69 %)	0.84 % (0.55 %)	0.0400	0.050	2.53 % (1.38 %)	2.70 % (1.27 %)	0.9144	0.9964
Relative effective spread %	1.64 % (1.57 %)	1.95 % (1.66 %)	0.9097	0.049	0.96 % (0.75 %)	1.83 % (1.47 %)	0.0553	0.9375
Depth	149.5 (104.8)	97 (97)	0.8411	0.009	549.8 (199)	333.9 (150)	0.8878	0.3125

Table 6. Means of enhancing control and liquidity

This table reports OLS regressions that relate liquidity to ownership and governance characteristics. Liquidity is represented by either effective relative spread or depth for the firm year. Spread is the daily average relative effective spread, estimated using full day data records. Depth is estimate of daily volatility averaged over the 12-months around the end of the year. Regressions include year indicators. Other independent variables are either ultimate or direct cash-flow rights held by the largest or the second shareholder. Discrepancy between cash flow and control

rights for the main shareholder is equal to the ratio of voting rights minus cash flow right to cash flow rights. Pyramid, cross holding, Priority dividend shares, Preferred shares, Voting certificates are dummies that equal 1 if the provision is present. P-values are in parentheses. measured using the data closest to the opening of the trading day. Both variables are averaged over 12 months around the year end. Log (market value) is the logarithm of the daily market value of the firm, averaged over 12 months around the year end. Volatility is the annualized

Model	Direct ownership impact				Controlling devices impact			
	1	2	3	4	5	6	7	8
Variables	Spread	Spread	Depth	Depth	Spread	Spread	Spread	Depth
Intercept	0.1915 (0.0000)*	0.1862 (0.0000)*	2.3581 (0.070)	1.1919 (0.005)*	0.1665 (0.0000)*	0.1717 (0.0000)*	0.1697 (0.0000)*	1.9429 (0.050)*

Control variables

Log (market value)	-0.0130 (0.0000)*	-0.0128 (0.0000)*	2.1026 (0.009)*	3.8089 (0.048)*	-0.0117 (0.0000)*	-0.0120 (0.0000)*	-0.0120 (0.0000)*	1.1042 (0.009)*
Volatility	5.0812 (0.0000)*	5.1369 (0.0000)*	-2.269 (0.003)*	-3.085 (0.017)*	5.3122 (0.0000)*	5.2462 (0.0000)*	5.2495 (0.0000)*	-2.127 (0.057)
Year 2003	0.0067 (0.525)	0.0067 (0.519)	1.3718 (0.624)	2.1805 (0.529)	.0064 (0.541)	0.0061 (0.559)	0.0061 (0.564)	1.4613 (0.556)
Year 2005	0.0038 (0.718)	0.0022 (0.829)	2.7792 (0.200)	4.7393 (0.090)	0.0073 (0.482)	0.0068 (0.506)	0.0062 (0.550)	4.9826 (0.107)

Direct ownership variable

Main shareholder	1.7606 (0.008)*	7.8107 (0.0110)*	-0.0035 (0.029)*	-0.0121 (0.573)	1.9106 (0.007)*	1.5106 (0.037)*	2.5206 (0.741)	0.0111 (0.013)*
Second shareholder	0.0010 (0.014)*	0.0009 (0.014)*	-2.3944 (0.012)*	-2.4631 (0.046)*				
Discrepancy between cash flow and control rights	-0.1141 (0.052)*	-0.1175 (0.006)*	-4.508 (0.196)	1.8462 (0.161)				

Dummy de gouvernance

Pyramid	0.0203 (0.040)*	0.0188 (0.054)	0.0189 (0.055)	-1.4055 (0.17)
Cross-holding	0.0188 (0.029)*	0.0180 (0.024)*	0.0167 (0.045)*	-2.9771 (0.412)
Without voting rights shares		-0.0078 (0.005)*	-0.0088 (0.052)	1.6946 (0.288)

Identity of controlling owner

Family control dummy	-0.0056 (0.553)	-3.0252 (0.005)*	-0.0055 (0.016)*
Non –family control dummy			
Number of observations	108	108	110
Adjusted R ²	0.0923	0.0952	0.0950

Table 7: Means of enhancing control and liquidity by control types

This table reports OLS regressions that relate liquidity to ownership and governance characteristics for subsamples by control type: Family controlled and non-family controlled firms. Liquidity is represented by either effective relative spread or depth for the firm-year. Spread is the daily average relative effective spread, estimated using full day data records. Depth is measured using the data closest

to the opening of the trading day. Both variables are averaged over 12 months around the year end. Log (market value) is the logarithm of the daily market value of the firm, averaged over 12 months around the year end. Volatility is the annualized estimate of daily volatility

Models	Family controlled			Non –family controlled		
	1	2	3	4	5	6
Variables	Spread	Spread	Depth	Spread	Spread	Depth
Intercept	0.1201 (0.007)*	0.1253 (0.028)*	2.4991 (0.006)*	0.0644 (0.017)*	0.0500 (0.021)*	1.9576 (0.022)*
Control variables						
Log (market value)	-0.0070 (0.006)*	-0.0069 (0.007)*	2.3963 (0.013)*	-0.0007 (0.037)*	-0.0034 (0.047)*	1.4911 (0.047)*
Volatility	5.6935 (0.003)*	4.6552 (0.042)*	-1.13 (0.024)*	1.7155 (0.028)*	5.9278 (0.049)*	-2.007 (0.541)
Year 2003	-0.0157 (0.484)	-0.0028 (0.908)	1.7334 (0.973)	0.0293 (0.044)*	0.0469 (0.084)	2.8744 (0.817)

Year 2005	-0.0131 (0.562)	-0.0047 (0.851)	3.2151 (0.906)	-0.0025 (0.864)	0.0225 (0.431)	3.1546 (0.412)
Direct ownership variables						
Main shareholder	3.8207 (0.046)*	-3.3406 (0.059)	-0.0069 (0.760)	0.0000 (0.050)*	-0.0004 (0.036)*	-0.4810 (0.794)
Second shareholder	0.0016 (0.015)*			-0.0008 (0.530)		
Discrepancy between cash flow and control rights	-0.3541 (0.091)			-0.3761 (0.131)		
Governance dummy						
Pyramid		0.0190 (0.024)*	3.3677 (0.549)		0.0312 (0.001)*	-3.500 (0.009)*
Cross-holding					0.2627 (0.0000)*	-2.8870 (0.817)
Without voting rights shares		-0.0217 (0.045)	2.1299 (0.487)		-0.0444 (0.417)	2.9725 (0.494)
Adjusted R ²	0.4917	0.4117	0.4954	0.4142	0.4184	0.4978

Table 8. Characteristics of the firms for which the adverse component of spread can be calculated compared to other firms

Table 8 reports the characteristics of firm-year observations, for which data were available to calculate the adverse selection component of spread, compared to the firm-year observations for which the data were unavailable.

	Adverse component of spread available		Adverse component of spread unavailable	
	Median	Mean	Median	Mean
Market capitalisation (MD)	978	1262	20	76
Volatility	0.008	0.009	0.002	0.007
Float (at 5% threshold)	32.2 %	32.85 %	10.56 %	17.75 %
Main shareholder (% of capital)	30.45 %	40.76 %	35.45 %	44.07 %
Second shareholder (% of capital)	12.73 %	14.02 %	15.35 %	16.45 %
Discrepancy between cash flow and control rights	0.05	0.08	0.02	0.04
Relative effective spread (in %)	1.05	1.08	1.14	1.20

Depth	156.375	320.106	109.5	220.684
Adverse selection components of the spread (in %)	0.0509	0.0564	–	–

Table 9: Adverse selection component of the spread and ownership characteristics

Table 9 reports OLS regressions that relate the adverse selection component of spread to ownership and governance characteristics. The adverse selection spread component is calculated as in Huang and Stoll (1997) and averaged over 12 months around the year end. Log (market value) is the logarithm of the daily market value of the firm, averaged over 12 months around the year end. Volatility is the annualized estimate of daily volatility averaged over the 12-months around the end of the year.

Regressions include year indicators. Other independent variables are either ultimate or direct cash-flow rights held by the largest or the second shareholder. Discrepancy between cash flow and control rights for the main shareholder is equal to the ratio of voting rights minus cash flow right to cash flow rights. Pyramid, cross holding, Priority dividend shares, Preferred shares, Voting certificates are dummies that equal 1 if the provision is present. P-values are in parentheses

Models	1	2	3	4	5
Intercept	0.9987 (0.000)*	0.6046 (0.002)*	0.9919 (0.000)*	1.0088 (0.000)*	0.9603 (0.000)*
Control variables					
Log (market value)	-0.0772 (0.000)*	-0.0452 (0.006)*	0.0776 (0.000)*	-0.0823 (0.000)*	-0.0790 (0.000)*
Volatility	-2.3746 (0.133)	-3.1280 (0.096)	1.5326 (0.821)	-2.1549 (0.320)	-2.9854 (0.231)
Year 2003	0.4122 (0.000)*	0.2961 (0.000)*	0.4065 (0.000)*	0.4062 (0.000)*	0.4088 (0.000)*
Float	-0.0014 (0.013)*	-0.0027 (0.045)*			
Ownership variable					
Main shareholder			8.88 ^E -06 (0.042)*	0.0000 (0.042)*	0.0000 (0.047)*
Second shareholder			0.0010 (0.052)*		
Discrepancy between cash flow and control rights			0.1915 (0.448)		
Governance dummy					
Pyramid				0.0581 (0.043)*	0.0578 (0.012)*
Cross-holding				0.1106 (0.346)	1158 (0.333)

Without voting rights				0.0332 (0.714)	0.0372 (0.689)
Identity of controlling owner					
Family control dummy				-0.0133 (0.049)*	
Non-family control dummy				-0.0869 (0.050)*	-0.0320 (0.580)
Number of observations	69	69	69	69	69
Adjusted R ²	0.926	0.962	0.717	0.974	0.906

The Effect of Proactive Personality, Self Promotion, and Ingratiation on Career Success for Employee of Public Organization

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GJMBR Classification (FOR)
150306,150312

Abstract- This research aims to test; (1) the influences of proactive personality on career success, (2) the influences of self promotion on career success and (3) the influences of ingratiation to career success. Survey method is applied in this research. The population is the entire employee of public organization in Daerah Istimewa Yogyakarta (DIY) Indonesia. The sample quantity is 96 employees. The technique of sample drawing used is method of purposive sampling. This research applies statistical technique of regression analysis.

The conclusion of all the hypothesis proposed are: (1) there is no influence of proactive personality on career success, (2) there is influence of self promotion on career success and (3) there is influence of proactive personality on career success.

Keywords-proactive personality, self promotion, ingratiation, career success.

I. INTRODUCTION

A public organization has a high complexity. Some literatures describe a public organization as a system which has core element (such as resources, activity, policy) that integrate each element to make contribution in increasing and creating an organization competitive challenge (Carmeli and Tishler, 2004). Therefore, human resources have an important role in improving an organizational performance. The decreasing of community trust towards public service quality, it demands Indonesian government for doing bureaucracy changing or reforming to make some innovation in the public service. However, it has not realized entirely yet in government structure Daerah Istimewa Yogyakarta. It can be seen from the lower response of the government structure in giving response toward public service innovation process so the public service has not appropriate to the society demand yet (Purbokusumo, etc, 2006). Actually, Indonesian government should be aware of this condition and it can be part of internal or external problem mapping in the innovation of public organization. Moreover, in each phase of public service innovation process can not apart from the organizational internal support itself, including the employees. The employee career success will become an

important discourse because it will be able to improve the organizational performance.

The improving of individual career should be suitable with career path policy in each institution. The career path often changes when the individual face the complexity of organizational reality and changing. The consequences, an employee or individual should be responsible to their own planning and developing career. Some researches in many career literatures have identified the amount of influences on career success, like race, organizational experience and performance. The comprehensive model of career success has included some individual and organizational variable (Judge & Bretz, 1994). On the individual level, some demographic variable such as human capital, motivational (Wayne, Liden, Kraimer & Graft, 1999), proactive personality, human capital and leader support (Muafi & Effendi, 2009) are correlated to career success. Then on the organizational level including industrial sector, geographic location and company measurement are also related to individual career success (Seibert, Crant & Kraimer, 1999). The previous research although had given big contribution on career literature, however some researches more emphasized on skill, performing and organizational success need to be focus on organizational politics, like ingratiation behaviors and self promotion (Cook, Ferris and Dulebohn, (1999).

II. LITERATURE REVIEW

The improving of individual career should be suitable with career path policy in each institution. The career path often changes when the individual face the complexity of organizational reality and changing. The consequences, an employee or individual should be responsible to their own planning and developing career. Since globalization the organizational changes very fast, it becomes a trend that influence on individual psychology in reaching career success. According to Judge and Bretz, (1994) most of research about career draws an individual as passive, under controlled one and intense situational influence on human behavior. Difference from this perspective, Bell and Staw (1989) argue that personality develop through personal control process and influence on the result which determined by the environment power finally. When career success related to the above issues, so career success can be reached by an individual who understood himself, know how to detect the environment changes and create an opportunity for himself and learn from their fault

(Greenhauss, Callanan & Godshalk, 2000). Many researches in career literature have identified the amount of influences on career success like race, organizational experiences and performance. A comprehensive model of career success has included some individual and organizational variables (Judge & Bretz, 1994). On individual level, many demographic variables such as human capital and motivation related to career success (Wayne, Liden, Kraimer & Graft, 1999). Then, on organizational level like industrial sector, geographic location and company size are also related to career success (Seibert, Crant & Kraimer, 1999). Judge & Bretz (1994) suggest that understanding of career success focuses on organizational politics, included ingratiation behavior and self promotion (Cook, Ferris and Dulebohn, 1999). Political behavior is a no sanction behavior organizationally, it may be disadvantaged for organizational objectives or other individual in one organization (Harrell-Cook, Ferris & Dulebohn, 1999 in Randall, et al., 1999). The organizational politics involve one interest above organizational interest (Greenberg & Baron, 2000). The evaluation of individual subjective towards observed situation or behavior as a politics becomes organizational politics perception (Harrell-Cook, Ferris & Dulebohn, 1999). Political behavior in organizations as those activities that are not required as part of one's formal role in the organization, but that influence, or attempt to influence, the distribution of advantages and disadvantages within the organization (Robbins, 2001). This definition encompasses the key elements from what most people mean when they talk about organizational politics. Politics can be functional or dysfunctional rely on symptoms happened. Other definition said politics as a narrow, that is politics is limited as a behavior to maximize individual interest in short or long term (Cropanzano, et al., 1997). Organizational politics involve an individual interest above organization interest (Greenberg & Baron, 2000). An individual subjective evaluation towards observed situation or behavior as a politics is a perception of organizational politics (Harrell-Cook, Ferris & Dulebohn, 1999). Organizational politics with no clear distinction made between the two phenomena. While there is some implicit, if not explicit, assumption that the two constructs are related, the present work views political behavior and perceptions of politics as distinct and separate constructs (Cook, et al., 1999). Theoriticians and researchers have examined various aspects of political behavior and perceptions of organizational politics with no clear distinction made between the two phenomena. While there is some implicit, if no explicit, assumption that the two constructs are related, the present work views political behavior and perceptions of politics as distinct and separate constructs (Cook et al., 1999). Most pertinent to the purposes of the current study are two behaviors these authors categorized as tactical-assertive behaviors, specifically ingratiation and self-promotion.

Goodfrey, Jones, and Lord (1986) characterized ingratiation behaviors as less proactive (i.e., more reactive)

verbal and non verbal behaviors than those involved in self-promotion. The focus of ingratiation behaviors is on 'attention giving' through agreeing with the target's opinions, expressing conformity with the target's values, and offering praise or flattering remarks directed toward the target. Self promotion behaviors are focused toward 'attention getting'. Self-promoters is to give the appearance of competence through expressions of self confidence, directing attention toward their purported accomplishments, or by exercising behaviors assumed to be valued by the target individual. Self-promoters engage in specific behaviors with the objective of establishing an image of the political actor as competent, intelligent, and/or extremely (Cook et al., 1999).

Ferris and Judge (1991) state that politics influence on behavior related to individual career success. On practical level, the research is most needed, since recently an individual career success is not only determined by the company but also by the individual himself.

Bell and Staw (1989) argue that finally a personality through personal controlling process can influence on the result determined by environment power. The based assumption of research when applying ingratiation and self promotion in this research is a political behavior has influence on career success depending on an employee's tactical type, it means that is an employee utilizes ingratiation or self promotion (particularly employee in a government institution). However, a private employee tends to apply supervisor-focused tactics or job-focused tactics. Bateman and Crant (1993) defined the individual with a prototypical proactive personality as one who is relatively unconstrained by situational forces and who effects environment exchange. A proactive personality as a stable disposition toward proactive personality. The construct domain of proactive personality according to Bateman and Crant (1993) is determined by a relation between proactive construct and five general factors of personality, and then known as big five personality, they are extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience.

The research result by Seibert, Crant and Kraimer (1999) show that there is a positive relation between an individual with proactive personality and two indicators of career success, they are self-reported subjective (fee and promotion) and subjective (career satisfaction), after controlling some variables like applied in the Judge et al. research (1995), they are demographic, human capital, motivational, organizational and industry variables. There is a positive relationship between individuals' proactive

personality and career success (Seibert et al., 1999). This literature has been used to develop the conceptual framework for this study as shown in Figure 1.

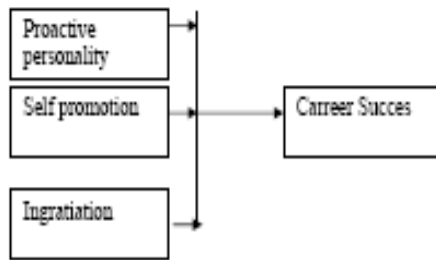


Figure 1. The Effect Of Proactive Personality, Self Promotion and Ingratiation on Career Success for employee of public organization

III. HYPOTHESIS

Based on the research model, this study hypothesis that:

- H1. There is influence of proactive personality to career success,
- H2. There is influences of self promotion to career success.
- H3. There is influences of proactive personality to career success.

IV. RESEARCH METHODOLOGY

Based on the characteristics of research problem, this research is an survey research. This study applies non probability sample design (purposive technique). The amount of respondent who involved in this research is 96 respondents. The type of questionnaire is closed questionnaire and asking the perception of employee of public organization in Daerah Istimewa Yogyakarta (DIY). The Likert 7 point scale was used for measurement with scale 1 (strongly disagree) until 7 (strongly agree). The result of validity and reliability examining conclude that for each indicator in examined variable points out significant or loading factor $>0,5$ (valid) (Appendix A). However, in reliability examining points out cronbach alpha $>0,6$ (reliable) (Appendix B). The technique of statistics utilized in this study is regression analysis.

V. EMPIRICAL RESULT AND DISCUSSION

A. SAMPLE PROFILE

In relation to sample profile, Table 1 shows that the majority respondent characteristics were females (40,6%), department in Bappeda, and Post Graduate 47.9%. Table 1. Profile of Respondents (N = 96)

General Characteristics	Sub Characteristics	Percentage
Sex	Male	59,0
	Female	40,6
Department	Secretariat	12,9
	BKD	16,7
	Bawasda	6,3
	BPKKD	18,8
Education	Bappeda	20,8
	High School/College	1,0
	Graduate School	51,0
	Post Graduate	47,9

B. Hypothesis Test

This research used the proactive personality as the independent variable and career success as the dependent variable for regression analysis in order to illuminate the no correlation between the proactive personality and career success. As shown in Table 2, there is no influences of proactive personality to career success ($\beta = 0.027$, $p < 0.793$). Thus, Hypothesis 1 was partly not supported.

For analysis, self promotion was an independent variable and career success as the dependent variable for regression analysis in order to illuminate the correlation between the self promotion and career success. As shown in Table 2, there is influences of self promotion to career success ($\beta = 0.293$, $p < 0.006$). Thus, Hypothesis 2 was partly supported.

Finally, ingratiation was an independent variable and career success as the dependent variable for regression analysis in order to illuminate the correlation between the ingratiation and career success. As shown in Table 2, there is influences of self promotion to career success ($\beta = 0.208$, $p < 0.042$). Thus, Hypothesis 3 was partly supported.

Independent Variable	Dependent Variable	Coefficient Regression	β	t	Sign.
proactive Personality	Career Success	0,047	0,027	0,263	0,793
Promotion Self		0,309	0,293	2,818	0,006*
Ingratiation		0,210	0,208	2,067	0,042*

* Significant at the 0,05 level (2-tailed)

VI. DISCUSSION

The research result explains that proactive personality has no significant influence on career success. This result does not support research by Seibert, et al. (1999) that shows proactive personality has influence on objective and subjective career success. Therefore it also does not support Crant's argument (1995) that explains individual with proactive personality chooses and creates a situation that can improve high performance. They can use more proactive activity in the career management, like watching job information and outer organization. This research also does not support Ashford and Black's argument (1996) that individual with proactive personality get sponsorship and career support, make career planning and sustain in facing

career's obstacles. The result of interview by researcher with the respondents collect explanation that there are some individuals in Pemda Sleman institution who have close relationship with the senior official at that time, so they get higher confidence than others. When there is a career promotion, the senior will promote the official who have he known well first psychologically, however may be there are others who have more skills and competency. Nevertheless, researcher believes that there is an opportunity they who are in the structural position actually have competency. Individuals' career success is not influenced by proactive personality factor at all. There are many other factors in career success. They are (Metz, 2004) human capital, motivation and support from senior, (Nilawati, 2004; Wayne et al., 1999), personality, human capital, motivation and senior's support (Muafi & Irhas, 2009).

Based on the information from the interview, it explains that there is an individual who was expressly acted in front of others in order to get intention from his partners and the senior. An individual who was doing self promotion is seen more than friendly. Their goals are giving and showing their competence through self confidence directly pays attention to achieve their goals perfectly or by giving example a behavior that have target assumption individually. The individual who acted self promotion tries doing specific behavior to build an image that he is a smart, competent and dedicated worker (Cook, et al., 1999). In Pemda Sleman institution, there is a big opportunity some individuals are expressly acted politically for their own interest, they do self promotion in order to get senior's attention that they are smart and competence. By doing this they hope will get the first promotion.

Ingratiation behavior is a behavior did by someone to make him self more interest by others (Linden & Mitchell, 1988). Ingratiation behavior is always patient either supported by effort to utilize the influence and/or get political benefits. However, ingratiation behavior is not always involving winding method to manipulate others, in fact some individuals doing ingratiation behavior unawares (Liden & Mitchel, 1988). In Pemda Sleman, there is big opportunity some individuals / employees are aware doing political effort to individual intention, by doing ingratiation in front of their seniors or partners. They hope they will get promotion first than others. This political effort can be openly but also hidden.

VII. CONCLUSION, IMPLICATION AND LIMITATION OF THIS STUDY

The result concludes that proactive personality has no influence on career success, self promotion has influence on career success and ingratiation has influence on career success.

The contributed implication is this research result shows self promotion and ingratiation have influence on career success in fact. The government in Pemda Sleman should be more careful and has clear standard in the employees' promotion, in order self promotion and ingratiation can be

minimized. High self promotion and ingratiation indeed have bad effect to organizational performance or other employees who are really competent in certain position but no chance. Moreover, political behavior usually emerges when there is no transparency on some regulations related to the quality of employees' life (example unclear promotion requirements, career structure, criterion of job evaluation, salary determination or compensation). Decreasing of not responsible political behavior, an organization should determine the above things more transparent, so misunderstanding can be avoided that effect to political behavior which point out certain individual intention. Nevertheless, the decision should be based on rationality not politics only.

The limitations of this research are; (a) this research takes only objects in one of government institution. It is better the next research try to take different objects, like manufacturing company, health institution, tourism, industry, journalism, education or other service companies, (b) the examining result is based on cross sectional data and self report data, so it make bias. This implication causes perception on each respondent very subjective since one perception on an object will be different (Muafi & Effendi, 2009)

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Appendix A. Correlation between multiple and single measure

	Pearson Correlation	Sign.
Proactive personality (17 item)	0.534	0.000
	0.544	0.000
	0.566	0.000
	0.549	0.000
	0.653	0.000
	0.587	0.000
	0.620	0.000
	0.642	0.000
	0.509	0.000
	0.667	0.000
	0.598	0.000
	0.540	0.000
	0.559	0.000
	0.640	0.000
	0.785	0.000
Self Promotion (15 item)	0.763	0.000
	0.560	0.000
	0.858	0.000
	0.858	0.002
	0.874	0.000
	0.740	0.000
	0.759	0.000
	0.638	0.000
	0.596	0.000
	0.536	0.000
	0.714	0.000
	0.561	0.000
	0.561	0.000
	0.588	0.000
	0.522	0.000
Ingratiation (9 item)	0.522	0.000
	0.805	0.000
	0.806	0.002
	0.805	0.000
	0.716	0.000
	0.769	0.000
	0.767	0.000
	0.745	0.000
	0.717	0.000
	0.730	0.000
Career Success(5 item)	0.698	0.000
	0.840	0.002
	0.781	0.000
	0.682	0.000
	0.613	0.000

Appendix B. Scale reliability

	Standardised Alpha
Proactive personality (17 item)	0.8713
Self Promotion (15 item)	0.8782
Ingratiation (9 item)	0.9383
Career Success (5 item)	0.8652

Firm Size on Profitability: A Comparative Study of Bank of Ceylon and Commercial Bank of Ceylon Ltd in Srilanka

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GJMBR Classification (FOR)
150103,150106

Abstract- The banking organizations, today, is moving towards the goal of integrated financial services because of the strong competition and quick changes of technology. In developing countries like Sri Lanka, banking organizations provide fund for other organizational developments. The financial sector in Sri Lanka started as a part of their overall economic plans and growth. Accordingly the banking sector is considered to be an important source of financing for most businesses. This study is initiated to effect of the firm size on profitability of virtually all the branches of Bank of Ceylon (BOC) and Commercial Bank of Ceylon Ltd (CBC) with 10 years accounting period: 1997-2006. Correlation analysis shows that, there is a positive relationship between Firm size and Profitability in Commercial Bank of Ceylon Ltd, but there is no relationship between firm size and profitability in Bank of Ceylon.

Keywords: Firm Size, Profitability, Banking, Measurable linkages, and Sustainability.

I. INTRODUCTION

Generally, the firm size of banks and other financial institutions has been measured using a combination of financial ratio analysis, benchmarking, measuring performance against budget or a mix of these methodologies (Avkiran, 1995). Dhawan (2001), who examined the relation between firm size and productivity for U.S. firms between 1970 and 1989, actually finds the opposition relationship between firm size and profitability. Nagarajan & Burthwal (1990) revealed the Co-efficient of growth rate of sales was positive and significant, suggesting that factors on the demand side of a firm had a greater impact on profitability than on the supply side. There are predefined methods for measuring the performance of a firm. The difficulty in relying on these measures is that different performance measures can conflict (Lumpkin & Dess, 1996). Dess & Robinson (1984) reported strong and statistically significant relationships between the subjective comparative assessments of the 5-year performance of 18 businesses by their top management against other similar businesses in their industries, and the objective measures of return on assets and sales growth. In a common sense, it is considered that the profitability of a firm depends upon organizational growth. While growth has been considered the most important measure in small firms, it has also been argued that financial performance is multidimensional in nature and that measures such as financial performance and growth are different aspects of performance that need to be considered (Wiklund, 1999). It has also been argued that firms grow in many ways and that a firm's growth pattern

is related to age, size and industry (Delmar, Davidsson, & Gartner, 2003).

The primary focus of this study is to investigate empirically the relationship between the Firm size and profitability of Bank of Ceylon (BOC) and Commercial Bank of Ceylon Ltd (CBC) in Sri Lanka including local and foreign branches. The Bank of Ceylon is the leading Commercial Bank in Sri Lanka owned by the Government of Sri Lanka. The Bank provides diversified Retail, Wholesale, International, Development/Investment Banking, Services, Credit cards, Sri Lanka Interbank Payment System (SLIPS), Safe Deposit, Custodial and Pawn Broking services through a network of 301 local and 3 overseas branches (London, Male and Chennai) and Off-shore banking Unit. 283 branches are on line and the balance branches are expected to be online very soon. There are 195 Automatic Teller Machines (ATM). BOC and ATM Outlets in collaboration with Sampath Bank. An accelerated IT development programme to bring state of the art convenience banking to customers and update our Internal Management Information System (IMIS) for improved decision-making. Commercial bank is the largest and the most admired private bank which is contributed to the development of economy of Sri Lanka. The bank provides the services through a network of 150 local, 269 Commercial Automated Teller machines and 07 overseas branches (Bangladesh). With an unblemished history of nearly a century in the Sri Lanka's Banking area, Commercial Bank has been rated as the Best Bank in Sri Lanka for the 09th successive year by Global Finance magazine-New York and as Bank of the Year Sri Lanka by The Banker magazine-UK for five years. Therefore the present study is made to find out the effects Firms size on Profitability.

II. THE LITERATURE REVIEW

The increasing competition in the national and international banking markets, the change over towards monetary unions and the new technological innovations herald major changes in banking environment, and challenge all banks to make timely preparations in order to enter into new competitive financial environment. Spathsi, & Doumpos (2002) investigated the effectiveness of Greek banks based on their assets size. They used in their study a multi criteria methodology to classify Greek banks according to the return and operation factors, and to show the differences of the banks' profitability and efficiency between small and large banks. William John (2004) pointed out the statement from Trau (1996), Sutton (1997), & Hart (2000), the

theoretical and empirical literature on firm growth. In the early empirical literature, a number of manufacturing studies find either no relationship or a positive relationship between firm sizes and growth rates. MacMillan & Day (1987) considered that rapid growth could lead to higher profitability based on evidence that new firms become more profitable when they enter markets quickly and on a large scale.

Empirical investigations of the relationship between firm size and profitability in industrial economies in the past have given varying results. Some studies have found either a weak negative relationship or none at all (Marcus, 1969). Hall & Weiss (1967) have found a positive association that disappears or reverses itself among the firms with the largest assets. The potential for a negative relationship was presented within the theory of the firm, which focuses on alternative theories of a firm's motivation (Amato & Wilder, 1985). One of the more important contributions to come from this theory is that managerial utility maximization may replace profit maximization as the firm's objective function (Alchian, 1965). Managerial utility maximization is a by-product of the separation of ownership from management in modern corporations. This separation may increase with firm size, making large firms more vulnerable to managerial utility maximization than smaller firms. Managerial utility maximization thus provides a conceptual framework for a negative relationship between firm size and profitability. An integration of the above-mentioned literature implies that the relationship between firm size and profitability may be positive over some firm size ranges and negative for others. Moreover, once a threshold size is reached, additional increases in size may further separate ownership from control. These arguments suggest that the relationship between firm size and profit can become negative beyond the threshold firm size (Amato & Wilder, 1985).

The nature of the relationship between firm size and profitability is an important issue that may shed some light on the factors that maximize profits. A major study done by Crum in 1939 for all United States industry formed the basis for much of the later work done in this field. One of the early themes in the empirical study of this relationship is economies of scale. Other themes or theories in the empirical study of this relationship include market imperfections, the concept of strategic groups, and the relative importance of concentration and market share. Firms achieve economies of scale when their operating costs increase at a rate lower than their output. Firms do not achieve economies of scale simply by increasing their size.

Economies of scale are likely to result only if the firms have sufficient idle capacity and organization systems already in place prior to expanding (Katrisher & Scordis, 1998). Other research related to a firm's size-profitability relationship, such as Lindsey (1981) and Hall & Weiss (1967) found that growth rate is one of the significant determinants of profitability. Lindsey (1981) accounted for the effect of change in profit resulting from change in demand or cost by using the growth rate of firm assets. Profitability could be related to changes in output as result either of increased demand or reduction of costs. The reduction in costs could come directly from investing in more productive capital equipment; increased demand could stimulate expansion on the part of the firm. A positive relationship is expected between profitability and growth rate. In construction, growth may not be best for every company, and even companies that should grow need to be aware of the cost and risk of growth Side (1993).

Three key measures of a firm's performance are its profitability, size and survivorship (Cassis & Brautaset 2003). Stekler (1964) pointed out that variation over a period of average profitability for small and large firms was less than that of medium size firms. Baumol (1967) emphasized that there is a positive relationship between firm size and profits. Another study of Velnampy & Nimalathan (2007) indicated that sales are positively associated with profitability ratios except ROE, and numbers of depositors are negatively correlated to the profitability ratios except ROE. Likewise, number of advances is also negatively correlated to the ROI, and RAA. Singh, Ajit & Whittington (1968) conducted an empirical study of the relationship between the growth, size and profitability of the firm, growth being the main dependent variable for 450 U.K. Public quoted companies, existing over the period 1948-1960 or at least for 6 years. Based on the above literature, we can say that various studies have been done on this area, but a detailed and comprehensive study has not yet been conducted in SriLankan context, especially in banking sectors. Hence, the present study is made on "The effects of the Firm Size on Profitability: A comparative Study of Bank of Ceylon and Commercial Bank of Ceylon Ltd in SriLanka".

III. CONCEPTUAL FRAME WORK

Based on the literature review, the following conceptual model is formulated to depict the relationship between Firm size and profitability

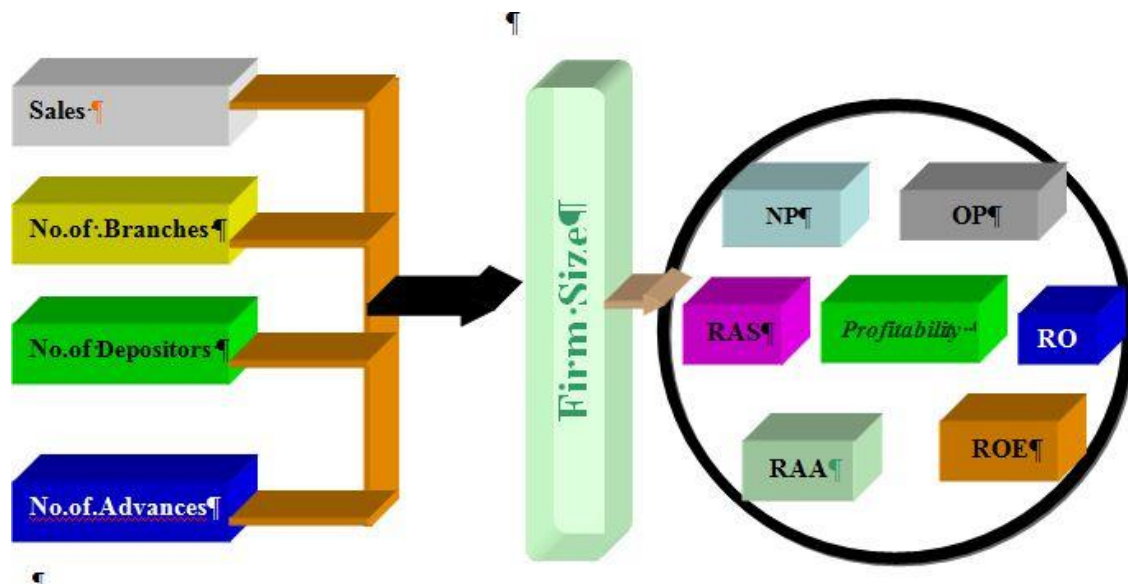


Figure-1: Conceptualization Model of Firm size and Profitability

Above conceptualization model shows the relationship between firm size and profitability of BOC and CBC.

A. OBJECTIVES

The main objective of the study is to find out the effects of the Firm Size on Profitability of Bank of Ceylon and Commercial Bank of Ceylon Ltd.

Sub objectives are:

1. To identify the profitability of bank of Ceylon and Commercial Bank of Ceylon Ltd over the 10 years during 1997 -2006.
2. To recognize the Firms size.

C. HYPOTHESES

The following hypotheses are formulated for the study.

1. Firm size and profitability is significantly correlated.
2. Association between firm size and profitability in CBC is greater than that in BOC.
3. All factors determine the firm size is significant.

IV. DATA COLLECTION AND SAMPLING DESIGN

To accomplish the abovementioned research objectives, the data for this study was gathered from the bank's financial statements as published by BOC and CBC .In addition, another source of data was through reference to the review of different articles, papers, and relevant previous studies. . The present study is confined only to the bank of Ceylon, and Commercial Bank of Ceylon Ltd as a whole in Sri Lanka.BOC is the first instituted government bank of SriLanka, which is contributed, to the development of

economy of SriLanka. The bank provides the services through a network of 301 local and 03 overseas branches (London; Male; and Chennai). Similarly Commercial bank is the largest and the most admired private bank which is contributed to the development of economy of SriLanka.The bank provides the services through a network of 150 local, 269 Commercial Automated Teller machines and 07 overseas branches (Bangladesh). All branches are taken for the study representing the period of 1997-2006, and the average values of each item was considered for the purpose of ratio computation and analysis.

V. RESEARCH METHODS

Secondary data were used to measure the variables which are related to profitability and Firms size. Here Indicators of profitability such as, Net Profit (NP), Operating profit(OP), Return on Investment(ROI), Return on Equity(ROE), Return on Average Assets(RAA), and Return on Average Share holders (RAS) were taken into account which are given briefly explain.

$$\text{Net Profit Ratio} = \frac{\text{Net profit}}{\text{Sales}} \times 100$$

$$\begin{aligned} \text{Operating Profit Ratio} &= \frac{\text{Net profit before interest and tax}}{\text{Sales}} \times 100 \\ \text{ROI} &= \frac{\text{Return}}{\text{Investment}} \times 100 \\ \text{ROE} &= \frac{\text{Return}}{\text{Equity Capital}} \times 100 \\ \text{RAA} &= \frac{\text{Return}}{\text{Average total assets}} \times 100 \\ \text{RAS} &= \frac{\text{Return}}{\text{Average share holder}} \times 100 \end{aligned}$$

As the variables taken to measure the profitability, which are most often used to measure management's effectiveness in achieving profitability, the following variables are considered to identify the Firms size (i) Number of Branches, (ii) Number of Advances, (iii) Number of Depositor, (iv) Gross Income (Sales). The above four items were directly extracted from the annual report of Bank of becomes more critical, but financial ratios provide one method of interpreting data in firm financial reports which will help to find out the relationship between firm size and profitability (Langemeter, 2004). Research evident that there is a substantial variation in the ability of branch offices to perform the task and substantial agreement on the

Ceylon and Commercial Bank of Ceylon Ltd.

D. RESULTS AND DISCUSSION

Generally profitability is depending on firm size. As firm size increases credit usage goes up, a means of evaluating the condition of the firm operation as a business unit

identity of the branches at the bottom of the performance distribution. Here the firm size indicators (No.of branches, No.of.advances, No.of .depositors, and sales (Growth Income) should have a relationship with profitability indicators (NP, OP, ROI, ROE, RAA and RAS).

Table-1: Descriptive Statistics for Bank of Ceylon and Commercial Bank of Ceylon Ltd

	Bank of Ceylon					Commercial Bank of Ceylon Ltd				
Variables	Min	Max	Mean	Std.dev	t- value	Min	Max	Mean	Std.dev	t-value
Firm Size										
Sales (in Million)	20091.00	28410.00	23854.60	2970.44	25.40* (0.000)	3781	24470.00	9808.60	6456.46	4.80* (0.001)
NOB	296.00	306.00	298.60	3.69	256.05* (0.000)	49.00	150.00	99.20	33.64	9.32* (0.000)
NOD	3841.00	5826.00	4989.40	632.85	24.93* (0.000)	38789.00	156504.00	72508.10	41682.13	5.44* (0.000)
NOA	613.00	1298.00	907.40	275.99	10.40* (0.000)	35483.00	156504.00	71040.40	41682.13	5.39* (0.000)
Profitability										
NP	0.59	10.248	6.099	3.212	6.00* (0.000)	8.23	15.35	13.64	2.07	20.802* (0.000)
OP	2.17	18.91	8.079	5.23	4.89* (0.001)	-17.92	-12.32	-15.17	1.99	-24.11* (0.000)
ROI	5.49	34.06	14.70	9.27	5.01* (0.001)	9.41	51.19	20.27	12.44	5.16* (0.001)

ROE	1.214	18.54	11.05	5.39	1.02* (0.000)	0.86	1.54	1.11	0.19	18.05* (0.000)
RAA	0.380	2.11	0.99	0.55	5.71* (0.000)	1.00	2.05	1.68	0.33	16.04* (0.000)
RAS	7.80	29.07	16.78	7.343	7.23* (0.000)	12.73	20.09	16.01	2.07	24.47* (0.000)

Correlation is significant at the 0.05 level(2-tailed)Source: Annual Reports of the Bank

Table-1 indicates the mean, standard deviation, and t-value for each variable related to firm size and profitability of both the banks of Bank of Ceylon and Commercial bank of Ceylon Ltd. As compared to Bank of Ceylon, Commercial Bank of Ceylon Ltd has a high mean values in connection with the No.of Depositors and No.of Advances. Even though Bank of Ceylon has a high No.of.Branches,

Commercial bank holds No. of Depositors and No.of Customers who received the advances from their bank. t-Value indicates that all variables determining to the firm size of both the banks is significant. Therefore hypothesis three is accepted.

Table-2(a): Correlation matrix for Bank of Ceylon

Correlation Matrix for Bank of ceylon

		NP	OP	ROI	ROE	RAA	RAS	NOB	NOA	NOD	SALES
NP	Pearson Correlation	1	.828**	.768**	.171	.790**	.857**	.339	.328	.090	-.085
	Sig. (2-tailed)		.003	.009	.636	.007	.002	.339	.355	.805	.816
OP	Pearson Correlation	.828**	1	.989**	.109	.990**	.962**	.098	-.026	-.341	-.412
	Sig. (2-tailed)	.003		.000	.765	.000	.000	.788	.943	.335	.236
ROI	Pearson Correlation	.768**	.989**	1	.077	.994**	.957**	-.004	-.151	-.439	-.452
	Sig. (2-tailed)	.009	.000		.833	.000	.000	.991	.676	.204	.190
ROE	Pearson Correlation	.171	.109	.077	1	.032	.163	.705*	.497	.464	.399
	Sig. (2-tailed)	.636	.765	.833		.930	.652	.023	.144	.176	.254
RAA	Pearson Correlation	.790**	.990**	.994**	.032	1	.963**	-.017	-.129	-.431	-.501
	Sig. (2-tailed)	.007	.000	.000	.930		.000	.964	.722	.214	.141
RAS	Pearson Correlation	.857**	.962**	.957**	.163	.963**	1	.164	.048	-.217	-.345
	Sig. (2-tailed)	.002	.000	.000	.652	.000		.650	.894	.546	.329
NOB	Pearson Correlation	.339	.098	-.004	.705*	-.017	.164	1	.930**	.841**	.587
	Sig. (2-tailed)	.339	.788	.991	.023	.964	.650		.000	.002	.074
NOA	Pearson Correlation	.328	-.026	-.151	.497	-.129	.048	.930**	1	.916**	.558
	Sig. (2-tailed)	.355	.943	.676	.144	.722	.894	.000		.000	.094
NOD	Pearson Correlation	.090	-.341	-.439	.464	-.431	-.217	.841**	.916**	1	.749*
	Sig. (2-tailed)	.805	.335	.204	.176	.214	.546	.002	.000		.013
SALES	Pearson Correlation	-.085	-.412	-.452	.399	-.501	-.345	.587	.558	.749*	1
	Sig. (2-tailed)	.816	.236	.190	.254	.141	.329	.074	.094	.013	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table-2 (a) indicates that association among the components of firm size (Number of

Branches (NOB), Number of Advances (NOA), Number of Depositors (NOD), and sales) and the profitability ratios such as Net profit(NP), Operating profit(OP), Return on Investment(ROI), Return on Average Assets(RAA), Return on Average Shareholders(RAS) was not found in BO

Table2-(b): correlation matrix for Commercial Bank of Ceylon Ltd.**Correlation matrix for Commercial Bank of ceylon Ltd**

		NP	OP	ROI	ROE	RAA	RAS	NOB	NOA	NOD	SALES
NP	Pearson Correlation	1	-.326	-.814**	-.772**	.711*	.606	-.529	-.663*	-.646*	-.747*
	Sig. (2-tailed)		.357	.004	.009	.021	.063	.116	.037	.044	.013
OP	Pearson Correlation	-.326	1	.184	.637*	.140	.329	.010	.138	.129	.190
	Sig. (2-tailed)	.357		.610	.048	.700	.354	.978	.704	.723	.599
ROI	Pearson Correlation	-.814**	.184	1	.532	-.921**	-.693*	.844**	.961**	.955**	.987**
	Sig. (2-tailed)	.004	.610		.113	.000	.026	.002	.000	.000	.000
ROE	Pearson Correlation	-.772**	.637*	.532	1	-.252	-.013	.164	.332	.309	.450
	Sig. (2-tailed)	.009	.048	.113		.482	.971	.651	.348	.384	.192
RAA	Pearson Correlation	.711*	.140	-.921**	-.252	1	.871**	-.843**	-.928**	-.926**	-.915**
	Sig. (2-tailed)	.021	.700	.000	.482		.001	.002	.000	.000	.000
RAS	Pearson Correlation	.606	.329	-.693*	-.013	.871**	1	-.603	-.710*	-.714*	-.670*
	Sig. (2-tailed)	.063	.354	.026	.971	.001		.065	.022	.020	.034
NOB	Pearson Correlation	-.529	.010	.844**	.164	-.843**	-.603	1	.896**	.889**	.907**
	Sig. (2-tailed)	.116	.978	.002	.651	.002	.065		.000	.001	.000
NOA	Pearson Correlation	-.663*	.138	.961**	.332	-.928**	-.710*	.896**	1	.999**	.984**
	Sig. (2-tailed)	.037	.704	.000	.348	.000	.022	.000		.000	.000
NOD	Pearson Correlation	-.646*	.129	.955**	.309	-.926**	-.714*	.889**	.999**	1	.978**
	Sig. (2-tailed)	.044	.723	.000	.384	.000	.020	.001	.000		.000
SALES	Pearson Correlation	-.747*	.190	.987**	.450	-.915**	-.670*	.907**	.984**	.978**	1
	Sig. (2-tailed)	.013	.599	.000	.192	.000	.034	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Annual Reports of the Banks

Table-2(b) shows that Commercial Bank of Ceylon Ltd has strong positive relationship exist between components of firm size (NOB, NOA, NOD and Sales) and ROI, which means as the sales increases profits of the Commercial

Bank of Ceylon Ltd increases, it is natural and apparent. Negative relationship was found between (i) NOB - RAA (ii) NOA - RAA, NP & RAS (iii) NOD - RAA, NP & RAS (iv) Sales - RAA, NP & RAS,

Table-3: Correlation matrix for Bank of Ceylon and Commercial Bank of Ceylon Ltd

Bank of Ceylon			Commercial Bank of Ceylon Ltd	
	Firm Size	Profitability	Firm Size	Profitability
Firm Size Pearson correlation Sig(2- tailed)	1	-0.141 0.699	1	0.909** 0.000
Profitability Pearson correlation Sig(2- tailed)	-0.141 0.699	1	0.909** 0.000	1

Correlation is significant at the 0.01 level

Source: Annual Reports of the Banks

Table-3 shows that correlation value between firm size and profitability(i.e, ROI) was 0.909 which is significant at 0.01 level in Commercial Bank of Ceylon Ltd. i.e as the firm size increases profitability of the bank increases where as there was no relationship between firm size and profitability in Bank of Ceylon. Hence hypothesis one is partially accepted and Hypothesis two is accepted.

E. CONCLUDING REMARKS

This study examined the effects of the firm size on profitability of Bank of Ceylon and Commercial bank of Ceylon Ltd. Correlation analysis shows that, there was great effect Firm size on Profitability in Commercial Bank of Ceylon Ltd, but there was no effect between firm size and Profitability.

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ERP Systems In Hospitals: A Case Study

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GJMBR Classification (FOR)
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Abstract- Purpose In this study, the process of implementation of ERP systems in hospitals is analysed, as an organisation with divided and heterogeneous functional areas. The purpose is to identify the principal technological objectives that were set in the process of implementation, which of those objectives were achieved, and the deficiencies that have subsequently become evident.

Design/methodology/approach – A case study approach is used. The primary form of data collection was interviews with managers participating in the implementation and internal documentation.

Findings – In a hospital, different groups of individuals (basically the clinicians and the managers) co-exist, and each group has the capacity and authority to exert pressures during the process of implementation of an ERP system.

Practical implications – The results may provide guidance to solve problems during ERP systems implementation in organisations in which highly differentiated functional areas exist.

Originality/value – ERP systems have demonstrated their efficacy in a good number of companies, the more notable among which are companies with a large geographic spread. However, there isn't much evidence in

organisations with differentiated functional areas. Often such areas have traditionally had independent information systems and control over the interests of their area, such as, for example, hospitals.

Keywords-ERP, hospitals, integration.

I. INTRODUCTION

Among the factors that have been characterising the business environment in recent years are increased competitiveness between companies, the rapidity of technological change, shortened product life cycles, increasing use of subcontracting, the flattening of traditional bureaucratic structures in organisations, and the growing importance of the communications media as a result of the globalisation of markets. Largely as a result of this situation many companies have decided to implement ERP systems as one means of confronting the new challenges and threats they face. (Robinson and Wilson, 2001; Fan et al., 2000).

The reasoning behind this decision is that ERP is considered particularly appropriate since it brings together three properties essential for adapting to a business environment of this type (Chen, 2001):

ERP systems provide a multifunctional perspective that encompasses the various different areas of the company (Finance, Inventory, Sales, etc.)

Since they are integrated systems, the same items of data can be shared by different areas.

ERP systems have a modular structure, which means that different combinations of modules can be utilized in function of the needs of the company.

These properties, together with the evolution of the technologies of information and communication, and the need for integration, have led to increasing interest in ERP as a tool for coordinating the management of different organisational units (Sikora and Shaw, 1998; Al-Mashari, 2001).

For Newell et al. (2002), ERP systems represent a new class of information system designed to help integrate all the key areas of activity of a company, particularly the financial, productive and human resources functions. Thus, from the point of view of companies, ERP systems could be considered the most important development of the 1990's: according to some authors, even more significant than the Internet and electronic commerce (Davenport, 1998). The appearance of ERP marked a trend towards the acquisition of standardised information systems, rather than tailor-made systems designed to meet the specific needs of a particular organisation (Scheer and Habermann, 2000).

As a consequence of the division in functional areas, traditional information systems were focused on supporting each functional area, and only rarely did they ensure that data flowed smoothly between the different functional areas. This was aggravated by the fact of that the information systems of each area had, in many cases, been developed independently, with data formats that were incompatible or did not meet the information needs of the rest of the processes of the business (Scheer and Habermann, 2000).

An ERP system overcomes these disadvantages by integrating the information from the different departments and subsidiaries of the company in one single database accessible to the whole organisation (Shang and Seddon, 2002). When a datum is entered in the ERP system by any organisational unit, it is immediately available for use by the rest of company's organisational units. In respect of this key feature, Gattiker and Goodhue (2000) state that this integration brings about an improvement in the flows of information between the various organisational units and reduces administrative costs, since fewer tasks have to be performed to obtain any particular piece of information.

Thus, for a large multinational firm, an ERP system essentially represents a means of homogenising the work procedures utilised by its units, which should lead to greater agility in responding to market demands and reduced inventory levels (Davenport, 1998).

Botta-Genoulaz et al. (2005) carried out a review of the literature on ERP systems during the period 1996-2004, in

which they reported an increased number of studies published in recent years, and identified different categories in function of the area of interest of these studies:

Implementation of ERP systems. This category includes those studies associated with the various stages in the implementation of an ERP system, the problems associated with the process of implementation, the conditions necessary for the process to be successful, and the reasons why the process sometimes ends in failure.

Optimisation of ERP systems. The idea underlying this type of study is that the process of implementation does not end when the system is first put into effective operation: in the post-implementation period it is essential to analyse the activities that the system is intended to support, in order to optimise the system and thus obtain the expected competitive advantages.

Management by means of the ERP system. These studies focus on considering the ERP system as a management tool, describing the changes that take place in the management of companies that install an ERP system, against other aspects that do not change as expected.

ERP Software. These are studies that approach the topic from the systems perspective, in which various analyses are made of the aspects associated with the processing of information, the inter-operativity of the ERP system with the other systems in use in the organisation, and the adaptation of standard systems to the individual needs of the company.

ERP and the management of the supply chain. These studies analyse the use of ERP systems in the context of companies that form an integral part of an existing supply chain.

Of the five categories of study identified, we consider the aspects associated with the process of implementing the ERP system, particularly in a large complex organisation, to be crucial. Serious problems can arise in organisations in which highly differentiated functional areas exist; often such areas have traditionally had a high degree of autonomy, with independent information systems and independent control over the interests of their area. Hospitals are one example of such organisations. In these sectors, the success of the implementation process depends largely on the top management giving continuous active support to the project, and on the commitment of managers to the concept of integrating functions and improving operating processes (Berchet and Habchi, 2005).

Achieving the participation, collaboration and acceptance of all the members of the organisation is, without doubt, one of the principal factors that are critical for the successful implementation of an ERP system. Akkermans and Van Helden (2002) state that, during the process of implementation, interdepartmental collaboration and communication will be reinforced if the top managers, the project managers and software suppliers all demonstrate a positive attitude. In many cases the tasks of leadership are really important and delicate, because the introduction of the ERP system in the company will modify procedures within the company and the job functions of some of the employees, at all levels, will change.

Thus, if the likely re-structuring that will be required is not properly taken into account in the process of design of the ERP (Molla and Bhalla, 2006), when the time comes to carry out the campaign of awareness and training needed the process of implementation could lead employees to adopt postures of resistance to the change, for fear of the unknown or simply due to the sensation of displacement that some members of the organisation will feel.

Experiences of the implementation of ERP systems in the public sector have also been described (Gulledge and Simon, 2005). Watson et al. (2003) describe the implementation of ERP systems in the State Government of Louisiana. They conclude that the management and collaboration of the diverse groups involved were perhaps the most difficult aspects of this implementation. Within the public sector, hospitals are especially interesting given their particular characteristics. In this area, several studies have already been conducted, such as those of Trimmer et al. (2002) and of McGinnis et al. (2004). Rubin (1999) analysed the use of ERP systems for improving the process of materials management in hospitals, and described the success represented by the integration of the whole supply chain in one single system.

However, difficulties arise when the management wishes to extend the scope of the information system to include all the information that is generated in the hospital. In effect, a hospital needs an integral system of analysis, planning and control that allows the procedures that have to be applied to the patients to be planned and executed in parallel with the provision of the capacity required (Merodea et al., 2004). On this point, according to Khoumbati et al. (2006), studies have to be carried out to analyse how to increase the capacity of the existing information systems at the same time as reducing the costs of integration of the information. In addition to the complexity of the services that are provided, a hospital will contain groups of people with the capacity and power to exert pressures during the process of implementation of the ERP system. This makes it important to investigate the effects that the decision to adopt an ERP system will have on the hospital as an organisation, and on such groups in particular. In this study an analysis is made of the process of implementation of an ERP system in a hospital, as an example of an organisation with divided and heterogeneous functional areas. The method used is the case study. The purpose of the study is to identify the repercussions of the influence of the different functional areas that coexist in a hospital, basically the clinical area and the administrative management, whose personnel have traditionally employed information and control systems independently of each other. By employing this strategy of qualitative research, an analysis is made of the principal objectives that were set in the process of ERP implementation, the successes that were achieved and the deficiencies that have subsequently been demonstrated. Specifically, the following sub-objectives are established To determine what were the prior expectations of those responsible for the hospital in respect of the implementation of the ERP system.

To analyse the system design and subsequent process of implementation to determine if the terms, objectives and initial expectations were met.

To check whether the heterogeneity of the various pressure groups that coexist in every hospital, with their different visions in respect of the hospital's role, has had some influence on the implementation of the system, and how that influence affected it.

II. THE CASE STUDY APPROACH

It was decided to use the case study as our research method because the design, development and implementation of an ERP cannot be fully understood in isolation of its context, and therefore a contextual approach is necessary.

Unlike other empirical research methods, the case study permits the analysis of a contemporaneous phenomenon in its real-life context, when the boundaries between the phenomenon and the context are not clearly differentiated, and when numerous sources of evidence are utilised with the object of bringing the research work into closer contact with the organisational reality (Hopwood, 1983; Otley and Berry, 1994; Scapens, 1990; Tomkins and Groves, 1983; Yin, 1993, 1994). Further, the case study has been recommended as the ideal research methodology for gaining a better understanding of complex phenomena (Flynn *et al.*, 1990; McCutcheon and Meredith, 1993; Yin, 1993, 1994), and the implementation of an ERP system in an organisation with sharply divided functional areas and professional cultures is a very complex phenomenon.

We have opted to analyse the implementation of ERP in a hospital since it is an example of an organisation with heterogeneous functional areas that are markedly divided, basically, between clinical personnel and administrative managers, who have traditionally been employing information systems designed, implemented and operated in a deliberately independent way.

This particular case has been chosen because it is a hospital (hereinafter referred to as the HPT) that possesses both administrative and financial management autonomy; in effect this means that the management is responsible for obtaining optimum effectiveness and efficiency in the decisions taken. In addition, the opening of the hospital has coincided in time with the implementation of the system, and so it does not represent a change from previously-established procedures to which the personnel of the centre might put up resistance.

To obtain the information required for the study, diverse sources of evidence (Yin, 1994) have been utilised:

Analysis of internal documentation containing the information utilised for the management of the centre. The analysis of this documentation has enabled us to define and delimit the requirements that were specified for implementing the ERP system.

Interviews with the centre's most senior managers responsible for Human Resources and Financial Accounting, and with the General Management and personnel of the Area of Financial Administration. The interviews, conducted both with individuals and with groups, have enabled us to clarify the goals and objectives

of the hospital and identify the flows of information that should be included in the ERP system. The interviews have also enabled us to seek and obtain the opinions of a representative of each of the groups involved in the process of implementation.

Direct observation of the management and operating behaviour in the different areas during the implementation of the ERP and once the process had been completed.

Participative observation in the working meetings held with the managers responsible for the various different areas of the hospital. Here we were able to identify the needs, problems, concerns, etc., related to the utilisation of the ERP system.

III. DESCRIPTION OF THE HSP

The HSP was constituted in 1990 under the juridical form of a Hospital Foundation. The project plan for the construction of the hospital was approved in June 1992. However, the building work did not begin until June 1993. In December 1996 the legal basis of the constitution of the HSP was changed, and it was brought under a new normative framework dealing with the creation of new forms of management of the Spanish National Health system.

The HSP has its own juridical personality, which gives it considerable autonomy in decision-making. Under this autonomy it is allowed to have its own budget which it can administer itself independently. In accordance with its degree of autonomy, it can therefore not only meet its own currents costs, including those for its personnel, but it can also make fixed investments, contract personnel and set their salaries.

Once constituted, the HSP's governing body authorised the preparation of a Business Plan, which was approved for implementation in September 1997. When the HSP started operating as a hospital, one of the basic principles established was that the specification and installation of technological equipment should be carried out in a properly planned way in accordance with agreed criteria of safety, efficacy and efficiency. Thus, in its Business Plan, in the part describing the Organisational Model of the HSP, there is considerable reference to information technologies and systems. Among the general objectives established, it is stated that information systems constitute the key factor in this process of strategic development; in fact, the viability of the hospital model to be put into operation, particularly in respect of its internal relationships, at both the functional and strategic levels, is crucially dependent on the development and implementation of information systems. As an unalterable objective the Plan stipulates that the nucleus of information must be the interaction of the patient with the organisation and, following from this, the integration of the clinical with the financial and cost information.

Thus, in the HSP it is understood that the management of information is one of the bases of how the organisation operates (in addition to the human and financial resources), and that the incorporation of technology is essential in

order to handle the information adequately, not only on the strategic and tactical levels, to serve as the support for decision-making, but also on the operating level, to facilitate the daily clinical activity.

For those responsible for managing the HSP, the information systems are a set of procedures and functions directed towards the collection, production, assessment, storage, recovery and distribution of items of information within the organisation, orientated to promoting the flow of these items from the points where they are generated to the final intended recipients. Therefore, the information systems should be an integral part of the corporate strategy, since today all organisations are based on information.

A series of criteria were set for the management of the information systems, such as:

The systems will be managed by contracting the services required from an external company (i.e. by outsourcing).

To avoid technological incompatibilities and obsolescence, and to avoid the outlay of funds without being able to take full advantage of resources, the HSP will not invest in either hardware or software. The supply contract will specify the services to be provided and the results to be obtained. By this means the technology and the personnel will at all times be appropriate for the needs of the HSP.

IV. CONTRACTING AND IMPLEMENTATION OF THE ERP SYSTEM IN THE HSP

The management of the HSP prepared detailed technical specifications for the contract to provide the ERP system, based on the requirements stipulated in the Business Plan. Given the imminent entry into operation of the HSP, the fundamental premise was the need for it to be equipped with an integrated system that would enable all the appropriate health-care functions to be carried out, and that would constitute the principal tool for the financial and administrative management of the hospital.

Competitive tenders were invited with the object of selecting a single systems integrator capable of providing a solution for managing the information needs of the HSP. The successful bidder would be constituted as the only interlocutor of the HSP for all matters related to its ERP system, and should present its offer with the following requirements:

Listing of all the subcontracted suppliers and the products that they are supplying, including the bidder if it will be providing any product that would form part of the global solution.

Details of the way in which the various modules are going to be integrated.

Any additional programming that will be needed to ensure the complete adaptation to the needs of the HSP. Human and material resources necessary, and the delivery terms to be met.

Detailed plan of implementation: phases and timetable, with terms linked to the achievement of levels of operationality.

On a complementary basis, the systems integrator will provide a contingency solution during the transition stage,

complying with the minimum coverage required and as a step towards the definitive integral solution.

The competitive bids must take into account explicitly the following criteria, all of them essential:

Uniqueness of data. The capture of each datum will be unique, as will its storage. The design should be relational.

Total integration of all the modules.

Operative solutions must be provided. The adaptations required to meet the special requirements of the HSP should be kept to a minimum.

There must be uniformity in the operating environments.

The winning bid was selected in September 1997. The decision went in favour of a centralised solution for the implementation of the ERP system, presented by the company "OFFER", who would be responsible for its management and integration. The contract specified, among other matters, the final product to be supplied, comprising the implementation of 3 modules and 11 applications (all included under the name of the GENESIS Program):

Module 1 (META 4 products and implementation): Module for Payroll, Personnel Management (Meta4 Mind) and Management of Shifts (Meta4 Shifts).

Module 2 (SAP and HP products and OFFER implementation):

Modules for Financial & Cost Management (SAP R/3): Supplies (MM), General Accounting (FI), Analytical Management and Management of Costs (AM and CO), Payment of Suppliers' Invoices (MM), Inventory Management (MM) and Maintenance (PM).

Modules for Supporting Services (HP-HIS): Catering, Dietetics and Kitchen.

Executive Information System: Balanced Scorecard EIS (SAP R/3 EIS and HP-HIS).

Module 3 (HP-HIS products and HP implementation):

Module for Healthcare Management (HP-HIS): Admission of in-patients, Waiting lists, Emergencies and Emergency Boxes, and External Consultations. Also included are Electronic Clinical History (HP) and Invoicing to the Customer (SAP R/3).

Modules for Clinical Management (HP-HIS): Management of Operating Theatres, Radiology, Out-patients, Ward Control Points, Control Infrastructure, Generation of Medical Reports, Unidose Pharmacy, Pathology and Nursing Units. Also included are Document Manager (HP), Medical Protocols (KPMG) and Laboratory (Behring) applications.

Applications: Laboratory, Dietetics, DOCTOR, Gacela, Carevue, GPC, Invoicing, Library, Balanced Scorecard, Pharmacy and Pathology.

In the standard version of each module there is a set of interfaces for the exchange of information between them. However, this is not the case with the different applications acquired; for this reason it was necessary to incorporate up to 11 interfaces, which are described below:

Interface I-1: This is the interface between the Personnel Module and the Library Management. Its objective is to load onto the database of the Library the data of the hospital personnel that are considered necessary for managing borrowings of publications.

Interface I-2: This interface exchanges data between the Payroll Module and the Financial Accounting Module, with the object of recording the accounting details necessary for each Payroll payment.

Interface I-3: This is similar to the previously described interface; its purpose is to exchange data between the Payroll Module and the Analytical Accounting Module, assigning the costs of each payroll item to its corresponding cost centre.

Interfaces I-4 and I-7: The Patient Care Module is generated in function of the data obtained when the patient is admitted to hospital. Therefore, it is necessary to transfer information corresponding to each patient.

Interface I-5: From the data of the invoices, which reflect the cost of all the services and products that each patient has consumed during their hospitalisation, the total costs of each hospitalisation are determined and these costs are assigned to the corresponding units.

Interface I-6: In the same way as in the previous interface, the costs of each period of hospitalisation are assigned the corresponding units; the interface of Invoicing with Financial Accounting allows the invoicing to be assigned to the account of each unit.

Interfaces I-8 and I-9: Among their functions, the Nursing and Pharmacy Modules support the control of the ward sub-stores and orders for supplies placed on the central warehouse; therefore interfaces are created that enable both the completion of orders placed automatically in function of the level of stock of certain materials, and the generation and shipment of orders placed manually to the Supplies Module.

Interface I-10: This allows modifications to be made to the planned capacity of the External Consultations, in function of the periods of time that the equipment of each Service is not available due to maintenance or repair work.

Interface I-11: This interface allows the localisation of the electronic file of documents associated with each medical history from the application that manages the Clinical Records.

A. Insert Figure

The process of implementation of the ERP system by OFFER began at the end of 1997 and lasted approximately 6 months. According to the evidence obtained, the involvement of the top managers was continuous, and they kept up the pressure to complete the project on time.

V. DISCUSSION

For the analysis of the evidence obtained, the information is grouped according to the following three phases (Escobar *et al.*, 2004): (1) prior or preliminary, (2) implementation and (3) operation. Interviews □ were held with the directors responsible for Human Resources and Accounting, and with the General Management and managers of the Finance and Costs Area of the centre, with the object of identifying the degree of satisfaction of these user groups with the system. The interviews, both individual and in groups, enabled us to clarify the goals and

objectives of the company, and identify not only the achievements obtained but also deficiencies that have become evident. Since these persons were also active participants in the process of implementation of the system, we were also able to determine if the wishes and expectations generated in respect of the system have been fulfilled.

As a preliminary observation, the HSP had, from the very beginning, been conceived of as an organisation which would operate with an ERP system that would facilitate the performance of its patient healthcare activities, its administrative management and its decision-making. Its philosophy is to seek the maximum satisfaction of its users, in both the scientific-technical and human aspects of its activities. It could be described as a young hospital that aims every day to offer high quality healthcare, where the professionals who work in it are considered to be its greatest capital asset. Thus, in the Business Plan formulated when it was created, a part was included referring especially to systems and information technologies; in this part, it was stated as a general objective that the nucleus of information must be the interaction of the patient with the organisation, and that, on the basis of this source, both the clinical and financial/cost information would be integrated. This stipulation was accepted by all the employees, as demonstrated by the following statement of the Sub-director of Nursing:

"The integrated system (...) was an objective for this hospital; we wanted to have an integrated system of management that will provide us with information. In the large hospitals the problem they had (...) was the topic of information; that is, at the level of the administrative management, the information was being received piecemeal from the different departments".

However, from the conceptual point of view, the organisation of the hospital provides its services to certain basic clients, the clinicians (doctors and other specialists), who in turn provide these to the patients, who are therefore the final clients of the organisation. Thus, the entire executive organisation is set up in such a way "that the doctors and specialist medical personnel may perform to perfection their work of patient care". The doctors are thus the direct clients of the organisation and are dependent on the organisation in a strictly functional, not hierarchical, sense. Hence, the situation in which the doctors consider themselves to be clients of the HSP and not simple users of the ERP system, like the rest of the employees, has clearly conditioned the implementation of the system.

Although the process of implementation of the ERP system had the support and active participation of the top management, there was a need to bring together the interests of functional areas with different cultures. The fundamental concern of the doctors and clinical practitioners is to return their patients to good health, whereas the managers are responsible for obtaining efficiency in the utilisation of limited resources. The effect of this was that the design of the ERP system was orientated towards ensuring the good functioning of each of the functional areas, separately, rather than towards

establishing an information system in which the source data only needed to be captured once, in which all the modules were fully integrated with each other and the system as a whole, and in which all the operating settings were uniform (the original objectives). Despite a total of 11 interfaces having been designed to inter-connect the different modules and applications that comprise the HSP's system of information, in the opinion of the Subdirector responsible for financial and cost control, "if we are speaking of integration of all the systems, what has failed most is the integration between the patient care system and the rest of the systems not directly related to patient care".

In consequence, not all the users are equally satisfied with the results of the process of implementation and with the way the information system operates. In this respect, we can identify two large groups of users: clinical practitioners and administrative managers.

The clinical practitioners have ensured that the part of the system that they utilise (Modules 1 and 3) cover all their needs. In general terms, those responsible for Patient Care Management, Clinical Management, Human Resources and Payroll are fairly satisfied with the performance of the system, according to the views expressed by the Medical Subdirector, who stated that "having an Integrated System of Management in this case, in the part of the patient care area, enables you in principle to have everything close to hand; in other words, to have clear, up-to-date information rapidly at your disposal, which is also directly connected with the management of the patient". The Subdirector of Nursing stated: "I believe that we have one of the best integrated systems because, despite some of the interdepartmental aspects remaining to be done, it is perfectly integrated, or practically integrated. We only have very little still to do, very little".

However, the managers (the users of Module 2) appear rather unhappy given that they do not receive correctly the information generated in the other modules. On this question, the Subdirector responsible for finances and cost control emphasised that "the integration between patient care information and cost information did not function as we wanted. An ABC system of costing and an advanced system of clinical guidelines, in which each step was associated with its cost, were tried and failed. It was not possible because, in practice, it was very difficult to collect the information; that is, the guidelines were so detailed that there was no way the data could flow towards the SAP, no way all this could be handled with the patient care information in detail and was not being received. That was where a lot of effort was made and it was not achieved. The guidelines were prepared, they did not get to be implemented, and there was no way of collecting this information". He also states "well, the financial system is well implemented, but perhaps we lack something in management control, because we have not fully developed all its possibilities, and to do that, we now have to take advantage of the change to a new version. Not because each of the tools is not implemented but because, in order for the

information to come out as you want, you have to enter it in the correct way. Well, at the time other things were given priority, and now is the time to change it". Lastly, in an attempt to find an explanation for this situation, he stated that "the integration with the patient care information is a failure for us because each system in its part (package) functions well". As can be observed, in this statement the Subdirector tacitly accepts the balance of power in the hospital between the clinicians, who are preponderant, and the managers.

For his part, the manager responsible for the Accounts Department stated that "now everything is much more stabilised, but there have been many disputes with the departments, and we have basic problems that have not been solved because at the time they were not put forward correctly". In particular, he complained that "every time that I have to finalise accounts with Pharmacy, complications!, and many years have gone by like this. When I have any difference and have to investigate, I have to go to their program, extract data, cross-check the figures with mine, see what they have charged to me and what they have not charged to me, trust in what they tell me and then check it. It's not easy, it's not easy, and then there is a slip, a gap of information, also very important, between one module and another. (...) In the case of the interfaces there is information that we are not picking up, and that also is not good". Lastly, there is also the complaint that "the interface is not transparent. A payroll is transferred to me, but I don't get to see the concepts of the payroll, I do not see the number of persons. They transfer them to me grouped by cost centre".

VI. CONCLUSIONS

In this study we have set out to identify, from a technical or technological perspective, the impact of the influence exerted by the various heterogeneous functional areas that coexist in a hospital, basically differentiated into clinical and management personnel, and that have traditionally been accustomed to employing information systems that were designed, implemented and operated independently of each other.

It has been demonstrated how the very same decision regarding the type of ERP system to implement has reflected, from the first moment, the organisational complexity over which the system had to be implemented. As can be confirmed in the choice of the design of the system and its modular structure, these factors demonstrate the not-always coincident interests of the two groups of personnel, clinical practitioners and managers, previously mentioned.

In the case analysed, evidence is obtained on the attempt made to resolve this complexity from the technological perspective, by means of the sophisticated set of interfaces described here. Although all the interfaces were developed, not all are utilised. In particular, interfaces I-5 and I-6 are not currently utilised. These interfaces would allow the

Invoicing module to be related to the General Accounting and Analytical Management, and are fundamental for the correct integration of information between Modules 2 and 3.

Despite this, on analysing the degree of satisfaction of the users of the ERP system, in the case of the clinical personnel it meets practically 100% of their expectations, whereas those responsible for the management of the hospital are found to be rather less satisfied, as they have not seen their initial expectations fulfilled in respect of the system.

A plausible explanation for this situation could start from recognition of the heterogeneity of these two pressure groups, which exist in some form in all hospitals; this heterogeneity is encapsulated in their respective general objectives: effectiveness in healthcare for the clinicians, and organisational efficiency for the managers. This generates a fierce struggle for control of the organisation. In this framework the process of implementation of the ERP system, seen as a formalised instrument of the hospital's control system, is taken as an opportunity by the managers to try and increase their degree of control over the organisation and, therefore, to increase their relative power in the hospital. For their part, the clinical personnel interpret the situation basically in a similar way to the managers, and their reaction is one of rejection faced with a perceived reduction in their control and power; this therefore translates into resistance to key integrative features of the ERP system.

In our particular case, that of a newly-established hospital in which its initial specifications already included the implementation of an integrated system of information, the resistance shown by the clinical personnel has not been as radical as a refusal to use the system at all, but has been more selective and nuanced. As we have been able to confirm, those modules concerned with basically clinical information are being utilised: what the clinicians have succeeded in resisting is the full integration of this clinical information to allow the ERP system to be used as originally intended by the specifiers.

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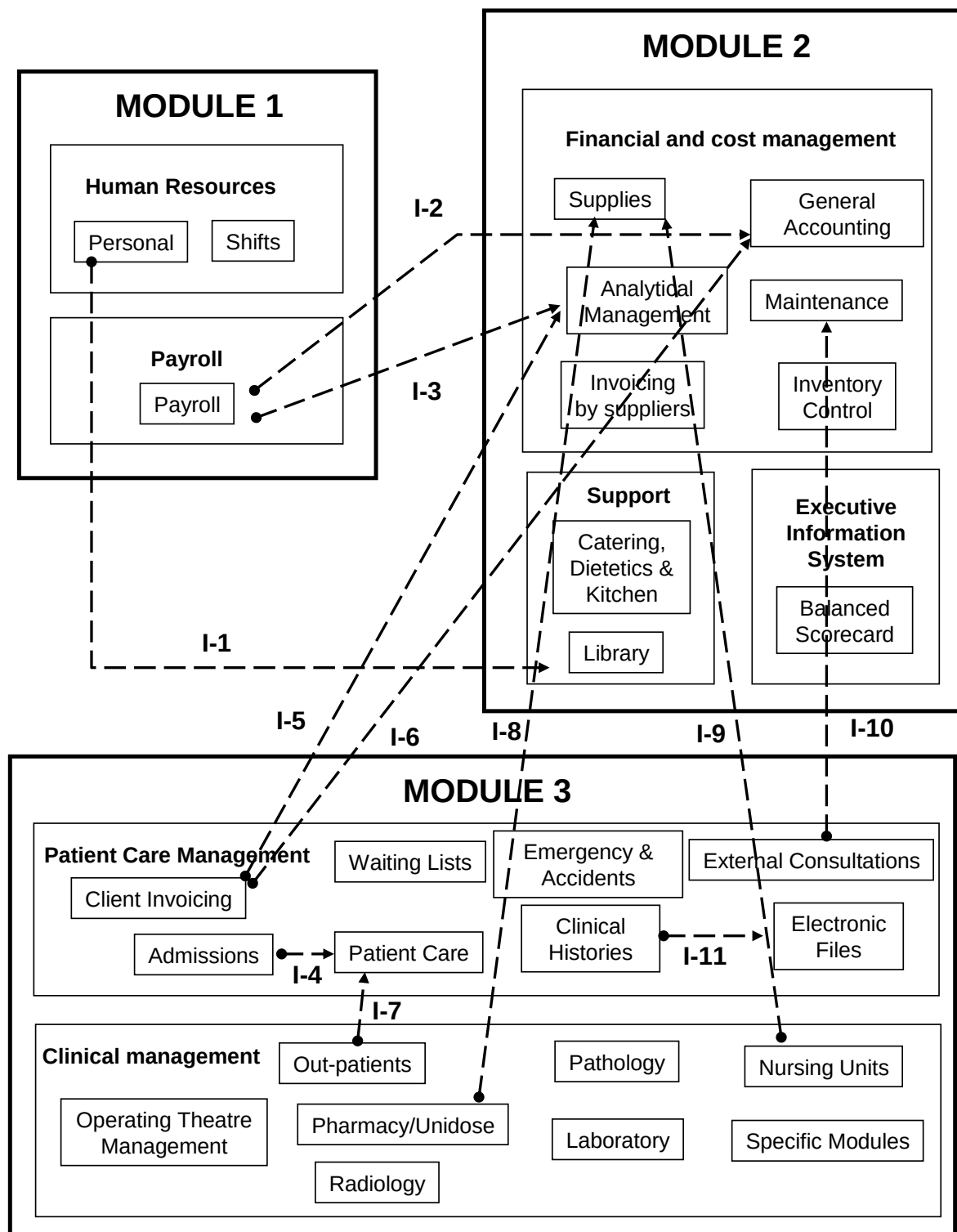


Figure 1. Diagram of the implementation of the ERP modules.

Source: Author's own elaboration according to information provided by the HSP.

Taking Advantage of Computer Assisted Audit Tools and Techniques during Testing Phase in Financial Audits: An Empirical Study in a Food Processing Company in Turkey

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Abstract-The main aim of this study is to analyze and report on the advantages provided by Computer Assisted Tools and Techniques (CAATs) especially during the testing phase of financial audits. Design/Methodology/Approach:

To realize the aim of this study, the literature and applications regarding specifically designed computer software and hardware, known as Computer Assisted Audit Tools (CAATs) or interactive Data Extracting and Analysis Systems (DEASs) in general, have been reviewed and searched. In order to give a clearer demonstration of the advantages of CAATs and DEASs, a number of audit tests and procedures focusing on the Sales Cycle accounts of a food processing company in Turkey are presented in this study. Findings:

It is firmly believed that various products of computer and information technology have provided great benefits to Certified Public Accountants. These include the improvement of quality and reliability of certain audit tasks and reaching a final audit opinion, as well as time and money saved while completing various audit procedures in a more comprehensive manner, and higher levels of efficiency and effectiveness achieved by the auditors. Originality/Value:

The research was conducted in a manner that would enable the audit of the whole data without omitting any accounting records in the desired fields. This enables the auditor to test the whole database without the inconvenience of selecting appropriate samples. As a result, the reliability of the tests conducted and opinion reached increase. It is hoped the findings will contribute to understanding of benefits provided by CAATs/DEASs while performing financial audits.

Key Words: Financial Audit, Information Risk, (CPA), Computer Assisted Audit Tools and Techniques (CAATs), Data Extracting and Analysis Systems (DEASs), Electronic data Processing (EDP)

I. INTRODUCTION

Audits of financial statements are the most comprehensive attestation services provided by Certified Public Accountants (CPAs). Credit companies, shareholders, both individual and institutional investors and all other users of fundamental financial statements, namely balance sheets and income statements, rely on the information disclosed on these statements while making their decision. One of the biggest concerns of these users is the reliability of the information provided, that is information risk, since it directly affects the appropriateness of their decisions. Remoteness of

information, biases and motives of information providers, voluminous data and complex transactions are the main factors affecting information risk (Arens, Elder and Beasley; 2008). The most logical and economical way to eliminate information risk is the audit of statements by a qualified, independent CPA.

It is necessary to remember that auditing of financial statements is a comprehensive process requiring expertise and experience in the industries, business types, product lines, raw materials, business practices including complex transactions such as transfer pricing, rules and regulations as well as tax laws all of which affect the company to be audited. Moreover, an auditor is expected to be competent in the area of Generally Accepted Accounting Principles (GAAP), to be independent and qualified to evaluate and understand the internal control structure through which all transactions are documented, recorded, classified, summarized and reported. Such an auditor is also expected to be knowledgeable about types of evidence and techniques for accumulating the necessary data in order to form an opinion about whether financial statements have been prepared in compliance with GAAP and is free from any material misstatement. An independent audit requires a careful investigation of all documents, files, records and other related pieces of data, including footnotes that constitute the figures and assertions on financial statements. The need for reasonable assurance of the accuracy and reliability of information disclosed in financial statements obviously creates a burden on CPAs as professionals. The consequences of the failure to carry out this great responsibility can be extremely costly, as can be seen from the Enron case. Therefore, besides meeting all ethical standards, CPAs need to constantly improve skills in order to meet the demands of ever changing business practice and technological environment. Therefore, American Institute of Certified Public Accountants (AICPA) has made it mandatory for CPAs to take at least 40 hours a year or 120 hours over 3 years of professional training and education. One of the most important areas emphasized by AICPA is the applications of tools and techniques such as CAATs, DEASs Neural Networks (NNs) and Expert Systems (ESs) in the context of financial audits.

II. COMPUTER TECHNOLOGY AND AUDITING

Almost all of businesses today exploit computer technology to its full extent. Data and documents related to business transactions are processed in Electronic Data Processing (EDP) environment and stored in electronic files, along with all other information and documents, such as contracts, company policies and bylaws. Since all information regarding business transactions are documented, recorded, classified, summarized and reported by the use of an electronic database, businesses seem to be operating in almost a paperless environment at the present time (Kanter, 2001). Therefore, it is almost impossible to conduct a high quality and reliable audit using traditional methods in the companies where a paper trail has almost disappeared. Conducting an audit in an EDP environment requires the knowledge and skills to work with mainframe terminals and electronic databases where all accounting records are stored. This explains the emphasis given to Information Technologies (IT) by the AICPA.

The tools and techniques provided by computer technologies have made it possible for CPAs to conduct high quality audits in a manner more suited to the needs and expectations of the present (Ethier, Jan/Feb 2000). Moreover, CAATs in general have enabled the auditors to improve efficiency and effectiveness while decreasing the cost and time taken to complete an audit. Computer technology utilized by auditors can be seen in every phase of audit cycle, namely *client acceptance/continuation phase, planning phase, testing phase and reporting phase*.

Auditors of major CPA firms such as PricewaterhouseCoopers (PwC) and Ernst & Young (E&Y) employ various computer tools and techniques at every stage of audit process. During the procedures applied in client acceptance/continuation phase, qualitative information i.e. background information about owners, partners affiliates, main suppliers and retailers, product line, industry specifications, bylaws, minutes of meeting along with quantitative information such as financial ratios of the company in a comparable format with industry averages, assertions on both actual and projected financial statements and budgets are taken into consideration and careful evaluation. Computer and telecommunication technologies save these auditors a great deal of time and labor while improving the quality of the tasks completed. A number of companies have built their own intranet system such as *Network of Excellence* and *Knowledge Curve* of PwC, where information about both current and potential customers and their industries are updated to assist the auditors of PwC worldwide. In addition to conventional computer software and systems, innovative tools such as *artificial intelligence* modules embedded *hybrid systems*, neural networks and expert systems are fully utilized by major CPA firms to perform various procedures in this first phase of audit. An important example is FRISK, a hybrid system employed by PwC auditors in client acceptance/continuation decisions¹.

There are also various software and system that can be utilized during the planning phase of audit cycle, including

a number of CAATs and DEASs along with ESs and NNs systems available for performing procedures such as time and labor planning for assistants and determining materiality, inherent risk, control risk and detection risk levels as well as selecting sample sizes and procedures to be applied in planning phase (Selditz, 1999). These tools have improved the supervision and control of assistants and tasks completed by them. In other words, they have improved the efficiency and effectiveness of auditors as well as the quality of audits, while decreasing time and costs associated with various tasks in planning phase.

Many CAATs and DEASs available to the auditors also offer great advantages in testing phase as well. With the help of these tools and techniques, it is possible to reliably scan the entire database and extract and retrieve the desired data in the desired format. It is also possible to reassess and manipulate retrieved the data and merge data from various files into a single file in order to analyze and test information as desired. The internal audit division of the First National Bank of Omaha reported reducing time taken to perform the tests from 80 hours to 1 hour while increasing the number of fields to be tested from 40 to 180 by employing a DEAS named Audit Command Language (ACL) (Kastner, 1999).

It is also possible to take advantage of various CAAT and DEAS software as well as many commonly used package programs (Words, Excell) in the reporting phase (Salamasick 1995). It is worth mentioning that nearly all CAATs and DEASs available for the use of auditors store all procedures in files, a great help in preparation of working papers, saving a great deal of time and energy in preparing both current and permanent files.

III. CAATT'S IN TESTING PHASE:

In this study, special emphasis will be given to the application of DEASs in testing phase. There are various reasons for selecting this stage in order to examine the benefits of DEASs. Firstly, most of the data taken into consideration during the client acceptance phase are qualitative and subjective. It is believed that working with qualitative data would not be appropriate for the content of this study. Secondly, types of the tests selected, materiality and risk levels determined during planning phase are subject to change or revision after actual applications start. Plans in advance rarely match the actual consequences. Besides, plans and their actual applications take place almost simultaneously in the use of DEASs. Therefore, it is believed to be more appropriate to omit the planning phase and concentrate directly on the field study. Thirdly, the reporting phase involves many routine and standard procedures that can be performed by various commonly used general-purpose package programs such as Windows. Applications in reporting phase are therefore not believed not to have much to prove in terms of understanding the advantages provided by CAATs and DEASs. Finally, it is believed the findings of the tests performed with a proper DEAS will help to emphasize the contribution of these tools to labor and cost savings, quality improvements of audits and effectiveness and efficiency of auditors.

IV. METHODOLOGY

The economic entity audited in this study is a poultry processing company. There are various reasons for selecting this company. Firstly, most of the businesses are unwilling to share financial information even if for academic reasons. Therefore, the understanding and cooperation of the management are greatly appreciated. Secondly, the company had been provided with certain management advisory services for two consecutive years prior to this study. This has saved time and effort during client acceptance and planning phase, since auditors already possess most of the necessary information obtained through background investigation, analysis and evaluation of structure of the internal control system along with Management Information System (MIS) and Accounting Information System (AIS). However, this was to be the first audit performed by these auditors in this company and in addition the first time these auditors work with a well known DEAS called Audit Command Language (ACL). Since the auditors do not possess the knowledge and skills to fully utilize ACL, necessary assistance is provided to them by the branch of ACL in Turkey. It should also be noted that due to request by the company and the sensitive nature of the information, it is impossible to provide full demonstration of actual results in this study. Instead, a more narrative approach is used in explaining the results.

The company owns and operates eight poultry farms within 10 km radius of a meat processing facility and works with more than 12 subcontracted poultry farms under the close supervision of five full-time veterinary. These subcontractors are provided with chicks and feed, vitamins and other necessary supplies along with necessary training and advice. The company processes various products and sells them to a big portion of domestic market. Although the company has initiated some efforts, it has no market share in foreign markets yet. Some of the products among which are produced and sold by the company are whole chicken, partial chicken products, burgers and sausages. As the company is only engaged in wholesale trade, the terms of sale and wholesale are used interchangeably in this study. Since the wholesale of whole chicken constitutes the biggest portion of sales, it is thought to be more comprehensive to conduct an audit related to whole chicken sales cycle. This kind of an audit includes records and documents related to accounts of Sales Revenue, Sales Returns & Allowances, Sales Discounts, Cash and Equivalents, Accounts Receivable, Notes Receivable, Cost of Goods Sold and Value-Added Tax. The emphasis is given to trade receivables accounts, namely accounts receivable and notes receivable, since most of the sales generated are on credit.

The Audit procedures to be applied during the testing phase are going to be conducted not only to gather evidence but also to assess the length of time taken to scan the related fields in electronically stored database and extract the necessary information in the desired format. The Audit Procedures to be applied are as follows:

Procedure 1: Prepare a trial balance of trade receivables and assess them in descending order according to the size of balance.

Procedure 2: Retrieve the data related to shipment orders and sales invoices from the database for the whole fiscal year. Prepare lists of both shipment orders and sales invoices and assess them on an individual customer basis in chronological order. Merge orders and invoices the same folder and scan for any mismatch or duplicates.

Procedure 3: Calculate the totals in both quantity and in monetary terms for both shipment orders and sales invoices.

Procedure 4: Compare the total of sales invoices with the total of Sales Revenue Account for any inconsistencies. Determine the names of companies responsible for inconsistencies and possible causes.

Procedure 5: Calculate the total amount of discounts on sales invoices and compare with Sales Discount Account totals. In case of an inconsistency, identify the company involved and the reason for inconsistency.

Procedure 6: Confirm trade receivables with a customer via e-mail. (During this procedure, confirmation will be conducted directly on the customer's website if necessary permission for access is obtained from the customer).

Procedure 7: Prepare two aging schedules for trade receivables at 10 day and 30 day intervals separately for the current fiscal year. Age the trade receivables the same way for the last 5 years and compare Allowance for Doubtful Accounts for the last 6 years. List the trade receivables more than 10 days overdue in descending order according to amounts for the current year.

All accounting information namely uniform chart of accounts, policies, procedures, books, journals, files, records, documents and financial statements are stored electronically through an accounting software called Logo Gold Open Version. In order to apply the procedures mentioned above the electronic data processing environment of the company should be understood thoroughly. Therefore, the auditor is provided with the assistance of an employee familiar with the EDP environment.

Procedure 1:

There were two main goals in conducting this procedure. The first was to test existence/occurrence, completeness and classification assertions of management while cross-checking and testing mechanical accuracy of related accounts. The second aim was to measure the time taken for an auditor using a DEAS to retrieve specified data from the related fields in database and create a working trial balance for trade receivables including information such as subsidiary account and customer codes, name/title of the customer and balances of each customer in the desired format.

The specifications of information required, such as customer code, customer name and address, debit total, credit total, debit balance, were loaded onto the DEAS and then retrieve command was given. Although there were many different sampling methods that could be utilized by DEAS, the approach of scanning all related records in

database was adopted entailing a complete scan the entire database to extract a specific data and store it in the files of auditors' computer in the desired format.

It took approximately 16 minutes for the DEAS to scan, extract and retrieve the desired information; create and store files prepared according to determined criteria in descending order. These files stored in auditor's computer could be re-assessed and used for various audit tests and reporting purposes. For example, the list of 100 customers with highest value purchases and the 100 with lowest value purchases were prepared in less than 4 minutes after the specifications were determined and command was given. Moreover, the cut-offs of accounts were recalculated and a report of current balances on the subsidiary ledgers of each customer account for the whole period in chronological order were prepared by tracing the amounts and types of payments (cash, checks received, wire-transfers to banks) made over the whole fiscal year. Preparing and storing this report in current and permanent files took approximately 18 minutes. After the completion of Procedure 1 by utilizing a DEAS, the auditor was able to scan more than 2,250,000 accounting records in trade receivables, cash, checks and wire transfers received without skipping a single record.

As the results of tests conducted above, the completeness and validity objectives of audit were met. In other words, there were no imaginary transactions recorded without proper documentation recorded and all existed transactions had been recorded without missing anyone. Also, during the mechanical accuracy tests of trade receivables and all other related accounts, namely, cash in hand, checks received and banks, it was discovered that the debit and credit totals and balances of all these accounts were accurate and in accordance with each other. This was considered as an indication of an effective and efficient internal control structure regarding the accounts mentioned above

Procedures 2&3

The main purpose of performing procedure 2 and 3 was to check the agreement of records regarding quantities on shipping documents and sales invoices. Also, the time taken to scan, extract and retrieve the desired data, in specified format through applications of the DEAS in use, was measured to assess its contribution to quality of work, time, energy and cost for completing these procedures as well as its contribution to the efficiency and effectiveness of auditor. Once again, all relevant fields of database were scanned without the need for sampling procedures.

Firstly, the related fields in database covering all information regarding sales invoices (INVOICE) were successfully accessed the DEAS. At this point, a list of data categories related to sales invoices under menu option of the DEAS appeared on the screen. According to specifications required by the auditors categories could be selected and filed created. In this study, the specifications required that data related to whole chicken sales for the current fiscal year be listed and displayed in alphabetical. In addition, details were displayed and stored in a designated file under the headings: of Invoice Reference Number, Shipment Order Reference Number, Customer

Name, Date, Net Weight, Unit Price, Gross Totals, Total Discounts, Net Totals and Net VAT. Knowing this, the fields in database, where the information about shipment orders (STFICHE) stored, were accessed and a separate file for shipment orders including same categories of information and specifications for display was transferred to auditor's computer. During these procedures DEAS scanned over 2.8 million pieces of data, extracted the information meeting the pre-determined specifications, transferred them to the auditor's computer and created two separate files. By doing, so 163,104 sales invoices and 201,114 shipment orders (multiple shipments could be recorded on a single sales invoice for the same customer when the orders were received separately but processed on the same day) were listed in details. The whole task took 38 minutes to complete.

The data collected in two or more separate files in the auditor's computer could be re-assessed, merged and used for different tests and analytical procedures determined by the choice of auditor through certain applications of DEAS. Therefore, it was decided to merge the separate files mentioned above to perform some analytical procedures. The main purpose of this was to cross-check the totals on both sales invoices and shipment orders. Several methods to merge the information on these two separate files in a logical manner could be employed. Invoice Reference Numbers and Shipment Order Reference Numbers were used in order to relate and cross-check the pieces of data transferred from two separate files into a new 3347 page file. Moreover, grand-totals of columns, namely Net Weight, Gross Totals, Total Discounts, Net Totals and Net VAT and differences in subtotals (i.e.GROSSTOTAL_DIFFERENCE) of similar groups were calculated and also displayed in this new file in a process completed less than 10 minutes.

All shipment orders were matched with the related sales invoice in a merged file. Also the grand-totals were found to be in accordance. The grand-total of gross totals on sales invoices was 45,556,708.465557 YTLiii whereas it was 46,556,708.465459YTL on shipment orders. Therefore, GROSSTOTAL_DIFFERENCE was only 0.000098YTL, which was caused by the rounding ups which occurred while multiplying net weight by unit price and considered immaterial. Further investigation revealed that the remaining of the grand-totals matched and there was no evidence of material errors or irregularities regarding the records existed in sales invoices and shipment orders. The auditor was satisfied with the results of analytical tests and procedures performed thus far and considered that the objectives of validity, completeness, mechanical accuracy and cut-offs had been met.

Procedure 4

This procedure was performed to compare the total gross sales figure obtained from sales invoices with the balance of Sales Revenue account. Since the grand-total of gross sales was previously calculated during Procedure 3, the main task here was to scan the field of Sales Revenue in database and extract the sales totals for whole chicken sales only for the current fiscal year to enable total amounts of

whole chicken sales could be calculated easily. The account code of Sales Revenue account is 600 in Turkish Uniform Accounting System. In this account, the total of all the sales generated by the company had been recorded. However, the auditor was only interested in whole chicken sales generated for the current fiscal year. The company's account chart gave the account code, for whole chicken sale, with the extension as 600.24.01. In order to extract and retrieve total of sales with 600.24.01 code among all sales generated for January 01–December 31 of the current year, four data scanning and extracting filters were electronically incorporated into DEAS. Determining the criteria for data and placing the filters took approximately 20 minutes. Upon giving the command DEAS scanned 998,695 records under 600.Sales Revenue account and extracted and transferred 174,467 records matching the determined criteria in less than 4 minutes.

174,467 records with the code 600.24.01 were found, a greater number than that previously found in Procedure 2, 163,104. Moreover, when the total of records with the code 600.24.01 was calculated, it was discovered to be 1,548,832.328280 YTL more than the grand-total of gross totals on sales invoices of whole chicken calculated during Procedure 3. Before starting the testing stage, the materiality level was set at 5% of total net sales, and the difference found here constituted up to 3.49% of total net sales, that is, below the materiality level. In spite of this, the difference of 1,548,832.328280 YTL was considered to warrant further investigation.

During a more careful and comprehensive review of data received, it was discovered during a comprehensive review that a number of items such had been recorded under 600.Sales Revenue with the same extension code as whole chicken. These items include insulation material, fuel oil, painting supplies, gloves, that had been sold to subcontractors (it was previously mentioned that the company had subcontracted poultry farms and those were provided with necessary supplies by the company). An example of this was the sale of coating material used to insulate pens recorded on March 24 of the current fiscal year. The inventory code of coating material was 150.04.04.002, whereas the code of finished goods such as whole chicken started with the code of 152 according to company's account chart. Such an error may be thought acceptable considering that approximately 1,000,000 sales transaction had been manually recorded. However, it was firmly believed the accounting program used by the company should have been designed to prohibit these types of errors and should have warned the user. Although this was not an intentional error and had no material impact on the overall accuracy of the financial statements, it was obvious that this was a violation of classification assertion of the management and therefore, the control procedures related to the sales portion of the internal control structure could be considered weak in this case. The management and Information Technology personnel were informed of the situation.

Procedure 5

The objective of performing Procedure 5 was to compare the grand-total of total discounts column on sales invoices calculated during Procedure 3 with the balance of Sales Discounts related to discounts given for the sale of whole chicken. The account code for sales discount under which discounts were given on sales of all material & supplies, semi-finished and finished goods recorded was 611. However, the auditor was only interested in sales discount records for whole chicken sales. Therefore, ten data scanning and extracting filters were placed in DEAS that would allow the system to enter and scan the entire records for 611.Sales Discount accounts and extract and retrieve those with the extension code 611.24.01, related to sale of whole chicken.

Setting the specifications and placing the filters took approximately 22 minutes. Then, DEAS extracted and transferred the desired information in under 4 minutes. During this process, DEAS extracted and retrieved 109,351 records matching the determined specifications after scanning 900,698 records in the 611.Sales Discounts file. In addition, the total balance of 611.24.01 accounts was calculated and compared with the grand-total of total discounts figure on sales invoices. Total balance of sales discounts recorded for sales of whole chicken found to be 219,758.039068 YTL more than grand-total of total discounts calculated for sales invoices. The difference constituted 0.0387% of total net sales well below the materiality level set initially. However, the difference was investigated in a more detailed manner and it was found to be caused by a similar error discovered during Procedure 4. Although considered to be a minor error, such a misclassification caused by weaknesses of control procedures embedded in internal control system for related field was reported to the management and Information Technology department. Without utilizing the DEAS, this weakness in internal control structure and misclassifications would have remained undetected. Under normal conditions without the use of a DEAS, a procedure including sampling of sales invoices with the highest values and tracing them to Sales Revenue and Sales Discounts would have been employed since it would have been impossible to scan all records in the Sales Revenue, Sales Discounts accounts and sales invoices as it was done with DEAS. Such a procedure would fail to indicate any error, because the data on sales invoices related to whole chicken sales were consistent with the data in the 600.24.01 and 611.24.01 accounts.

Procedure 6

Confirmations provide some of the most reliable audit evidence. However, they are also among the most time consuming and costly procedures. The main purpose in performing Procedure 6 was to determine whether improvements could be obtained in time and costs involved with preparing and sending confirmation letters and receiving replies. Also improvements in quality of the task to be performed, that is, opportunities for a more comprehensive analysis regarding trade receivables would be taken into consideration. With this considerations in

mind, it was decided to obtain the cooperation of an important customer, a grocery business, located approximately 100km away, was contacted and management agreed to cooperate. It was initially planned to get necessary permissions to access into the store's website and accounting database for scanning trade payables files for the purpose of extracting and receiving records showing the grocery store's debt to the company that was being audited. However, neither was there a suitable intranet infrastructure for these applications nor did the management have the authority to give permission for such an access. One of the purposes of this initial attempt was to assess in general terms the efficiency and effectiveness of DEAS in performing on-line audits. However, it should not be forgotten that the majority of the companies in Turkey had not built the necessary infrastructure that would allow on-line audits at this time. Besides, the laws and regulations related to on-line commerce and commercial information transfer had not been set up sufficient enough yet to solve a conflict that might arise between participants. Therefore, the initial attempt had to be abandoned before it had even begun. Upon cancellation of this initial attempt, a different approach was taken. A standard confirmation letter was prepared and sent to the management of the grocery store via e-mail requesting a detailed list of trade payables to company audited for January 1-December 31 of current year. Using Sequential Query Language (SQL), the accounting personnel of the store extracted from their records the trade payables to the company being audited and sent the list to the auditor via e-mail. The reply was received in one hour upon request. Meanwhile, trade receivables related to the grocery store were extracted from database and transferred to the auditor's computer in approximately 17 minutes including the time taken to set specifications of data and install the data scanning and extracting filters.

The auditor decided to continue with the Excel program (although the procedure could be carried out by DEAS in use) in order to test the compatibility of DEAS with other commonly used programs. The trade payables file received from the customer and trade receivables file retrieved from database by the auditor were merged in a separate Excel file. This information needed to be sorted once again by using similar criteria for proper crosschecking and matching purposes. The task of resorting was completed in 3 minutes, after which the totals per day, week, month and grand-totals per the whole year were calculated. Every single item, record and total in both files seemed to match perfectly. It took around 30 minutes to complete all desired tests to the satisfaction of auditor, thus meeting validity, completeness, mechanical accuracy, classification objectives regarding the field of trade receivables. can also be successfully utilized in other phases of audits. The advantages of DEAS applications in financial audit can be summarized as follows:

- Improved efficiency and effectiveness due to decreased time and costs in scanning, extracting and retrieving data.

Furthermore, the internal control structure was tested and control procedures related to trade receivables were found to be reliable

Procedure 7

Aging trade receivables are among the most commonly applied procedures in financial audits. There are various computer-assisted tools and techniques for aging trade receivables and determining whether the accounts have passed due date. During the application of Procedure 7, SQL commands were employed in order to prepare aging schedules of accounts 10 and 30 days overdue. Utilizing SQL in such procedures requires at least a medium level expertise in programming languages as well as analytical thinking ability and familiarity with structure and features of databases especially the one to be scanned. However, the auditor still needs to be very careful while preparing the commands in SQL, since an extra/missing comma or even a dot may cause totally unrelated results. The DEAS used in this procedure had an SQL module compatible with any database available. It took around 36 minutes to complete all desired tests and investigation. No problems were experienced while performing Procedure 7 and the findings of auditor were similar to previous aging of trade receivables table prepared by the accounting personnel of the company.

The aging schedules of trade receivables have been prepared in exactly the same way for the previous 6 years without omitting a single record. They were merged in a single file for conducting a trend analysis. The provisions for doubtful accounts were recalculated to check for compliance with company policies regarding doubtful trade receivables. The results were found to be consistent with each other and in compliance with percentages determined by the management. The application of these procedures raises the importance of the fact that new age auditors needed to improve their skills in computer-assisted tools and techniques that will allow them work efficiently and effectively in Electronic Data Processing (EDP) environment

V. CONCLUSION

As a result of this study, it is possible to state that CAATs and DEASs greatly improve the efficiency and effectiveness of performance in a number of audit tests. All relevant databases were audited in their entirety, the desired evidence was collected and results were stored in permanent files within a period of 12 hours including breaks. The auditors expressed satisfaction with the scope of the test performed. It can also be stated that DEASs,

- Improved confidence in decisions made due to ability to scan and test all relevant information in its entirety without omissions, as well as the elimination of human error in calculations and mechanical accuracy tests.
- Minimization of human errors in every procedure and test applied.

- A more comprehensive evaluation of internal control structure.

Finally, it should be emphasized that the applications of computer technology in financial auditing are not limited to those reported in this study. The extent and types of tests which can be performed with DEASs and CAATs in audits of financial statements are limited only by desires and imagination of auditors. For example, after specifications and criteria set with ACL the DEADS used in this study, more than 1000 audit tests can be performed with a single command.

More information about Networks of Excellence, Knowledge Curve and FRISK can be obtained at www.pwccomperio.com.pwcresources.

¹ According to Turkish Uniform Chart of Accounts which is mandatory for every company operating under Turkish Commercial and Tax Laws, there are special codes for each account. The accounts analyzed in this study are 100.Cash, 101Checks Received, 102.Banks (all three are in the classification of cash and equivalents), 120.Accounts Receivable, 122.Notes Receivable, 391.VAT, 600.Sales Revenue, 610.Sales Returns, 611.Sales Discounts, 620.Cost of Goods Sold.

¹ YTL is the currency of Turkish Republic. 1YTL $\cong$ 0.624USD at the time of the research

¹ The inventory accounts have the following codes according to uniform chart of accounts in Turkey: 150.Materials Inventory, 151.Work-in Process Inventory, 152.Finished Goods Inventory.

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Application Of QFD For Improving Customer Perceived Quality Of Synthetic Fiber: A Case Of Beximco Synthetics Ltd

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Abstract- The use of polyester filament yarn is growing rapidly throughout Bangladesh. To meet the growing demand of synthetic yarns, Bangladesh has to import it from foreign countries which cost a substantial amount of foreign currency for the country. It is a pressing need for local manufacturers to come forward, produce quality synthetic yarn and fulfill the demand of the local market. This paper demonstrates the use of Quality Function Deployment to identify customer requirements and also shows how these requirements can be used to prioritize the design requirements for manufacturing of synthetic yarns. Improving high priority design requirements will ultimately increase customer satisfaction and as a result customer perceived quality will soar.

Keywords- Synthetic Fiber, Quality Function Deployment (QFD), House of Quality (HOQ).

I. INTRODUCTION

The manufacture of synthetic fibers represents a huge industry, both in the United States and worldwide. In 1990, the dollar value of synthetic fibers was roughly \$17 billion in the U.S. and \$70 billion worldwide [1]. The term synthetic describes any manufactured fiber made from chemical synthesis. Synthetic materials vary in their properties. Many are engineered to imitate and replace natural materials. The benefit of engineered fibers is that special qualities can be added and undesirable traits can be eliminated. The most common synthetic fibers in the 20th century are nylon, polyester, acrylic, and polyurethane. The industry under consideration manufactures synthetic textured yarn. In normal year of operation the industry contributes Tk. 370.15 million to the country's national Gross Domestic Product (GDP). In the new economic era where customers have greater possibility to choose than in the past, the companies have found themselves obliged to adapt and acquire a form of customer oriented management [2]. QFD is primarily a set of graphically oriented planning matrices that are used as the basis for decisions affecting any phase of the product development cycle. It is considered by many

experts to be a perfect blueprint for quality by design. The methodology of QFD allows the deployment of the expectation of the customer, or rather, the characteristic expected of this service, through all the function of the company [3]. It is possible therefore, to translate the expectations or requirements deployment of the expectation of the customer, or rather, the characteristic expected of this service, through all the function of the company [3]. It is possible therefore, to translate the expectations or requirements (what the customer wants) with the appropriate means, into specification of service and internal action (how we should it) or design requirements [4]. Sullivan (1986) says that the main objective of any manufacturing company is to bring products to market sooner than the competition with lower cost and improved quality and that QFD can help do this.). In this paper we will use QFD to prioritize the design requirements of the company and as a result will make the product more responsive to customers

II. LITERATURE REVIEW

So far no literature has been found that tries to apply QFD for improving customer perceived quality of synthetic fibers. But there are literatures on QFD being applied to the Textile Sector. G. Manikandan (2009) has applied QFD to design an economic sampling plan for textile sector. Hergeth (2001) has developed QFD matrix for synthetic particle board. QFD also has been successfully implemented in many industries worldwide. QFD has been widely applied in industries such as aerospace, software engineering, construction and marketing, and multinationals as diverse as IBM, HP, General Motors, AT&T, Digital Equipment, ITT, Baxter Healthcare, Texas Instruments, Miliken Textile, Black and Decker and Philips International have subscribed to its advantages (Prasad, 1998a). Early adopters of QFD in the US included 3M Company, AT&T, Baxter Healthcare, Budd, Chrysler, DEsC, Ford Motor, General Motors, Goodyear, Hewlett-Packard, IBM, ITT, Kodak Eastman, Motorola, NASA, NCR, Polaroid, Procter and Gamble, and Xerox. Also, QFD has been successfully used in many Japanese industries, such as agriculture systems, construction equipment, consumer electronics, home appliances, integrated circuits, software systems, steel, synthetic

rubber, and textile (Chan and Wu, 2002). Franceschini and Rupil (1999) illustrate how the priority rank of design characteristics can change depending on the type of scales used.

III. METHODOLOGY

A. CLASSIFYING CUSTOMER GROUPS

There is a strong correlation among the quality of service, the level of customer satisfaction and the profitability for the company. Higher standards of quality lead to higher levels of satisfaction in the customers, which at the same time increase the possibility of higher prices and frequently, lower costs [2]. Thus quality is a strategic variable that can provide the company with a competitive advantage [5]. But the level of customer satisfaction can be significantly different for different customer groups. So, it is very important to divide the customers into relevant groups. For BSL this grouping is done according to the type of customers. Fig.1 represents the consumer mix of BSL in 2008.

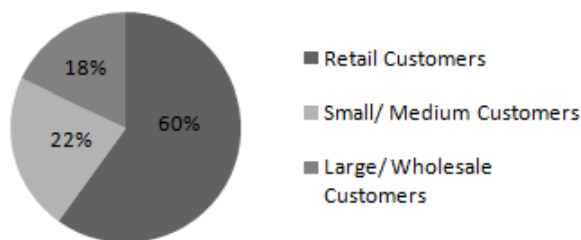


Figure 1: Consumer mix of BSL in 2008

B. Identifying Customer Demand

This stage includes two steps. In the first step, customers are interviewed and their expectations are captured. In the second step, analysis is done to find out the percentage of customers mentioned these requirements. Table 1 shows summary of survey report for different customers' demand.

Table1: Summary of survey report for different customers' demand

SI No.	Demand	Rate (%)
1	No broken filament	80
2	Continuous market supply	65
3	Reasonable cost	56
4	Package weight	55
5	No weak yarn	50
6	Package soldering angle	49

7	Information collection from market by electronic medium	48
8	Avoid Roto mistake	48
9	Uniform length of bobbin	47
10	No change in bobbin Color	46
11	Cross winding	42
12	Shining yarn	41
13	Tight winding	40
14	No loose winding	40
15	Option to change yarn	38
16	Avoid CLQ yarn	32
17	Marketing officer appointed	25

Through discussion with the experts within the company, the first 14 points are kept as potential customers requirements. The rest are discarded from further analysis.

C. Classifying Customer Expectations

Once the requirements and their ratings are obtained, multiple regression is used to obtain the level of importance of the customer expectations. A scale of 0 to 80 is used to find the weights of the customer requirements. Table 2, 3 and 4 shows the weighted requirements for large customers, small-medium customers and retail customers respectively.

Table2: Customer requirements for large customers

No	Requirements	Weights
1	No broken filament	80
2	Continuous market supply	68
3	Package weight	55
4	Information collection from market by electronic medium	45

Table3: Customer requirements for small-medium customers

No	Requirements	Weights
1	No broken filament	70
2	No weak yarn	60
3	Continuous market supply	55
4	Tight winding	40
5	Cross winding	25
6	Avoid Roto mistake	20
7	Bobbin color should not mix	15

Table4: Customer requirements for retail customers

No	Requirements	Weights
1	No broken filament	80
2	Continuous market supply	68
4	Bobbin colors should not mix	55
5	Weak yarns should be avoided	51
6	Cost should be feasible	47
7	Avoid Roto mistake	45
8	Package weight	35
9	Cross winding	28
10	Tight winding	25
11	Flexible bobbin length and soldering angle	22
12	Shining Yarn	22
13	Loose windings should be avoided	20

D. Establishing design requirements to meet the customer requirements

Quality function deployment is a way to assure the design quality while the product is still in the design stage [6]. This part of the progress, as stated by Knowles, is often the most time consuming and difficult, as it involves the experts exploring their knowledge and experience in order to establish the correlations between the customer requirements and the design requirements [5]. Personal

interviews have therefore been held with some professionals from BEXIMCO who were asked to assess the relationships between the customer requirements and the design requirements. Tables 5, 6 and 7 shows the design requirements needed to fulfill customer demand for the three different groups of customer.

Table5: Design requirements for large customers

No	Expectations(What's)	Design Requirements(How's)
1	Broken Filament	Spinneret
		Continuous power supply
		Electric Heater for machines
		Skilled manpower
2	Continuous market supply	Proper utility support
		All data collect digitally
		Time to time communication to customer
3	Package weight	Closed supervision by production officer
		Travers Guide
4	Information collect from market by electronic media	Trained marketing officer

Table6: Design requirements for small-medium customers

No	Expectations(What's)	Design Requirements (How's)
1	No broken filament	Spinneret
		Continuous power supply
		Electric Heater for machine
		Skilled manpower
2	Continuous market supply	Proper utility support
		All data collect digitally

3	Bobbin color should be different	Closed supervision by production officer
4	Weak yarns should be avoided	Cooling oil
5	Avoid Roto mistake	Air pressure for intermingle yarn
		Belt and Pulley
6	Cross winding	Travers guide
7	Tight winding	Belt and Pulley
		Trained production officer

Table7: Design requirements for retailers

No	Expectations(WHATs)	Internal quality indicators
1	No broken filament	Spinneret
		Continuous power supply
		Electric heater for machine
		Skilled manpower
2	Continuous market supply	Proper utility support
		Electronic collection of data
		Responsiveness to customer
3	Package weight	Travers guide
4	Bobbin color should be different	Closed supervision by production officer
5	Weak yarns should be avoided	Cooling oil
6	Roto mistake	Air pressure for intermingle yarn
		Belt and Pulley
7	Cross winding	Travers guide
8	Tight winding	Belt and Pulley
		Trained production officer
9	Bobbin length and soldering angle	Travers guide
		Skilled machine operator
10	Cost should be feasible	Always communication to market for others prize
11	Shining	Cooling oil

E. Building QFD Matri

So far we have identified customer requirements, customer requirements' relative importance and design requirements. At this stage, we will try to build relationships between customer requirements and design requirements and among the design requirements. The relationships between the customer requirements and design requirements are established, by means of numerical grading according to their strength using the traditional system where 9 indicates a strong relationship, 3 indicates a medium relationship, 1 indicates a weak relationship and 0 indicates no relationship between the

customer requirements and design requirements [5]. Relationships between design requirements are found by carrying out series of interviews with the experts. The relationships are depicted by four signs where ® indicates a strong positive relationship, ⊕ indicates a positive relationship, ⊖ indicates a negative relationship, ⊗ indicates a strong negative relationship. HOQ matrix is then developed for three customer groups by placing these relationships in appropriate boxes. Figure 3, 4 and 5 shows HOQ matrix for large, small-medium and retail customers

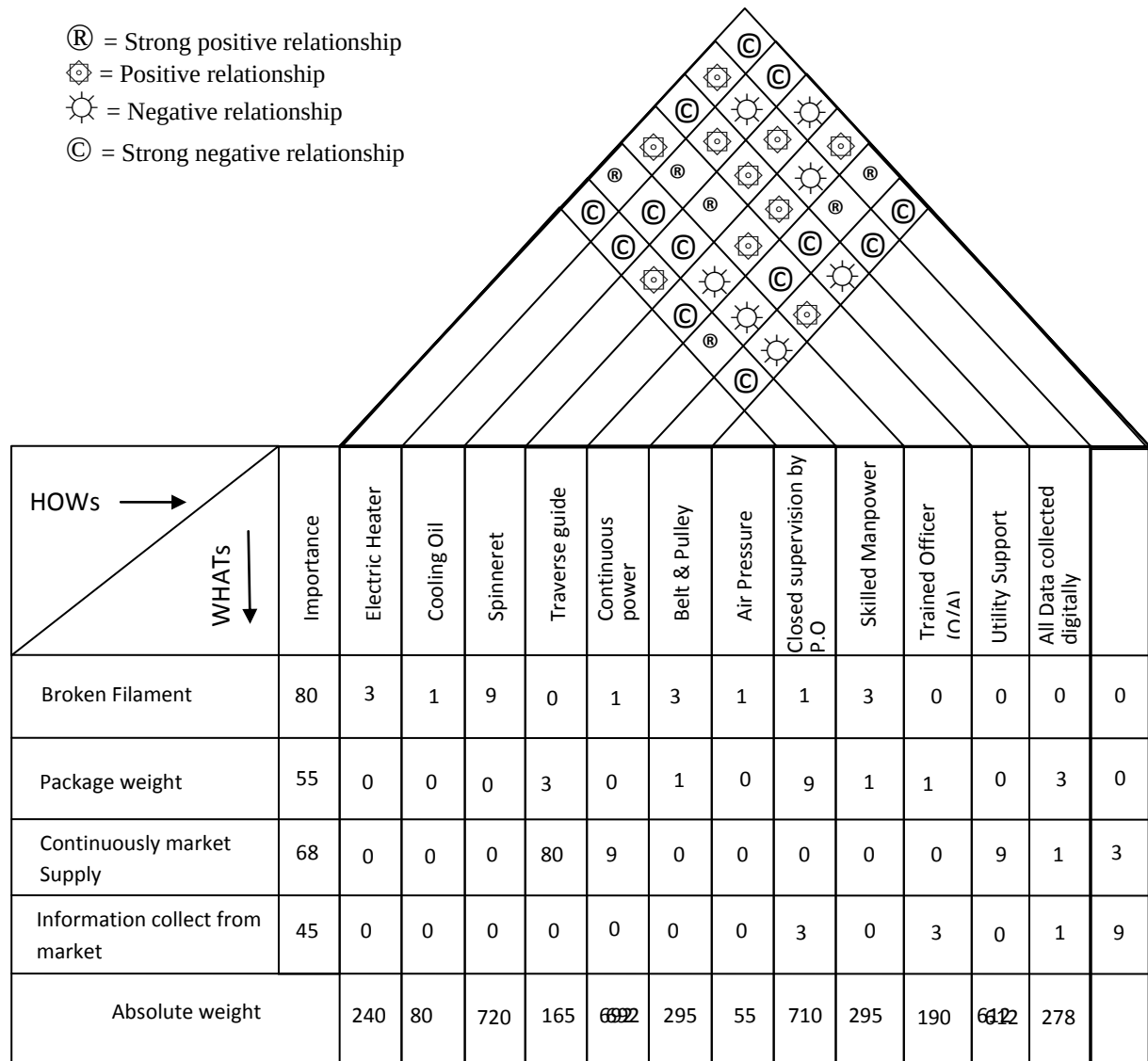


Figure 3: The QFD matrix for large customers

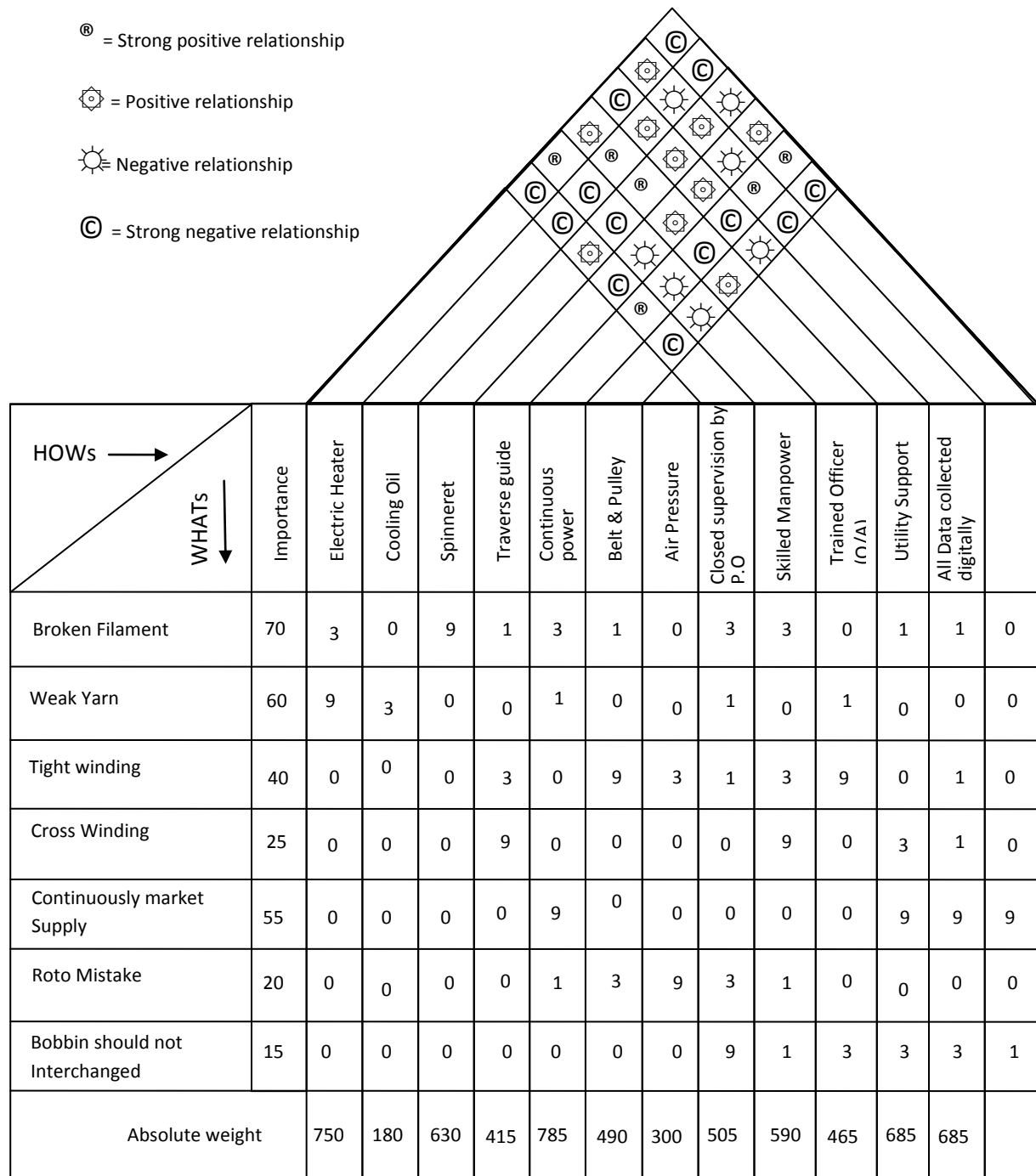


Figure 4: The QFD matrix for small-medium customers

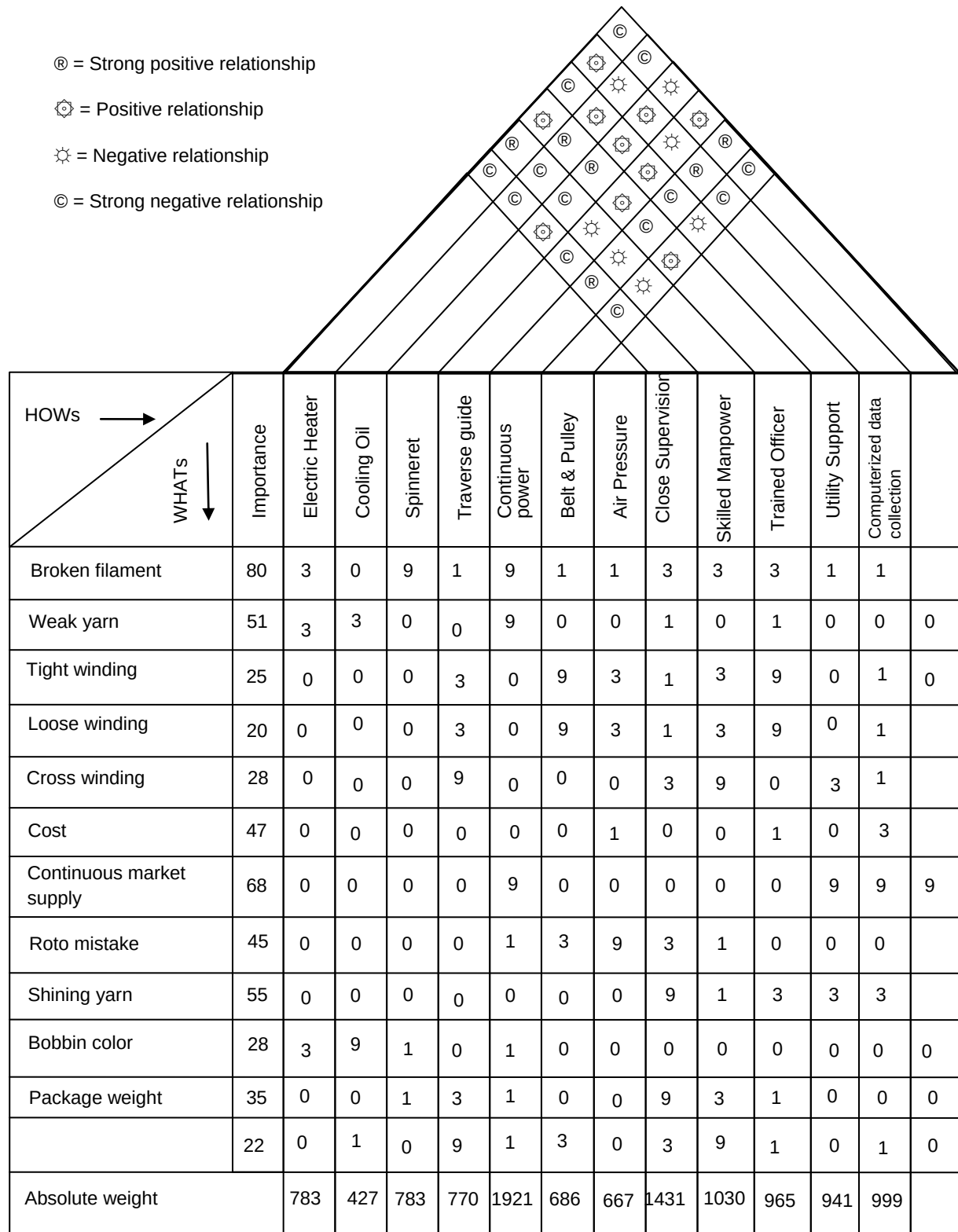


Figure 5: The QFD matrix for retail customers

IV. RESULTS

The objective of applying QFD is to identify the design requirements which are important to meet the customers'

expectations. The most relevant design requirements for three customer segments are found by just measuring the

absolute weight of the requirements from the HOQ. A chart is then created in which the design requirements are sorted

from largest to smallest according to their absolute weight. Table 8, 9 and 10 show the weighted design requirements three customer groups. If we combine the findings of these three tables we will get the overall weight percentage that

we should give to the design requirements which is shown in Table 11

Table 8: Weighted design requirements for large customers

No.	Design Requirements	Absolute Weight	Weight percentage
1	Spinneret	720	16%
2	Closed supervision by production officer	710	15.73%
3	Continuous power supply	692	15.30%
4	Proper utility support	612	13.56%
5	Time to time communication to customer	609	13.50%
6	Skilled manpower	295	6.53%
7	All data collect digitally	278	6.16%
8	Electric Heater for machine	240	5.32%
9	Trained production officer	190	4.21%
10	Travers guide	165	3.65%

Table 9: Weighted design requirements for small-medium customers

No.	Internal quality indicators or HOWs	Absolute Weight	Weight percentage
1	Continuous power supply	785	11.25%
2	Electric Heater for machine	750	10.27%
3	Spinneret	630	10%
4	Proper utility support	685	9.80%
5	All data collect digitally	685	9.80%
6	Skilled manpower	590	8.40%
7	Responsiveness to customer	510	7.30%
8	Closed supervision by production officer	505	7.20%
9	Belt and pulleys	490	7%
10	Trained quality officer	465	6.60%
11	Travers guide	415	6%
12	Air pressure for intermingle yarn	300	4.30%
13	Cooling oil	180	2.50%

Table 10: Weighted design requirements for retail customers

No.	Design Requirements	Absolute Weight	Weight percentage
1	Continuous power supply	1921	15.50%
2	Closed supervision by production officer	1431	11.50%
3	Responsiveness to customer	1090	8.70%
4	Skilled manpower	1030	8.30%
5	All data collect digitally	999	7.90%
6	Trained quality officer	965	7.80%

7	Proper utility support	941	7.50%
8	Electric heater for machine	783	6.30%
9	Spinneret	783	6.20%
10	Travers guide	770	6.20%
11	Belt and pulleys	686	5.50%
12	Air pressure for intermingle yarn	667	5.30%
13	Cooling oil	427	3.50%

Table 10: Weighted design requirements for retail customers

No.	Design Requirements	Weight Percentage
1	Continuous power supply	14.00%
2	Spinneret	10.73%
3	Proper utility support	10.02%
4	Responsiveness to customers	9.80%
5	Travers guide	9.31%
6	All data collect digitally	7.95%
7	Skilled manpower	7.74%
8	Closed supervision by production officer	7.45%
9	Electric Heater for machine	7.44%
10	Trained quality officer	4.80%
11	Belt and pulleys	4.16%
12	Cooling oil	3.40%
13	Air pressure for intermingle yarn	3.20%

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It is evident from Tables 7, 8, 9 and 10 that individual design requirements priorities are significantly different than the combined design requirements priorities. It happened because requirements that satisfy one type of customer may not satisfy the other types. So it is necessary to observe tables for combined and individual requirements to decide the requirements that should be chosen for improvements.

V. CONCLUSION

Quality function deployment is an extremely useful methodology to facilitate communication, planning, and decision making within a product development team. It is just not a paper work exercise or additional documentation that must be completed in order to proceed to the next development milestone; it brings a product closer to the intended target and reduces development cycle time and cost in the process. QFD allowed BSL to identify the design requirements that they have to focus most in order to keep their customers happy. The benefit of this exercise may not be realized immediately but at a later time when customer complaints are reduced significantly and as a result new opportunities open up.

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Critical Success Factors in Implementing Portal: A Comparative Study

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150501,150302

Abstract- In today's business portal is very important for information sharing and service delivery in every enterprise. Portal has the potential to develop the performance of an organization in terms of productivity and business process efficiency. Portal is never ended project and need modification time to time as for the business requirements. However implementing portals can make negative significant changes to business environment. Therefore significant information and resources are needed to invest for the success of portal implementation. In this paper we have identified and analyzed some critical success factors in the implementing portals and the results are compared with the results of the other researchers in the same area. The work done in this paper has been taken from both theoretical and practical framework to cover the service delivery as well as the overall portal implementation.

Keywords- CRM, Critical Success Factors, user, enterprise, employee.

I. INTRODUCTION

Rapid changes in the internet technology can urge significant challenges in the business of an organization. New services are always required to make the portal more effective and valuable according to the organization's need and employees moral. We have addressed some critical issues regarding the implementing portal in Saudi Arabian organization. 'CSF are vary on their degree in affecting portal implementations, some of these are considered as high, while some are less important' [11]. In our new framework of portal implementation we have taken some critical success factors (CSF) in consideration, our planned framework is adapted from both practical and theoretical frameworks to covers the service delivery as well as the overall portal implementation. Portals are large application that integrates information, people and processes across the organizational boundaries. On the user point of view portals have been defined as corporate portals, customer portals, employee portals or enterprise portals [8]. A big problem to make the portals effective for their users is the lack of inclusive and convincing means for measuring the portals ability to meet employee and other audience demands [12]. Portal extends the integration of business application capability of a

company to interact it with its clients, employees and vendors and interchange its information on a single point [8]. It generally involves the use of e-business approaches and internet technologies for delivering a comprehensive set of services to employees [10].

II. Background Study

The literature reviewed for this paper has been referenced from different journals and articles related to the topic of this paper. Portals are the gateways that integrates the information from different sources and provide it on a single window to the end users [1,2,3]. Portals development is a costly initiative and not only that it costs the company to develop it but it requires significant business process change in order to influence it for business benefits [4]. A portal is an-tier information system accessed via the web and exchange data and services with users and thereby implements a value added service [5]. Fengchun et-al [6] has implemented an informative portal which has a unique characteristics and functions for the educational sectors. Visitors use some standard tools within the portal framework they all have a consistent appearance and is reducing the learning time [6]. The organizations are needed to exclude all the inaccurate and misleading information and provide the right information to the right people [7]. Hazra [8] described the software engineering principles for the implementation and challenges face the enterprise portal. Corporate portals offer organizational users the ability to access a wide variety of information sources directly from the desktop [9]. Senior business executive appreciate portal's ability on the delivery of benefits to the organization and their employees [10].

A. Critical Success Factors Analysis

Portal implementation can directly influence the effect of any organization. To implement such portals there are several Critical Success Factors (CSF) that any organization must pay attention to. Look at CSF from four different perspectives: Strategic, Tactical, Organizational, and Technological perspective in Table.1 [11]

Table1. Model of CSF

	Strategic	Tactical
Organization	• Top management. • Change Management. • Team competence and Skills. • Dedicated Resources. • Business process reengineering. • Clear goal and objectives. • Flexible project Structure. • Organizational Culture.	User Acceptance. Project Management. Strong recommendation inwards and outwards. Project monitoring and controlling. User training and education.
Technological	▪ Portal Strategy. ▪ Selection of the appropriate portal package. ▪ Portal reengineering roadmap.	Defining the portal architecture. Requirement Analysis. Process and application and integration. Prototyping and portal design. Portal design.

The critical success factors (CFS) in Table.1 is ranked in Table.2. The critical success factors are rated as Critical=1,

Very high= 2, High= 3, Moderate= 4, Low= 5, while CFS highlighted with grey are the organizational portals [11].

Table.2 Top CSF across all stages of implementation

Critical Success Factor	Mean	Std. Dev
User Acceptance	1.2	0.42
Selection of the appropriate software package	1.4	0.53
Top management support	1.5	0.71
Requirement analysis	1.5	0.53
Project management	1.7	0.48
Strong communication	1.7	0.67
Process and application integration	1.7	0.84
Prototyping	1.7	0.67
Portal design	1.89	0.78
Change management	1.9	0.32
Team competencies and skills	2.0	0.82
User training and Education	2.0	0.47
Defining the portal architecture	2.0	0.67
Dedicated resources	2.1	0.74
Business Process Reengineering	2.1	0.99
Clear goals and objectives	2.1	0.87
Portal engineering road map	2.1	0.74
Portal strategy	2.1	0.57
Project monitoring and controlling	2.2	0.42
Flexible project structure	2.5	0.85
Organizational Culture	2.9	0.74

III. Methodology

The concept of portal and e-services is quite new in Saudi Arabia and there are several portal implementations around the kingdom, but only few are considered mature portal implementations. In conducting this research, several ways and methodologies have been chosen, considering time, available resources, and the effort external entities are willing to give. Preparing several un-formal meetings, and speaking to key persons in many organizations, as well as meeting with portal developers and integrators. Furthermore, official meetings was conducted, structured interviews, and many email regarding some fast Q/A. To make this work more clear and understandable we have presented a detail case study of Saudi Stock Exchange in the following section.

IV. Case Study

Saudi Stock Exchange Market (Tadawul) has been established in March-19th, 2007. Tadawul is a Saudi Arabian organization and is operating all stocks exchange operations inside the kingdom. Tadawul contains several departments, but IT is the main and biggest depart in the entire organization with around 100 employees. One of these departments is the website developing and maintaining department, this department is responsible for all activities regarding the website (portal). There are two main activities this department is doing: operating the website and technical activities.

According to release manager at website department in Tadawul, he indicated that Tadawul get more than 800,000 users every day, moreover, the portal get around 9,000,000 hits every day. Tadawul web site contains all information and data about Saudi stocks exchange, whether these information is updated or historical so there is a massive amount of data in there portal is accessing every day. Tadawul has been upgraded and enhanced the portal in 2004 to comply with the new evolution of Saudi stock market that time. Tadawul is providing many new services and facilities to public and the portal is using as a window interface to the outside world. In addition, Tadawul is using a standardize way to operate and enhance the portal.

In fact, they are using ITIL [13] standards in terms of change management and release management etc. they are

using two environments to develop and deploy services to the portal, one is for testing and the other is for production. There are highly strict policies and procedures in the portal development that every change or new release must be approved by Change Advisory Board (CAB), which meets twice a week furthermore, scope, risk and impact must be defined in advance.

V. Challenges

Tadawul facing the following challenges:

- The major challenge that is facing to Tadawul is the availability of time. According to release manager of this organization time is a major factor for it because there are too many request without enough resources to handle the job.
- Additionally, user acceptance is another challenge, the portal team finds it difficult to negotiate and agree with business users upon some issues regarding the portal, beginning from the initial request up to the final acceptance.
- Moreover, outsourcing is a third problem that Tadawul is facing, it directly impact on the portal when there is any conflict between the team and the vendor and this problem let the Tadawul to lose the control over the project and its services.
- On the other hand, portal architecture is a serious issue because it provides a blueprint of the overall services. Tadawul collect all the information from repositories and many other sources so it is very important to carefully understand the integration architecture, and that the new integration will not affect existing ones.
- Finally, defining a flexible project structure is a very important according to the dynamic nature and regulations of the stock exchange market that may be applied and forced at Tadawul.

VI. Findings and Results

After applying UlrichRemus [11] CSF ranking to Saudi stock exchange, we came with some interesting results shown in table.3.

Table.3 CSFs for Saudi Stocks Exchange

ID	Critical success Factors	Mean	Std. Deviation
1	Strong communication inwards and outwards	1.00	0.00
2	User acceptance	1.00	0.00
3	Top management support	1.33	0.58
4	Clear goals and objectives	1.33	0.58
5	Project monitoring and controlling	1.33	0.58
6	Requirements analysis	1.33	0.58

7	Defining the portal Architecture	1.67	0.58
8	Dedicated resources	1.67	0.58
9	Selection of the appropriate portal package	2.00	1.00
10	Process and application Integration	2.00	1.00
11	Prototyping	2.00	1.00
12	Flexible project structure	2.00	1.73
13	Project management	2.00	0.00
14	Portal design	2.33	0.58
15	Change management	2.33	1.53
16	Team competencies and skills	2.67	1.53
17	Portal strategy	2.67	0.58
18	User training and education	2.67	1.53
19	Business process reengineering	2.67	0.58
20	Organizational culture	3.00	1.00
21	Portal engineering roadmap	3.00	1.00

VII. Discussion

As shown in the table3 the first eight factors is balance including organizational factors (user acceptance, requirement analysis) and technical factors (strong communication inwards and outwards, dedicated resources). In the above ranking if we focus so we can easily understand that Saudi stock exchange faces the critical factors in the first part (one third) of the ranking in table3. In the first part of the ranking a user acceptance is the most critical organizational factor. In the portal implementation user acceptance is very critical as told by our interviewee that introducing a new user, evaluation and feed back from the end user is critical. Top management is very important for an enterprise and is responsible for making policies and translates these policies to a meaningful objective and goals for enterprise. Similarly portal architecture is another critical technical factor in Saudi stock exchange. Before starting the portal project the architecture must be defined clearly and understandable for the organizational requirements.

Selection of appropriate portal package is the second important critical factor. In fact, the selection is seen as a strategic decision determining all subsequent measures, e.g. the selection and customizing of portlets and the evolution of the portal [11]. This also implies on "Business process reengineering" as well.

By comparing table2 and table3 we concluded the following significant results. Top Management Support and Requirement Analysis is ranked as the highest CSF. While in table2 the same results obtained in number three, but generally our findings where quite similar to *UlrichRemus* [11] in table2. Moreover, in this paper we have some high standard deviation such as the Selection of the appropriate

portal package and Prototyping. This can be construed by the nature of the work that our interviewee had done. Selection of the appropriate portal package is very critical to any portal implementation because it directly impact on the business process reengineering. "Process and application Integration" have a 1.5 standard deviation due to a mature portal implementation of Saudi Stocks Exchange.

In addition to our findings, we found that there was an additional CSF that our interviewees mentioned it is the selection of the vendor how is going to implement the portal. So if an organization decided to implement the portal through an external entity (out sourcing), we have found that the selection of this vendor will play a major role in the portal implementation. Additionally, there are some criteria that must be taken into consideration such as "Strong References" to that specific vendor, a good profile in implementing such projects and more importantly the vendor's location.

Finally, we urge that some of the CSF can be merged into together. For example, "Project monitoring and controlling", "Change management", "Project management", "Team competencies and skills", and "User training and education" can be merged into one CSF called "Project Management". Moreover, "Business process reengineering" can be renamed to "Business process redesigning /reengineering" that will indicate the level of change in that process; if it is a minor change it can be called redesigning, while if it is a major change, we can call it reengineering.

VIII. Conclusion

In this part, we would like to reemphasize on the critical success factors in the implementing portal to improve the quality of services for the enterprises. Although, portals can make a significant changes to organizations and enterprises but many organizations lack suitable framework to implement portals for their products and services due to some most critical factors. To address this gap, we have proposed a comprehensive framework to develop and operate portal projects as well as the delivery of new/changed services and have taken into consideration some critical success factors we have evaluated and compared with the past work. The result obtained in this paper is more accurate and significant.

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E-Business In Banking Sector: The Effectiveness Of Technology

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150307 150309 150203

Abstract—In the last decade e-Business has been carrying out the best resources and investment plans for the business mans for growing their business as well as sufficient and useful alternatives for the customers to acquire their necessities. Everyone wants to start their business under the available circumstances, environment and capabilities to establish their business and facilitate the customers in secure atmosphere. Technology has been very helpful and plays an important role in e-businesses. In this paper we described importance of technology in e-business, particularly we select banking sector for showing effectiveness and significance of technology. We discussed the procedures and practices that can be apply for the customers to access all the available resources provided by the bank by using internet and other technologies. The key idea at the back to initiate the online banking services is to offer the customers with choice, more approachable and with less expensive options.

Keywords: Internet Banking, Use of Technology, E-Business.

VI. INTRODUCTION

Technology is the realm of mankind. As it may occur to the recent activities that e-business is one emerging field whereby significant changes are brought about to the way organizations function, majorly depending on the advancing technologies such as the Internet.

Technology as old as the Archimedes principles have moved to advances such as the mini digital gadgets that are present with multiple functions and access to ease of operations. The present growth and sophistication of information technology and communications is changing in the ways the societies and the economies operate. Today, computer and various electronic devices communicate with other devices via various networks such as the Internet.

In order to understand and cope with the growing demand of the sophistications in the e-business, many organizations have taken the step towards large investments so as to facilitate the operations within the organizations and exploit their maximum capabilities.

In this article, I shall be able to analyze the e-business strategies that have already been existing within a banking organization by investigating its strategic analysis stage, strategy choice and implementation and highlights its concepts, methodology and the business model.

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I. Business Strategy Overview

In general, strategy can be stated as the direction and scope of an organization over the long term, which the organizations achieve through its configuration of resources within a challenging environment to meet the needs of markets and to fulfill stakeholder expectations [3].

On the average strategies differ from one organization to the other depending on the range of activities that the organizations carry out to the individuals working within those organizations.

Michael Porter in his article, ‘Strategy and the Internet’ has stated that “we should move away from the rhetoric about ‘Internet industries’, e-business strategies’, and a new economy and see the Internet for what it is. In other he insisted that the Internet can be viewed as a set of powerful tools that can be used, wisely or unwisely, in almost any industry and as part of almost any strategy” [4].

It can be stated that strategic management consists of three main components namely strategic analysis, strategic choice and strategy implementation



Fig 1. Three main components of strategic planning process

These three components of strategy can be used as a base for almost all organizations depending on the different levels of the industry accordingly.

In the first stage of strategic management process, the organization should be able to conduct an external analysis and industrial analysis so as to understand a- the current state of the organization as compared to the industry and the markets, b – identify the competitive advantages to the

competitors and c- customer analysis of the buying behavior [1].

Analysis, Profit Impact of Market Strategy (PIMS), and Costs & strategy are all recommended tools for the analysis stage [8].

In the second stage, the organization should be able to make choices based on the information derived from the tools. Taking this information the organization should be able to develop strategies that would be more beneficial for the organization and provide proper directions based on the resources available.

In the implementation stage, the organization should be able to take into considerations aspects such as behaviour & politics, leadership, organizational structure, planning and control [8].

VII. EBANK (ALIAS NAME) OVERVIEW

The bank under study, ebank is one of the leading online banks in the world which is part of Skandia Group, one of the largest insurance companies. ebank was established during the 1990s as “branchless” bank for the Swedish

During the analysis stage, several tool such as five forces model, value chain analysis, SWOT analysis, Ansoff Matrix, Benchmarking, Balance Score card, PEST banking market based on providing services via the Internet and telephone channels serving over 400,000 customers [6]. The main purpose behind the launching of the Internet banking was to provide the customers with an alternative, more responsive and with less expensive options.

A. Strategic Analysis

Sweden is one the flourishing country's, which has one of the largest banking industries in the world [5]. Based on the market requirements and the services provided, Internet usage over the number of years had increased which in turn provided an opportunity for businesses to capitalize on the new technology and utilize the technology to its maximum capabilities.

Based on the challenges posed by the emerging technology, majority of the banks in Sweden had taken the opportunity to go for online banking.

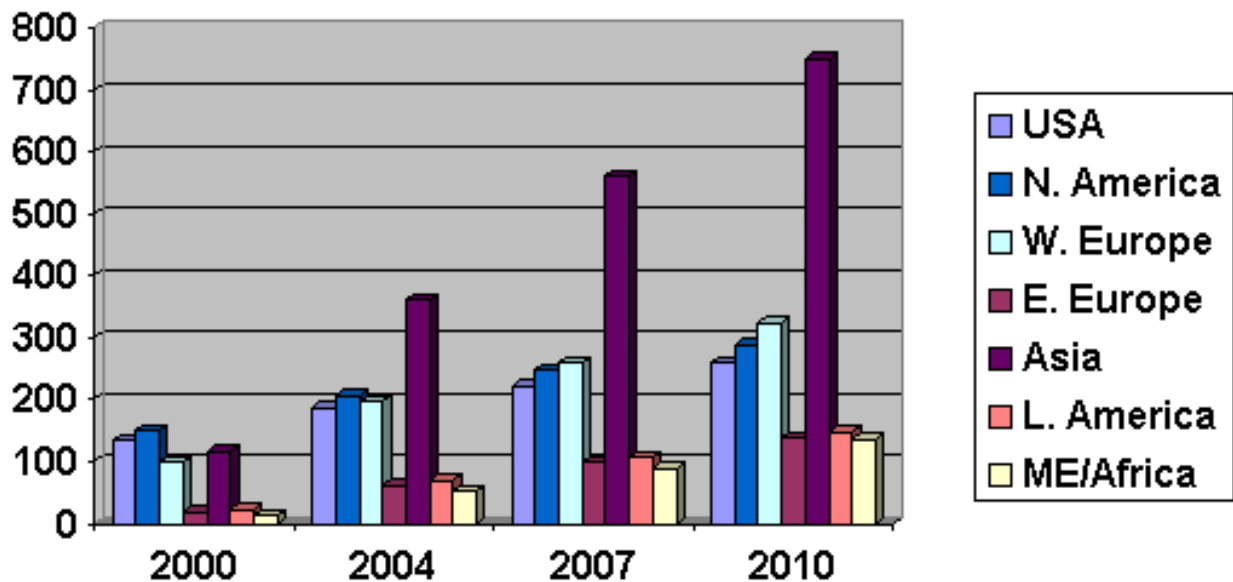


Fig 2-Internet Users Forecast between 2000-2010-[2]

There were two main findings that gave ebank the opportunity to go online

(a) the presence of a strong customer base from the insurance company, Skandia, who are already loyal.

(b) the increase in the number of Internet users who looked for better services, convenience and ease of access to accounts and transactions without having to wait in long queues.

B. Strategy Choice

Based on the information derived from the emergence of the Internet users and the transformation from a telephone bank to an Internet bank, the senior managers developed management philosophy whereby the organization can be created into a future bank – as an organization that could easily change with new market trends as well as be

responsive to the customer needs. The management philosophy taken into account consisted of two parts such as:

1. The first part of the philosophy focused on developing a company culture that supported both personal responsibility and action.
2. The second part of the philosophy focused on getting the IT people and the business involved in adopting a customer viewpoint of the organization.

C. Strategy Implementation

In order for the transformation to occur, some of the measures adopted were:

1. Open sharing of all company performance information. In other words transparency was encouraged by sharing performance information and goals throughout the organization.
2. Creativity such as innovation and action were reinforced by the management team
3. Developed simple processes to collect customer complaints and sense customer needs.
4. Intensive training of individuals and teams to create self responsibility awareness which has lead to self monitoring of individuals and team performance goals.
5. Collecting, organizing and maintaining customer information through people and information processes set up to provide the information that drives the real customer relationship.

D. Online Components

For the online banking to be successful, ebank had adopted certain features such as:

1. Website Updating – ebank already had an existing website which allowed customers to have access to the information pertaining to the organization. Much of the information derived from the website was pertaining to the services and products offered by the Bank to the customers. After the transformation, the website was updated such that the customers could not only derive information but could also perform all of their banking functions via the website. The website provides a demo in Macromedia Flash of the Internet Banking procedures. The Bank also provides all the various forms for the type of transaction that needs to be completed. Once the customers become member, they are provided with pin number that will allow the customer to have direct access to the IT application Switch – board.
2. IT Application Switchboard – This infrastructure was designed such that all of the bank's databases and systems can be linked into one integrated structure where customers could derive the required information regardless of the channel of entry. The IT Application also allowed ebank to interface directly with the existing banking industry infrastructure [7].

E. Business Model

ebank business model was based on three main principles which provided as guide for value creation for the customers as well as the company such as:

1. Truthfulness – ebank set up a straight forward and transparent fee schedule for the services that it provided to the customers
2. Simplicity – Simplicity was a factor that was applied to all aspects of the e – business model such as customer relationship, products and services, business processes, development of IT solutions and organizational structure.
3. High Interest Rates – ebank offered higher interest rates averaging 2 to 3 percent higher than the competitors.

II. Conclusions and Recommendations

ebank is one of the leading Internet Banks in the world that has developed a large customer base and success based on Internet technology providing customers ease of access to services via the standard telephones, voice-response units, GSM- technology, an HTML based Internet Banking interface with e-mail options, and now WAP technology.

ebank has developed successful e – strategies and business models that are supported by information systems that are integrated into the organization's operations to provide better services without losing the edge on quality.

In the case study of ebank, it can be appropriated that the organization has developed to become one of the leading and successful online banks providing straightforward IT interface, clear and transparent information about customer and product segmentation and an open action – oriented culture for the employees.

Some of the recommendations that can be asserted for ebank are:

1. ebank provides a website that is only provided in their Swedish language thus making it inappropriate for other users to gain information in English thus limiting the access of information to the Nordic region.
2. Loyal banking customers are getting old, thus ebank will have to integrate their information system to develop new method of opening doors for new and young customers such as the walk in customers.
3. ebank will have to develop new products and services to focus their attention towards the other parts of the world such as the Middle East where the internet users have increased and information technology has advanced to provide the cutting edge in providing better services such as Internet Banking which is one the requirements of the market.

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Perception of University Students on the Concepts of Quality and TQM

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Abstract- The major objective of the present research was to reveal how undergraduate students at University of Beira Interior (UBI) understand the meaning of the phenomena quality and total quality management (TQM). The paper begins with a review of the historical evolution of the main concepts of quality and TQM. Following, the phenomenographic method, of exploratory-qualitative type, was used in the research. Data was collected through a structured questionnaire applied to 144 students from the most important areas UBI (Communication Sciences, Biochemist, Medicine, Management and Civil Engineering). Based on content analyses, it was possible to conclude that there is no predominant quality concept. In fact, the concept of quality as “conformance to specifications” is predominant on students from health and sciences areas. On the contrary, social sciences’ students understand quality as value and as meeting and exceeding customers’ expectations. With respect to TQM, it was possible to verify an almost complete ignorance of such phenomenon. These results can help the organizations understanding how future professionals, of the different areas, understand quality, thus facilitating their decisions when they focus on quality for competitive advantage.

Keywords-Quality; Total Quality Management; Phenomenography.

I. INTRODUCTION

Defining quality is a challenging exercise. According to Gomes (2004), quality is easy to recognize, but it is difficult to define. In accordance with Reeves and Bednar (1994), there is no global definition and different quality definitions in different circumstances arise, making it a complex phenomenon. We live in a time of enormous competition, and quality is seen as one of the main competitive differentiators, in today’s companies. But what is quality? Quality can be defined in several ways: quality as value; quality as conformance to specifications; Quality as conformance to prerequisites; Quality as adjustment of the product/service for the user; Quality as reduction of losses; Quality as achieving and/or surpassing clients’ expectations (Reeves and Bednar, 1994).

Which definition is more correct? This question is yet to be answered. The fact is that quality is considered universally as something that affects the lives of organizations and the life of each individual, in a positive way (Gomes, 2004).

This way, it is important to understand this phenomenon, as

it represents an important instrument for business. This way, it is important to understand this phenomenon, as it represents an important instrument for business management in a competitive turbulent and market (Piovezan and Carpinetti, 1998).

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No exact definition of quality is essential, but it is important to be understood by all professionals within the company’s process (Nadler and Tushman, 1994). This way, it is important to question whether the quality phenomena and total quality management are understood by the market professionals, especially the youngest and current students of several courses. Therefore, this study aims to answer the following question: How students, attending the main courses at University of Beira Interior (UBI), understand the concept of quality and total quality management?

The main purpose of the study is therefore to reveal the knowledge that students, attending the main courses at UBI, have of quality phenomena and total quality management. The specific objectives sought to: (a) define which concept of quality, present in the literature, is closer to the knowledge of students from each course; (b) define which concept of total quality management, present in the literature, is closer to the knowledge of pupils from each course; (c) compare the knowledge of quality and total quality management among courses.

To understand the perception of individuals on a given concept, a phenomenographic research is used. This research method has, as its main feature, the description of a phenomenon as it is experienced, emphasizing the collective significance of the researched phenomena, which should not be confused with phenomenological studies.

The survey is useful for market managers, since it clarifies the true knowledge of future professionals regarding quality and total quality management. It is useful to the Higher Education Institutions (HEI), because it identifies which is the level of knowledge that their current students have upon the analyzed topics. The contribution of this research is also extended to the Academy, by presenting the concepts of quality and total quality management that are more present in the minds of future market professionals.

When carrying out this study, the terms quality and total quality management were initially revised, their historical retrospectives and its concepts according to several authors that deal with these topics. Next, the survey methodology was presented. As a result, the data was collected and

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analyzed. To conclude, the conclusions and recommendations are presented.

II. QUALITY CONCEPTS

Although quality is a millennial concept always present in the history of mankind (Avelino, 2005), only in the 20th century did it effectively become focus of organizations. With the growth of consumption and the market, companies are obliged to deal with quality in a more cautious manner (Oakland, 1994). Thus, the main names related to quality appeared (Avelino, 2005) some of them became very popular and hence significantly influencing the history of quality: W. Edwards Deming, Philip Crosby, Joseph M. Juran, Kaoru Ishikawa, and Genichi Taguchi are some of them. The term quality has been used in various situations,

not always with a clear and objective definition. In other words, quality is not easy to define, it is apparently intuitive. Its interpretation depends on the point of view of the person who analyzes it. It is common for a product/service to have quality for one person and not for another (Carvalho, 2007).

In the study of Garvin (1992), the author identified five ways to define quality: the transcendental (feeling of quality when trying a product), focused on product (characteristics that differentiate a certain product from other similar products), based on value (product with high performance with an acceptable market price), appreciated for its production (positively meets the specifications of the project when manufacturing the product), and the customer

Concept	Characteristics
Excellency	Older concept; Philosophy of being the best, better than others; Abstract concept.
Value	Second concept; Relates to the relation between price X benefits; Promotion of a product or service depends on various factors (convenience, price, service, needs, among others); Abstract concept
Conformance to specifications	Concept emerged with manufacturing ; Focuses on product standardization; Avoids losses and waste; Controllable quality; The conformity of products compared to the specifications of the project; Product free of deficiency; Focus on monitoring tools; Perfection in production; Objective and quantifiable concept.
Meeting and/or exceeding customer's expectations	Concept has undergone strong influence of the services sector, being the most recent; Product or service that best meets customer's requirements; Characteristic of products and services that meet customer's expectations; Satisfaction of customer's expectations; Abstract concept.

Source: adapted from Reeves and Bednar (1994)

's point of view (consumer preference for a certain product that meets his/her needs, given a specific combination of its attributes). Soltani et al. (2008) deepens the analysis of Garvin (1992) and concludes that quality is a continuous process of improvement. Meredith and Shafer (2002) see quality as an effective way to produce at a good price, low-cost and customer satisfaction, making the company competitive in the market. ISO 9000:2005, IPQ (2005) defines quality as "degree of requirement satisfaction given by a set of intrinsic characteristics" (p. 16).

In summary, quality is the ability of any object or action to correspond to the proposed objective (Crosby, 2000; Loenert, 2003; Morejón, 2005). These various definitions lead to one conclusion: According to the situation, the concept changes. And, for being a broad concept, the topic of quality tends to relate to various aspects organizations:

market participation, costs, and profits, among others. This way, with a thorough and comprehensive work, Reeves and Bednar (1994) analyzed each definition and its characteristics. Some results of this study can be seen in table 1.

In the analysis of table 1 it is verified that: (a) new definitions of quality did not supplant older definitions; (b) no definition is better in all situations, i.e. all have strengths and weaknesses in terms of, measurement, generality, management or relevance to the customer. This way, it is concluded that any of the settings shown in table 1 can be used, as the situation.

In more recent studies, Dale, van der Wiele and van Iwaarden (2007) reviewed the concepts of quality. It was found that little has changed since the Reeves and Bednar study (1994) to present date. The phenomenon quality

continues, until today, to be a set of applicable concepts as

III. CONCEPTS OF TOTAL QUALITY MANAGEMENT (TQM)

According to Castro et al. (2007), to achieve better quality, it is necessary to administrate it. Similarly, Andersson, Eriksson and Torstenson (2006) defined that organizations which desire to add value to their services and products should standardize processes, and, at the same time, meet customers' expectations. Second Poubel (2007), quality management aims to ensure that the project will be completed with the desired quality, i.e. meet customer needs and product requirements. In this management process, the focus is to avoid failures. Quality management involves planning, quality assurance and control (Escrig-Tena, 2004).

According to Casals (1997), numerous reasons and situations stimulate an organization into doing management through quality: meeting/exceeding customer's requirements; improving the company's image; gain market; improving the morale of its staff; troubleshooting responsibility issues; improving process documentation, products and services; improving the physical environment of the job. This way, quality management suggests a new

the context, and their definitions remain virtually the same. managerial approach, built upon the development of a new organizational culture, change of attitudes and a continuous search for improvement that produces a rational structure in the company. To Escrig-Tena (2004), quality oriented organization is structured to seize and direct template workflow systems and determine the inter relationships of the various parties involved.

Studies of Garvin (1992), Feigenbaum (1994), Shank and Govindarajan (1997) and Ryan and Moss (2005) elaborated the paths to follow until one reaches Total Quality Management understood as the integration of the entire organization in the construction and maintenance of products, services and the Organization itself. Slack, Chambers and Johnston (2002) concluded that TQM is a natural extension of some of the previous approaches. The same authors believe that a good quality management of products and services is reflected into a better image and lower costs, with reductions of scrap and rework, stocks and processing time. To achieve these objectives, along with the increase revenue and reduction of costs came TQM. But what is the definition of TQM? Table 2 shows the version of several authors.

Table 2 –TQM Definitions

Authors	TQM Definition
Merli (1993)	Set TQM at four points: complete satisfaction of the customer; quality above all; continuous improvement; involvement of the company's staff.
Ross (1993)	Management philosophy that includes a set of actions focused on continuous improvement, meeting customers' expectations/ needs, long-term planning, reduction of rework, teamwork, redesign of processes, competitive benchmarking, evaluation of results and a close relationship with suppliers.
Hackmann e Wageman (1995)	The fundamental assumptions that support the TQM vision: quality costs reduction such as development of processes that ensure quality; staff support in quality improvement; involvement of all sectors of the organization in solving problems; and support from top management.
Damazio (1998)	Philosophy that uses the basic quality as an attribute in all processes, going through everyone in the Organization and doing it right the first time. TQM principles were defined: total customer satisfaction; participatory management; human resources development; constancy of its purposes; continuous improvement; process management; delegation of powers; information and communication management; quality assurance.
Scott (1998)	Defined that the values which are more related to TQM are: customer focus, continuous improvement, and teamwork.
Bianco e Jaccoud (2000)	Management model centred on quality, counting on the participation of all its members and seeking long-term success through customer satisfaction, and benefits for all members of the Organization and for the society.
Grohmann (2000)	TQM is the measurement of results achieved in all organizational processes, to find out whether the objectives have been achieved, detect causes of bad results and try to repair them.
Meredith e Shafer (2002)	TQM involves steps: define what the customer wants; develop products that meet/exceed customer expectations; develop a production system that helps to get it right the first time; monitor the system, and make adjustments to its improvement; and include customers and suppliers in the process.
Kujala e Lillrank (2004)	Quality is a responsibility of all the staff, covering every aspect of the company operation, being a systemic issue. Guaranteeing quality of the system, total quality is guaranteed.
Dale, van der Wiele e van Iwaarden (2007)	TQM is the mutual cooperation of all in the Organization and is associated to the processes that aim to produce products and value-added services that meet and exceed the needs and expectations of customers. The TQM develops methods and processes that cannot be copied by competitors.

Source: Own elaboration

In summary, despite several definitions (table 2), a common point: TQM should not only be restricted to productive areas. I.e. it should involve all functional areas of an organization: from production to marketing, sales, purchasing, engineering, distribution, handling, among others. The use of TQM, must not only establish internal objectives of the company, but also establish objectives for the relationship between the company and the consumer market and the enterprise with the country (Avelino, 2005).

IV. RESEARCH METHODOLOGY

This study used the phenomenographic methodology, characterized for being qualitative, of exploratory and cross-section type, with data being collected through personal interviews with structured questionnaires (Barnard, McCosker and Gerber, 1999; Akerlind, 2002; Neves, 1996; Marconi and Lakatos, 1999; Hair et al, 2005). Senior students of the main courses were inquired (higher number of students) of a public University in Portugal, which makes it a case study (Yin, 2005). The choice of this audience was due to the fact they are completing their course and in a few months they will be the youngest professionals in the market, besides this, they have already done all subjects of their course, which allows a real picture of its performance in the market.

The choice of UBI was due to the fact that this University receives students from various places in Portugal. For being a university based in a small town in the Interior of Portugal, the vast majority of its students are from other cities. This diverse nature of students at this institution establishes that the results obtained here shall present a better view of the new set of professionals of the market to the country, unlike other universities, where students, mostly come from their own town, where the University is located (major centres or regional centres).

For the selection of courses, the choice went to main integrated superior courses/masters (the largest number of pupils, greater presence in the market after completion of

the course) of each of the five Faculties, allowing a broader overview. The selected courses were the following: Communication Sciences, the Faculty of Arts; Biochemist, the Faculty of Sciences; Medicine, Faculty of Health Sciences; Management, Faculty of Social Sciences and Humanities and Civil engineering, Faculty of engineering.

To meet the requirements of the research, 20 to 60 students of each course were selected randomly, as guided by Shanahan and Gerber (2004). The choice of the sample was held with students present in the classroom on the day the research was applied. This is a non-probabilistic intentional sample, by trial (Marconi and Lakatos, 1999).

For collection of data, a set of personal interviews with structured questionnaires were used (Marconi and Lakatos, 1999). It was developed, in accordance with the guidelines of the phenomenographic method (Akerlind, 2002), a questionnaire with six questions that characterize the interviewee and four open questions, which sought to identify respondents' perceptions of their own definitions of quality and total quality management.

Data collection was carried out in the period from 22 to 29 April 2009. 144 senior students of five courses at UBI replied in a valid way to the data collection instrument. Content analysis was used to analyse the data (Kude, 1997), that aimed to find quality settings and total quality management through coding (Bandeira-Melo e Cunha, 2003), with the help of Atlas/ti software (Muhr, 1995).

V. RESULT ANALYSIS

Having coded and collected the data, the next step was to perform the analysis of the students' responses who participated in this research.

A. CHARACTERIZATION OF THE RESPONDENTS

To start the analysis, the first step was to characterize the respondents. This characterization is summarized in table 3.

Table 3 – characterization of survey respondents

Course	Communication Sciences	Biochemist	Medicine	Management	Civil engineering
Student respondents	23	21	52	21	27
Average age	21,4 years old	21,5 years old	24 years old	24,4 years old	24,9 years old
Gender	10 men e 13 women	7 men e 14 women	10 men e 42 women	7 men e 14 women	20 men e 7 women
Previous studies in quality	No – 23 Yes – 0	No – 12 Yes – 9	No – 18 Yes – 34	No – 3 Yes – 18	No – 27 Yes – 0
Professional experience	No – 10 Yes – 13	No – 12 Yes – 9	No – 37 Yes – 15	No – 5 Yes – 16	No – 8 Yes – 19

Source: Own elaboration

Reviewing table 3 it is understood that:

- Students of communication sciences are very young; no professional experience; no one previously claimed to have studied quality;

- Biochemist students are also young people, with predominance of women and little professional experience; 14 students said to previously have studied this subject;
- Final year medical students are in average 24 years old; the majority are women and with little professional experience; 34 students said to have studied this subject;
- Management students have a relatively high average age (24.4 years old), they are mainly women, and with greater professional experience; 18 said to have already studied (or are currently studying) quality; this course is unique among the researched courses which researched that provide a specific quality subject (optional subject).
- Civil engineering has the highest average age (24.9 years old); it is mainly a male course with many students with professional experience; all students declared not to have previously studied the subject quality

B. COMMUNICATION SCIENCE COURSE

The most present concept of quality among students of this course was "quality as value", with 15 quotations. Most students associated quality to the benefits of a product or service related to price and other factors (easy to reach, fulfilment of needs, among others). It was clear that quality relates to the added-value of a product or service. Other concepts also emerged: 8 quotations of "quality as meeting/exceeding customers' expectations", 7 quotations of "quality" as conformance to specifications, and 2 quotations of "quality with excellency". This diversity of concepts represents the subjectivity of the term quality for individuals who have never been in contact with academic subjects related to quality.

This last finding becomes clearer when students were asked about total quality management (TQM). The variability of responses were vast, but the concept which is more present in the mind of students was "management of enterprise processes to achieve better results", with 9 quotations. Others related TQM to "quality control" (7 cases), to "continuous improvement" (3 cases), to the "action of people in the Organization" (2 cases) and to "quality departments" (1 case). Six students claimed not being acquainted with TQM. Students' vision of TQM is related to the Organization's internal environment.

C. BIOCHEMISTRY COURSE

The concept which was more present among these students was "quality as conformance to specifications", with 13 quotations. These students believe that a product or service is of quality when it follows all the production requirements. The predominance of this concept is understood, because they are potentially professionals who have major concerns with internal processes in General. Other concepts also emerged: 6 quotations for "quality as meeting customers' expectations of", also 6 quotations for

"quality" as value, and 5 quotations for "quality as excellency".

The two definitions of TQM more present in the students minds were: "planning and leading processes in order to achieve the desired results" (9 quotations) and "problem solving" (8 quotations). Other definitions have been observed: "quality control" (5 quotations), "decision-making by top management" (2 quotations), "management of personnel attached to the product/service" (2 quotations), "meet customers' expectations" (1 quotation), "create a good working environment" (1 quotation), "continuous improvement" (1 quotation). Two students claimed not being acquainted with TQM. In this case it is observed that TQM involves, above all, the entire internal organizational environment, but in a broader perspective (quality planning, problem solving and quality control), closer to a systemic vision, referred to by Kujala and Lillrank (2004).

D. MEDICINE COURSE

Among future doctors, there was a clear balance between two concepts: "quality as conformance to specifications" (27 quotations) and "quality as value" (22 quotations). The concept of "quality as meeting/exceeding customers' expectations" received 15 quotations. As for the concept of "quality as excellence" this was quoted only 4 times. In short, for future doctors, quality is much more related to outstanding development of impeccable process than excellency or even quality as exceeding customers' expectations. As for the concept of value, also quite indicated, it is understood that students see quality as a way of appreciating the doctor.

As for total quality management, a number deserves special attention: 12 students stated to have no knowledge of TQM. With regard to students who gave some TQM definitions, these definitions focused on 4 quotations: "process management" (19 quotations), "means to achieve desired results" (15 quotations), "resource management" (14 quotations) and "quality control" (12 quotations). These definitions brought by students were close to the results of Slack, Chambers and Johnston (2002), which highlighted TQM as being a way to manage resources and processes to control quality and achieve organizational objectives.

E. MANAGEMENT COURSE

Most management students (16) identify the term "quality as meeting/exceeding customers' expectations." Other quality concept were also quoted: "quality as conformance to specifications", with 10 quotations (highlighting the issue reduction of production costs), and "quality as a value", with 6 quotations. "Quality as excellence" was not quoted by any student. Analyzing the answers, it is understood that most of these students, especially those working or that have worked in the labor market, refer to quality as a means of meeting and exceeding customers' expectations, something which is essential nowadays for a great number of organizations, in addition to being a constant concern of the market managers.

As for the concept of total quality management, a diversity of settings was verified. The most quoted (9 quotations)

was "management of business processes to ensure the quality of its products and services". Also to be highlighted "the development of top management policies with" (5 quotations) and "actions to achieve the company's desired results" (5 quotations). "Quality control" was also referred to with (3 quotations), "quality certifications" with (2 quotations) and "zero defect production" (1 quotation). There were 6 negative highlights of students who claimed not being acquainted with TQM, despite being in a management course. When observing the results, total quality management is seen, once again, as something internal to the organization, of a systemic character, as Kujala and Lillrank (2004) quoted.

quality as value" (14 quotations), "Meeting and/or exceeding customer's expectations" (14 quotations). Only the concept of "quality as excellency" was not part of student's responses (2 quotations). This response was somewhat surprising, because "quality as conformance to

F. CIVIL ENGINEERING COURSE

This course shows a balance between three concepts: "quality as conformance to specifications" (17 quotations),

specifications" was totally expected, since engineering is much more related to technical aspects, nevertheless this was not totally confirmed. Students also related quality to clients and to the value-added of a product or service, important to conduct the job. As for total quality management, students' main response was "way to achieve the objectives of the Organization" (15 quotations). Another common response was "management of the organization's internal processes" (11 quotations). Other less frequent responses were: "quality control" (6 quotations), "enterprise task management" (3 quotations), and "continuous improvement" (2 quotations). With these answers, it is verified that these students' knowledge is close to the concept proposed by Hackmann and Wageman (1995), where quality is obtained from management of the organization's internal processes.

G. COMPARISON AMONG COURSES

Gathering the answers from all surveyed courses, a comparison between courses can be carried out. Table 4 presents all grouped results.

Table 4 – Summary responses of the five courses

Course	Communication Science	Biochemist	Medicine	Management	Civil Engineering
Predominant quality concept	Value	Conformance to specifications	Conformance to specifications; Value	Meeting/exceeding expectations	Value; Meeting/exceeding expectations; Conformance to specifications
Predominant concept of Total Quality Management	Management of a company's processes; quality control	Plan and leading processes; problem solving	Process management; asset management; quality control	Management of company processes	How to achieve the objectives of the organisation; internal processes management organization

Source: Own elaboration

Making a comparative analysis among all courses, it is verified that:

- Courses with predominance of older students see quality as meeting and exceeding customers' expectations;
- Majority of male or female students have little effect on student's perception of quality;
- Carrying out studies on quality does not determine a specific concept to be used, because students who previously studied quality do not have a predominant concept;
- Courses where most students have professional experience see quality as value or as meeting/exceeding customers' expectations; on the other hand, courses with a majority of students who have no professional experience see quality as conformance to specifications;
- Exact and health areas, have a predominance of the concept of quality as conformance to standards and specifications, different from social science courses, where value and customer expectations and exceed standardization in the production of products/services;

- As for total quality management, there is uniformity in the replies, i.e. internal processes management of the organisation and TQM as a way to achieve the organizational goals, predominant concept among all pupils. In summary, the comparison among courses showed that whether or not studying quality, the concept is easy to be recognized and difficult to be defined (Gomes, 2004). Even among the youngest professionals in the market and senior students in superior courses that will soon be in the labour market, there is no predominant concept in quality and there is a striking lack of knowledge regarding total quality management.

VI. CONCLUSIONS AND RECOMMENDATIONS

Understanding how the new market professionals see quality, allows business decisions when they focus on quality as a competitive differentiator. This context motivated the study. Thus, the aim of the study was to reveal the knowledge that students attending the main courses at (UBI) have regarding quality and the total quality management phenomena.

At the end of the research it was concluded that the topic of quality is not consensus among all professions that participated in this survey. For future health care professionals, quality and conformance to specifications, a perfectly justifiable concept due to the responsibility of individuals whose role is to look after people's health. Also in exact areas, the concept of conformance to specifications was pointed out (despite the good presence of concepts such as value and meeting/exceeding customer's expectations), mainly because they are more technical professions which require special care with processes and ways of product and service development. As for the professions related to social sciences, whose primary interest is the human being, quality becomes more subjective and linked to value-added and meeting of customers and users' expectations.

As to the total quality, in all courses little knowledge of the phenomenon was noted, although respondents have good perception of TQM. However, this lack of TQM knowledge complicates implementation in organizations, which might result in resistance of professionals who do not understand perfectly well the objectives of TQM and believe that quality is the responsibility of a specific department in the company.

With regard to specific objectives, it was possible to identify the quality concepts (first objective), and total quality management (second aim) present in the literature which are closer to students' knowledge in each course.

For the third specific objective, comparing the knowledge of quality and total quality management among the courses involved in research, it was concluded that courses related to health and exact areas tend to be more focused on conformance to specifications and human courses focus more on meeting customer's expectations and adding value

to products and services. As for TQM no striking differences were observed.

Finally, it is important to highlight the limitations of the study. The main limitation was the achievement of an exploratory investigation, without statistically valid samples. The continuity of study is recommended, with replication of the same search for other courses of UBI, as well as further investigations in other Portuguese universities and thus to generalize the results and define which quality concepts and total quality management the youngest professionals in the market have in mind.

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Islamic Banks' Dilemma Between Ideals And Practice: Debt Or Equity

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Abstract Equity financing modes currently adopted by Islamic banks are seen to be based on debt-based formats, originally developed for implementation in interest-based financing system. With the experience gained over a period, a careful scrutiny of prevalent equity financing techniques could be appropriate in order to assess the level of their success in achieving Islamic economic objectives. With Islamic banking gaining a firm foothold in the banking and commercial sectors, a more dynamic approach to promulgating the ideals of equity participation appears timely.

I. INTRODUCTION

Providing finance could materialise either in a manner where the seeker of funds becomes indebted to the provider, or through extending funds by way of capital participation in a joint venture, where practicable. The former, commonly referred to as debt-financing, includes means of financing such as extension of loans against interest or otherwise, sale on deferred payment, lease etc, where the process leads to the creation of a debt. In the latter mode where funds are provided as capital exposed to profit or loss, the liability remains with the provider to the extent of his capital, and no debt is created. This latter method, which could be called equity financing as it is based on contributing equity, is the recommended avenue for all venture-financing done by Islamic banks, from a theoretical perspective. In addition to equity financing, Islamic economic ideals proposed as alternatives to debt financing also include qard hasan or gain-free (i.e. interest-free) loan. However, under the prevalent commercial paradigm and its approach to money, this alternative could not be expected to play a significant role in business finance today, as such loans are not purported to give rise to any material increase directly or indirectly.

Thus, a large proportion of all business financing in an Islamic economy would be based on equity financing, where the financier shares in the profit and loss of the business financed. This article attempts to study the possible outcomes of financing based on debt vis-a-vis equity-based financing in the context of Islamic economic ideals, and to analyse problems faced by Islamic banks in adopting an equity-based approach to financing in an earnest manner

¹ Umer Chapra, *Towards a Just Monetary System*, London, The Islamic Foundation, 1985, p. 68

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II. EQUITY FINANCING AND DEBT FINANCING: A COMPARISON

It would be worthwhile to undertake a review of the possible practical reasons why the Islamic economic system gives preference to an equity-based approach to financing ventures. It is argued that in financing on the basis of equity participation, the funds required by the venture are injected as equity or capital that is entitled to a share of any profits realised through the venture, while being exposed to erosion or total eradication in the event of loss. The funds increase the equity base of the venture, thus providing stability. The profit and loss both are distributed among all participants who contribute towards the equity, which is differentiates this mode of financing from debt financing. Thus, equity financing entails mutual sharing of risks pertaining to the enterprise and an equitable distribution of the return. The actual rate of return of all sharing parties will be determined ex post in accordance with the actual performance of the venture.

In conventional debt financing, additional finance sought is injected in the form of a loan at a predetermined rate of interest. The funds injected come as a liability on the venture, which is to be repaid with the interest, according to the terms agreed. The funds do not play any role in increasing the equity base. They remain a foreign element as far as the assets of the venture are concerned, and do not take a constructive share in enhancing the network. Therefore, even a large amount of funds injected as a debt serves only the purpose of inflating the cash position temporarily. Profit / loss of the venture is borne solely by the entrepreneur, the lender not being immediately concerned with this aspect. Irrespective of the ultimate profitability of the venture, the lender is entitled to receive the agreed amount of interest. Thus, risks are associated with the entrepreneur solely.

In profit sharing arrangements, only shares of expected profit are determined at the outset, while the actual rate of return on investments is to be determined in the end, on the basis of realised profits. However, debt, on the other hand, requires predetermined interest payments, and business difficulties may create pressures on the firm's cash flow, forcing it to forgo lucrative business ventures, borrow further, or sell its existing assets. As equity finance does not create such mandatory payment, the cost of adjustment to any contingency is lower. Therefore, proponents argue that in an advanced economy, equity financing should be the rule and not the last resort. Profit sharing provides more flexibility in meeting contingencies. This is because of the balanced distribution of gains as well as the risks

among the participants in equity financing, while debt is restrictive and unforgiving, hence less stable

²Usamah A Othman, "Debt and equity contracts in the theory of social economy" (1994) vol. 3, No. 1 Review of Islamic Economics 5.

³Ibid.

Researchers have highlighted the property right imbalance in debt finance arising through the fixed nature of the interest element. One party, i.e. the lender, has some permanent and contractually guaranteed rights, while the other, the borrower, only has some temporary and residual rights. Such imbalance and asymmetry of property rights may entice opportunistic behaviour on the part of the borrower in several forms such as misappropriation of funds or forgoing altogether of what could otherwise be a profitable venture. On the part of the lender, should difficulties develop, he could resort to foreclosure and liquidate what could be a better business in the long run.

In depositing funds with a bank under an equity arrangement, instead of being guaranteed for the face value of deposits, the depositors here are essentially shareholders whose returns vary with the profits and losses of the bank. The situation could be even compared to accounts in mutual funds. This would render deposit insurance unnecessary, and there would be less likelihood of financial panics or runs. Research in the area of mutual-fund banking comes to the same conclusion. Researchers also observe that under equity financing, assets and liabilities of the bank would move together due to the above reason. This, while relieving banking authorities from excessive regulatory oversight, would result in the net-worth values constantly giving an adequate read on the health of the financial institution.

In debt financing, the possibility of refinancing brings about an uncertainty for both parties as to the nature of the future terms of the contract. It may even induce the debtor to liquidate to save as much as he can of the present value before foreclosure prevents him from saving his own equity. In a profit sharing arrangement, there is less incentive for this even if the expected average gross rate of return changes, due to the absence of a strict obligation of principal repayment on the entrepreneur. The return to the capital investor will be in accordance with the actual market conditions.

In the equity based risk / reward sharing system, value judgements as well as strength of the proposal would both play an important role in the allocation of resources. Financing of any economic or business activity turns into an ownership stake, and banks have an incentive to make the joint venture work. They become fully involved in overseeing the project and make sure that the money is spent wisely. Similarly, the equity arrangement should encourage the borrower to exert more effort in his endeavour and should lessen the moral hazard problem of underreporting profits. The fusion between investment experience and financial experience found in the Islamic banking system could provide

⁴Othman, p. 11.

⁵Tyler Cowen, Randall Kroszner, "Mutual fund banking: a market approach," (1990) vol. 10 No. 1 The Cato Journal 227, in Mohammed Akacem, Lynde Gilliam, "Principles of Islamic banking: debt versus equity financing" (March 2002) vol. 9 No. 1 Middle East Policy 124(15).

⁶Akacem, Gilliam above.

⁷Othman, p. 7.

⁸M Umer Chapra, Islam and the Economic Challenge, Leicester, The Islamic Foundation, 1992, p. 332.

⁹Akacem, Gilliam above.

¹⁰Othman, p. 8.

the maximum guarantee for sounder investment through the best possible utilisation of limited resources.

III. EQUITY FINANCING IN THE PRACTICE OF ISLAMIC BANKS

The above was a brief exposition of some basic aspects pertaining to debt and equity modes of financing in the context of banking, from an Islamic economic perspective. Despite of certain advantages as could be perceived in the equity mode, the conventional system of banking and finance is seen to be founded on debt financing with the interest-based loan as its primary building block, equity financing usually being the last resort. The conventional system has refused to share in the risk of the ventures financed in any manner, sufficing with the risk-free gain through interest income. More surprisingly, adoption of equity financing modes by Islamic banks themselves is noted to be less common than the use of debt-financing modes. The latter usually involve various adaptations of mark-up schemes, and are employed for the most part in short-term financing. Although Islamic banks are allowed to invest in businesses directly in addition to financing third party enterprises, in actual fact, direct investment by Islamic banks is not seen to have flourished due to a variety of factors, not the least among them being the identity inherited from the conventional industry as mere financial intermediaries, and legal impediments resultant of this identity. Debt-based structures frequently adopted by Islamic banks are *murābahah*, *ijārah*, *istisnā'*, and numerous variations based on these. Application of equity financing modes is seen to be less developed and adopted sometimes in unfavourable conditions where they may not function in a manner that could reveal their full potential.

The tendency among Islamic banks has been to invest in short-term deals, due to the apprehension that involvement in long-term equity projects could affect regular payments of profit to depositors, a necessary aspect in competing with conventional banks. Such aversion to long-term investment reduces the efficiency of Islamic banks in the long run. In the Malaysian context, Islamic banking is concentrated in the individual customer sector and not in commerce and industry. Despite of the fact that short-term financing, involving trade financing and other types, performs an important economic function, such financing does not cause the creation or increase of additional production capital, on which real economic growth rests. Thus, emphasis on short-term financing would not be congruent with social needs

¹¹M A Mannan, *Islamic Economics: Theory and Practice*, Delhi, Idarah-i Adabiyat-i Delli, 1970, p. 226.

The Japanese experience could provide a real-time example. By engaging in joint debt-equity finance, the Japanese bank is able to address the agency problem of information asymmetry (Amir Barnea, Robert A Haugen, Lemma W Senbet, *Agency problems and financial contracting*, Prentice Hall, 1985, p. 38, in Akacem, Gilliam above.) Since the bank is now part owner, it has access to more information on the firm and in turn achieves efficiency gains in monitoring (Sun Bae Kim, "The use of equity positions by banks: the Japanese evidence" (Fall 1991) *The Economic Review*, Federal Reserve Bank of San Francisco 41, 43, in Akacem, Gilliam above.)

¹²Saad al-Harran, "Equity Financing" (Nov & Dec 1994) vol. 5 no. 3 *The American Journal of Islamic Finance* 8.

¹³Nik Mohamed Affandi bin Nik Yusoff, *Islam & Business*, Selangor, Pelanduk Publications, 2002, p. 55.

¹⁴Obiyathulla Ismath Bacha, "Conventional versus mudārabah financing: an agency cost perspective" (1995) vol. 4 nos. 1 & 2 *Journal of Islamic Economics* 35

Problems in implementing equity structures

While some have gone so far as to question the sincerity of Islamic banks in devising workable interest-free alternatives, i.e. based on equity participation, reasons cited by others for the lukewarm interest shown by current-day Islamic financial institutions in implementing equity structures carry some similar themes. A major factor could be that equity financing is commonly perceived as difficult in operation. This perception appears to arise from the conventional banking standpoint, where equity financing is considered specialized business carrying drawbacks such as risk, difficult nature, long gestation period and potential involvement in management. Mudārabah financing is assessed to have more agency problems compared to conventional debt or equity financing. Obligation to oversee projects in which they are partners is another potential deterrent. This requires managerial skills and expertise in overseeing different investment projects. Clients and projects to be financed require more careful evaluation.

While some of the above factors had been partially addressed in the foregoing appraisal of equity financing and debt financing, some additional responses could be reviewed here. It has been pointed out that costs and other requirements pertaining to auditing and monitoring internal performance and related issues are part of set-up costs, which are needed irrespective of the form of finance. Others argue that debt financing only bypasses the need for information by requiring collateral and creditworthiness to ensure repayment of principal plus fixed, predetermined interest. The issue of information cost in the profit loss sharing system, i.e. equity financing, has to be judged by comparing the benefits of collecting information with the costs associated with it. Moreover, in a bank-client relationship, it is hardly likely that the client would contemplate of only a single transaction with the bank and be tempted to withhold information. In the context of the need for a continued bank-client relationship and

competitive demand for bank finances, the problem of information asymmetry poses less of a problem. In fact, the issue exists in all market transactions, which is taken care of through credit rating and other measures. Institutions and conventions could be developed, when those in existence are considered inadequate, to restrict gains from fraud. It should be conceded in this regard that within profit loss sharing techniques, mushārahah might have an edge over mudārabah in the sense that in mushārahah, the capital owner has a right to enter into the management and hence have some control over the problems created by information asymmetry and moral hazards.

¹⁵Tarek El Diwany, Muhammad Nejatullah Siddiqi, "A discussion with professor Siddiqi – June 2006," <<http://www.islamic-finance.com>> viewed on 15.06.2006.

¹⁶Al-Harran, p. 7.

¹⁷Bacha, p. 45.

¹⁸Akacem, Gilliam above.

¹⁹Othman, p. 4.

²⁰M Fahim Khan, *Essays in Islamic Economics*, Leicester, The Islamic Foundation, 1995, p. 241.

²¹Fahim Khan, p. 99

Therefore, although some have suggested asymmetry of information as an explanation of why profit loss sharing has failed to prevail in a competitive market despite of being superior to the interest-based system or mark-up based techniques, others have highlighted the fallacy of this supposition as outlined above. Thus, it is necessary to investigate other causes for this phenomenon. A major hurdle could be the economic structure, which may have a bias in favour of the interest-based system rather than a profit and loss sharing arrangement. Tax structures are regarded unfavourable to equity formats. While interest payments are deductible expenses and result in reducing the tax burden, adopting equity financing thus claiming a share in profits could increase tax liabilities for the entrepreneur. Some researchers have shown that the only advantage of debt financing vis-à-vis equity financing is the tax savings generated by the former.

Another important reason that prevents equity schemes coming into practice is the simultaneous presence of the interest option. Interest is a convenient, less effort-requiring option for both parties, and drives out profit loss sharing on analogy with Gresham's Law of bad money driving out good. The existence of an inferior product and absence of a superior product is possible on various non-economic grounds. Convenience may outweigh economics, due to the fact that adopting an equity basis places additional burdens on the capital owner such as vigilance over the operation of the project and bearing of financial loss, while entrepreneurs could be willing to undertake fixed payments rather than share profits or responsibility. Since there are capital providers who can afford to forego possible advantages for the sake of convenience and entrepreneurs who can afford to bear all the risk of loss, if any, interest rates and mark-up schemes

tend to drive out profit and loss sharing mediums. Similarly, the tendency to reserve capital away from risk even at the cost of a lower return, and the facility provided by debt financing of earning interest even on consumption loans too have been identified by researchers as factors that prevent capital-owners from seeking profit loss sharing ventures with investors.

Based on the above, some modern Muslim economists conclude that as long as interest is allowed to prevail in the economy, an Islamic financing technique based on profit and loss sharing cannot prevail. Similarly, despite of the higher efficiency of profit and loss sharing techniques in most of the operations in the economy, they may remain in the background as long as the option of mark up based techniques is available to capital providers. However, as mark-up based techniques have a basis in Islamic law, they may not be eradicated as interest. Therefore, these economists suggest that in the long term, Islamic commercial banks must be gradually barred from involvement in mark-up based activities, as is the case with non-Islamic banks usually. Thus, commercial banks would have no option but to deal on an equity platform. There could be specialised banks

²²F Modigliani, M H Miller, "The cost of capital, corporate finance and the theory of investment," in A Abdel (ed), *The Theory of Finance and Other Essays*, Cambridge, The MIT Press, 1980, vol. 3, in Fahim Khan above, p. 241.

²³Gresham's law: in economics, the tendency for money of lower intrinsic value to circulate more freely than money of higher intrinsic and equal nominal value (often expressed as 'Bad money drives out good'). Formulation of this principle is attributed to Sir Thomas Gresham [d. 1579, Eng. financier and founder of the Royal Exchange.]

²⁴Fahim Khan, pp. 242-44.

carrying out trading and leasing based on mark-up. These economists feel that without such efforts, profit / loss sharing scheme will never be enforced, and will remain in use only to the extent to which equity participation is in use in the activities of interest-based banking.

Although the above suggestion appears to be an extreme measure unlikely to be sought in the immediate future, there is no gainsaying the fact that if equity financing is to be promoted with any measure of success, some restriction on the proliferation of mark-up based debt-finance schemes in areas of financing should be introduced. This could be

either through legislation or through sharī'ah supervisory boards of Islamic banks.

When Islamic banks find themselves obliged to adopt equity financing, it could reasonably be assumed that speedy solutions may be found to many of the obstacles perceived currently. Customer education, and to a larger extent, a change of the identity of the bank too appear imperative. It should be noted that as long as Islamic banks maintain their inherited image of a mere lender and financial intermediary, they would hardly be considered entitled a share in the profits. Ensuring willingness of the clients to adopt equity modes could primarily depend on Islamic banks creating for themselves an image of a vibrant business partner who could contribute positively to the success of the venture. With the resources available at the disposal of a banking institution, this should not prove unachievable, especially in view of the higher returns such a change could generate. Management of Islamic banks, instead of being assigned solely to personnel trained in conventional banking, could be opened for more involvement of business expertise. This could solve aspects such as information asymmetry and agency problems while also moderating the temperament of extreme risk aversion typical of conventional banking, bringing a level of commercial approach to investment and finance

IV. CONCLUSION

Based on the above discussion, it could be assumed that, should Islamic banks make a decisive effort to employ equity-based modes on a wider platform, possibility thereof is not non-existent. Although modes based on debt financing could be adopted in instances such as facilitating acquirement of assets and usufructs, a general reliance on debt-based modes for financing purposes could result in the non-realisation of Islamic economic objectives. The ethical responsibility of Islamic banks too should not be lost sight of. The developmental nature of an Islamic bank means that it has to exert persistent and continuous efforts to improve and diversify its investment in order to achieve satisfactory results for society, shareholders, depositors and partners, which could be best done through broader involvement in equity financing

²⁵Fahim Khan, p. 245.

²⁶Al-Harran, p. 9.

Leadership Orientation Of Chinese Professionals In The Automotive Industry: Comparing Their Task And Relationship Tendencies

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Abstract- Managers usually balance their approach to task management with a focus on developing healthy relationships with employees, customers, and vendors. To study the management approach of automotive industry managers in China, this paper focused on comparing the leadership orientation of respondents and compared it with Americans. It appears that these Chinese respondents from the automotive industry have significantly higher scores on the relationship-orientation than task-orientation. Similarly, the female respondents in China had similar scores as their male colleagues. The responses of these 200 Chinese respondents from the automotive industry were compared with 484 Americans from the general population, demonstrating significantly higher scores for the Chinese on both orientations. It appears that being socialized in a collectivistic and high content culture that practices Confucius principles can lead to higher focus on relationship and task orientations. In the last section, practical application and implications for future research are explored.

Keywords- Relationship, task, culture, Confucianism, China, and the United States.

I. INTRODUCTION

In the competitive world of global business in today's workplace, understanding the collective behaviors of people in a society, as well as an organization's employees and their relationship orientation are paramount to succeeding as employees, managers, and entrepreneurs. Leaders of all countries are concerned about the negative impact of pollution that industrialization can cause to individuals living in society. The United States and China are two of the world's largest economies and thus the collective behavior and expectations of people in each economy can have a great impact on the decisions that impact their lives. For example, in regards to pollution,

entrepreneurs. Leaders of all countries are concerned about the negative impact of pollution that industrialization can cause to individuals living in society. The United States and China are two of the world's largest economies and thus the collective behavior and expectations of people in each economy can have a great impact on the decisions that impact their lives. For example, in regards to pollution, as the world's leading producer and biggest importer of raw cotton, "China has experienced much of the damage" (Wood, 2010, p. 18). Wood continues to say that:

In China's industrial heartland, untreated dye wastes stain drainage ditches in vibrant synthetic hues, contributing to pollution that renders most Chinese rivers undrinkable and a few even dangerously toxic to the touch...And...scrutiny would extend to America and other major cotton producers, shedding light on how divergent political and economic cultures can hinder the achievement of greener trade—even when the country at the center of the trade is focused sharply on sustainability...China is the No. 1 foreign customer for American grown cotton, buying as much as 45 percent of its exported harvest in a typical year (Wood, 2010, p. 18).

American and Chinese leaders know that they do not want the negative consequences of pollution to cost taxpayers too much money or for it even to be slowing their economic growth in the future. "In provinces like Xinjiang, this waste is a major contributor to industrial and municipal pollution so severe that nearly 1 in 4 of China's 1.3 billion people drink contaminated water every day" (Wood, 2010, p. 20). Thus, since these problems can be very costly to a country's economy, leaders from both countries are looking for pragmatic alternatives to such environmental dilemmas. While the United States will face more challenges due to the two-party systems of checks and balances to get any major reforms passed through Congress and the Senate, what China has going for it is "its one-party government and authoritarian habits, which can support decisive action" that eliminates the problem or reduces its externalities (Wood, 2010, p. 21). These environmental challenges demonstrate that we all live in an interdependent world and political leaders must understand each other, their people's needs, and the needs of their colleagues in other countries. If our future generations are to have a good quality of life in this society, then our political and organizational leaders need to cooperatively work together in a socially responsible manner.

Research completed by Jiang, Baker and Frazier (2009) provides empirical evidence the good management and

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good leadership matters to the lives of people, especially those working in the Chinese manufacturing export firms. China, over the past few decades, has been a place where most workers have left major metropolitan cities for manufacturing jobs in the coastal areas so the needs of firms such as Wal-Mart, Target, and other giant retailers can be filled for cheap products that are considered to be of good value. Of course, in reality, “good value” is often produced using cheap labor with working conditions that are at times antiquated and less than ideal. However, more recently, many Chinese manufacturers have been faced with higher labor costs and fewer available skilled workers. Jiang, Baker and Frazier surveyed 600 Chinese migrant workers that worked for export manufacturers at the Guangzhou train station as they were going home for the Chinese New Year. The survey asked whether they planned to work in the factory much longer. The results showed that workers who received low pay and did their jobs in poor working conditions had similar responses as those who said they had good pay and fair working environments. So these workers were not going to leave because of low pay or less than ideal working conditions in the manufacturing jobs. However, poor management practices did become a concern in this study since workers who reported that their firms had good human resource practices and effective production operation managers demonstrated increased job commitment, which can lead to higher productivity and better employee retention rates. Increased job commitment is especially important in competitive times when longer work hours, reductions in pay, and learning of new tasks and technologies can all lead to higher levels of stress for managers and workers alike. While the endless supply of fairly cheap labor might continue to exist for the coming years in China, many of these workers are not likely to tolerate poor management and leadership practices, and, thus, might leave to go to other firms that have better leaders and managers (Jiang, Baker and Frazier, 2009). Jiang, Baker and Frazier’s research leads to the recommendation that foreign executives must create long-term relationships with their Chinese partners, workers and associates in order to create win-win relationships where everyone’s livelihood is improved. Creating this type of a relationship is important for all managers, leaders, and human resource professionals and it requires understanding the local country’s cultural norms, customs, and mores.

Corporate and political leaders need to create and build alliances in unlikely places (Campbell and Balbach, 2009) in order to leave this world a little better for future generations of managers and leaders. Japanese leaders for example encourage corporate social responsibility. The Japanese concept of Kyosei is the “philosophy of corporate social responsibility,” which means having the “intention or spirit of cooperation” (Sanyal, 2001, p. 470). According to Sanyal, “A firm that practices Kyosei establishes harmonious relationships with its customers, suppliers, competitors, governments, and the natural environment” (2001, p. 470). This Kyosei principle has been used for many years with good organizational success in Japan, and, thus, people around the world should be paying attention.

Japanese organizations are making the Kyosei principle a part of their training and many educational institutions in Japan are teaching it in order to have a generation of future managers and leaders that will understand why it is important to cooperate in a socially responsible manner and practice this concept.

Similarly, it is also important for all managers and expatriates to understand others and to reflect on their cooperative relationships with people of different cultures while examining how differences in context can lead to cultural misunderstanding for overseas employees living or working in Japan, China, the United States, or other countries. The purpose of this paper is to analyze the relationship similarities and dissimilarities between American and Chinese respondents.

It is commonly perceived that professional Americans are usually socialized, trained, and conditioned to be task-oriented or “workaholics” (Mujtaba, Khanfar, and Khanfar, 2009; Mujtaba and Balboa, 2009; Huang and Mujtaba; Osland, DeFrnaco, and Osland, 1999; Martinez and Dorfman, 1998). They are conditioned to “keeping an eye on the ball,” and to not allow themselves to be distracted from the tasks at hand. The emphasis of task-orientation in American society is placed on the tangible outcomes of a business project, not necessarily on the process. In contrast, the Chinese (like most other Asians, Middle Eastern citizens, and Latin Americans) tend to feel that it is essential to invest in establishing a relationship before focusing on the task. In business meetings and negotiations, a warm-up period is typically required to create a good interpersonal environment in which the task can be accomplished most effectively. There is the expectation that a good relationship will lead to an effective long-term work connection, which in turn will produce better win-win results. American business professionals may seem impersonal or distant when they put tasks before relationships. On the other hand, the Chinese may be considered too relaxed and unconcerned to get started on the task; they may not always appear to be “serious” about getting the job done in a timely manner. Yet, most Chinese workers appear just as productive as others while handling several tasks at a given time.

We now live in an interdependent world and we should all understand how capitalism and other systems (such as socialism, Confucianism, etc.) can impact society and people’s behaviors in the workplace. While most people around the world tend to learn about the Eastern and Western philosophies of business, Americans are often criticized for not paying sufficient attention to the beneficial aspects of other systems. One aspect of a large country’s economy is likely to impact others in society due to globalization. Globalization is a reality of life as it impacts all workers, managers, organizations, institutions, and inhabitants of each locality around the globe. Ali Farazmand explains that:

The market plays a key role in economies and societies, but so do government institutions and public administration, which must check market failures, help sustain market dynamics, and control abusive corporate organizational

behavior to preserve democratic values...The 2008 Wall Street meltdown, which caused a global financial crisis that led to a near collapse of global capitalism and prompted multi-trillion-dollar rescue plans by the world's largest capitalist states—the worst since the Great Depression of the 1930s—is another fresh reminder of how mythical free market capitalism is and how badly it needs the interventionist capitalist state to make it possible for it (to) operate freely! Such freedom comes at a heavy cost to citizens of the world (Farazmand, 2009, p. 1009).

Isenberg explains that all modern managers and entrepreneurs “must be able to identify opportunities, gather resources, and strike deals,” and they must also have “soft skills like vision, leadership, and passion” to be winners in the global marketplace (2009, p. 109). Furthermore, they must be able to articulate a global purpose, build alliances across different countries, create efficient supply chains, and function like any successful multinational organization. It has been said that “Entrepreneurs shouldn't fear the fact that the world isn't flat. Being global may not be a pursuit for the faint-hearted, but even start-ups can thrive by using distance to gain competitive advantage” (Isenberg, 2009, p. 111). History offers many lessons as globalization has been around since the great empires of ancient Persia, Greece, Spain, Rome, Great Britain, and various other European nations. However, modern globalization began to take form right after World War II. And, in some cases, globalization has brought about many positive and negative changes.

Dramatic changes have a tendency to produce at least three types of effects: good, bad, and ugly—and some neutral ones. Beneficiaries of the “good” praise the changes, while receivers of the “bad” suffer and complain, but the “ugly” effects harm virtually everyone everywhere; it is this “ugly” side of the current global changes that has caused a profound global debate and created serious backlash. Examples include the erosion of national sovereignty and public infrastructure, increasing unemployment and underdevelopment, global warming, expanded global economic crisis, poverty and hunger, ethnic conflict, war, AIDS, insecurity and terrorism, increased corruption and lack of accountability, and corporate-friendly dictators (Farazmand, 2009, p. 1010).

Overall, globalization is not a new phenomenon. However, the interdependencies linking one country or market to others and the major effects of economic decisions are new and more dramatic than ever before. As such, business leaders and government representatives must work jointly and interdependently to reduce the negative externalities associated with the economic recession to make sure that suffering and hunger are eliminated quickly.

For international managers and researchers it is essential to understand the culture of the country or region in which it is doing business (Tajaddini and Mujtaba, 2009). It is almost impossible for a manager or a company to be successful in a foreign country without proper knowledge and understanding of the culture. Managers of international operations should be aware of the importance of context in various countries as it indicates the level in which

communication occurs outside of verbal discussion. Understanding the effect of the differences in context provides a knowledge base and cultural intelligence that can help provide effective business relationships with a firm's vendors and customers (Hall, 1976). Watkins and Liu (1996) assert that the quality of social interactions between individuals in a collective culture depends heavily on whether or not they belong to the same in-group. China is a high-context culture and the U.S. is a low-context culture. As emphasized by Hofstede (1980) and Trompenaars (1993), culture plays an important role in the behavior of its people. Adler (1986) argued that national culture has a greater impact on employees than does their organization's culture. Thus, management must concern itself more with developing appropriate management methods relevant to the national culture than with optimizing organizational culture. It will be interesting to see the general tendencies of Chinese and Americans and to find out whether they are similar or different in their leadership orientations

II. THEORETICAL FRAMEWORK: CHINA AND THE CONFUCIUS PARADIGM

China is a country with a population size that is four times larger than the United States. With over 1.3 billion people living in China, next to India, it is the world's largest country. Just like most other countries, China has been facing some very large and dramatic changes as it is becoming a global powerhouse, while going through political, economical, social, and technological changes. Since the Chinese practice Confucius principles, this research theorizes that this foundation enables people in China to strongly focus on a network of relationships with their friends, colleagues and business partners in the workplace. Furthermore, this familial form of networking and its concomitant obligatory or reciprocal functions enable them to remain competitive on a global scale. If the Chinese have high scores on their relationship and task orientations, then this assumption is likely to have validity. The government and people of China have adopted many western practices alongside their Asian norms. The Chinese use modern technology, have high standards in various educational fields, and have a sufficient number of information technology experts in the modern cyberspace digital age. In essence, modern practices and focus on competitiveness have induced changes in the Chinese culture. Due to its thousands of years of history and strong traditional practices, China remains a collective society. Asian collectivism is more akin to vertical collectivism. Thomas and Au (1999) explain that vertical collectivism is a form of collectivism where individuals see themselves as a part of an in-group where there are differences in status. Inequality, hierarchical distinctions, and pressure to conform are the norms in such a group. Individuals would be expected to exhibit less voice in such a setting. In China, hierarchy and inequality between managers and employees would be expected and this is the case with most collectivistic societies.

In China, due to its high context collective culture, meaning is often more likely to be implied and less direct than in many Western cultures. This means that words are less important and greater attention must be given to context and additional forms of communication such as voice tone, body language, eye-contact, and facial expressions (Tajaddini and Mujtaba, 2009). In China, because business is personal and based on trust, developing relationships rather than exchanging facts and information is very important to effective communication. This also relates to the Asian cultural values of courtesy, tolerance, harmony, and saving face. Direct answers, particularly negative ones, are avoided in order to prevent disagreement and preserve harmony; this is a very important aspect of the Chinese culture. For the Chinese it is more important to focus on the social and relational aspects of the business transaction rather than simply on the facts of the business. Values such as mutuality and reciprocity point to a negotiation style which veers towards a win-win outcome (Fisher and Ury, 1981).

According to Storz (1999) the Chinese view the experience of time as a subjective and holistic notion, this implies that any time related concept, for example, punctuality and deadlines cannot be absolute. Consequently, time is changeable and stretchable and deadlines can be moveable. As such, individuals and teams are often accommodated more time and flexibility in business decisions – this is very different from the Western concept and perception of time. In the Chinese culture the group is the primary unit of social organization as a consequence of their socialization in extended families; thus, this explains why it is easier for them to work cohesively as members of teams and groups. The concept of Confucianism, which is widely practiced and accepted in China, plays a very important role in sharing the culture. The Confucius qualities, norms and expectations through socialization produce a certain type of person who is polite, empathizes with others, and considers their views before proceeding with a decision (Dahlan, 1991). Many claim that Confucianism has positively impacted the Chinese entrepreneurs in today's global world. Ames (2009) emphasized that globalization from a Confucianism perspective has two dimensions which are: 1) homogenization of technology and various processes that enable people to get things done and enhance their quality of life; and 2) mutual accommodation of different cultures. China is an excellent example of how the Confucian moral imagination has allowed globalization to flourish. According to Ames (Personal Communication on August 18, 2009), China is a miracle of the twenty-first century as

it is flourishing economically due to its practice of mutual accommodation of diverse cultures, people groups and work-practices in a harmonious manner. One better understands the impact of this economic powerhouse when it is seen not just as a country but also as its own continent since China hosts a quarter of the world's inhabitants living in it.

The Confucian philosophy is such an integrated part of the culture that it is weaved into the language and everyday teachings. During their socialization process, most Chinese people vicariously learn about the partnership between one's heart and mind as the two complement each other. The relationship between the heart and the mind working interdependently is analogous to one's relationship with friends, colleagues and family members. Building healthy relationships are critical for having a strong heart and mind. Most relationships in the Confucian culture are familial relationships (Ames, 2009). Through this network of connections, colleagues and friends, managers can get people motivated to contribute the most to an institution or a project. You can achieve this Confucian harmony by treating people with respect and dignity as if they were family members. The idea of family is a fundamental unit of success in the Chinese tradition.

So there are many distinct differences between the Chinese culture and that of the United States of America. The United States can be seen as a revolutionary experience since it was created and formed through immigration over the past few centuries. As more and more people migrated to the United States, they were far from their relatives and had to basically rely on their performance to create an individuality or identity for themselves. On the other side, the Chinese tend to be "relationally-constituted human beings" whereby they are continually reforming and becoming as per the needs of the community. The basic spirit of the Chinese culture works as a symbiosis between the particular and the totality. The heart (the particular) works interdependently with the mind and other elements of the body to make worthwhile contribution and to make the person a "relationally-constituted human being."

Certainly with the tremendous economic growth in China, a merging of the task-relationship orientation along with the adaptation of eastern and western practices will continue to occur between the Chinese and Americans business managers and leaders. Table 1 provides a summary of comparison of the task-relationship portion between Chinese and Americans from literature and the authors' personal observations and work experiences.

Table 1 – Typical Perceptions of Chinese and American Cultures

Chinese Traditional Perception	American Traditional Perceptions
Conception of the Self-Collectivist: Higher value placed on group cooperation and individual modesty. Social Relationships-Formal, and hierarchical: People are most comfortable in the presence of a hierarchy in which they know their position and the customs/rules for behavior in the situation. Friendship-Small numbers of close, lifelong friends who feel deeply obligated to give each other whatever help might be required. Obligation-Relationships with other people involve reciprocal obligations. Task vs. Relationship Orientation-Relationship-oriented: Maintaining a harmonious relationship has priority over accomplishing tasks. Harmony vs. "Truth": Avoid direct confrontation, open criticism, and controversial topics. People are concerned with maintaining harmony and saving "face". Role of laws, rules, and regulations-More faith in personal relationships than in written rules and procedures for structuring interactions. Time Consciousness-Relatively more attention to the past and to the longer-term future. Ascribed vs. Achieved Status-Traditionally, a person's status in the society has been based on inherited characteristics such as age, gender, and family.	Individualist: Higher value placed on self-reliance. Self-promotion is more accepted. High value placed on "freedom" from externally imposed constraints. Informal and egalitarian: People are most comfortable with their social equals; importance of social rankings is minimized. Large collection of "friends" and acquaintances which changes over time and involves only limited mutual obligations. People avoid interdependent relationships and situations that might entail long-term obligations. Task-oriented: Relationships are less important than getting the work done. Willing to confront directly, criticize, discuss controversial topics, and press personal opinions about what they consider to be "the truth." People are not as concerned with saving "face". Written rules presumably apply to everyone and are assumed to produce fair, reasonable procedures and decisions. Less interested in the past; eye on near-term future. People's status is based mainly on their own achievements, including education obtained and level of success realized in their line of work.

From the literature review of material written on different cultures and personal observations, the authors have found that traditional characteristics associated with the Chinese family network to be evolving and changing with the times. Chinese business entrepreneurs seem to be adopting many Western business practices, while still paying "lip service" to traditional Chinese social obligations. Chinese developers and managers are expected to be task oriented at work, but off the job they are relationship oriented. However, it is very difficult for an American business person to be successful in the United States without a task orientation. Success in America is measured by performance and performance is measured by degree of task completion. Chinese can be successful in a relationship only situation. For example, due to their family networks, there are many wealthy Chinese in high corporate positions who have not always earned their position...rather their family wealth and power gave them the position

A. Task and Relationship Orientations

The behavior of leaders has often been perceived in terms of initiating structure or task-orientation and consideration or relationship-orientation (Halpin and Winer, 1957; Fleishman, 1967). Bass (1990) found relationship-oriented functions to be associated with subordinate satisfaction, and task-oriented functions to be associated with group performance. However, Bass also

found relationship-oriented functions to be positively associated with group performance. According to Sherwood and DePaolo (2005), the task context includes situations that involve how the manager will accomplish tasks through people and in which attention is given by both the worker and manager to the task at hand. These situations may involve planning, task coordination and execution. Since the task-based context focuses on the work to be done, skills and abilities are the predominant criteria on which workers base their willingness to be vulnerable (Tajaddini and Mujtaba, 2009). Abilities are a clear requirement for accomplishing tasks in a specific domain (Mayer, Davis and Schoorman, 1995). The relationship context includes situations that involve showing concern for the worker or providing support for the worker and the worker-manager relationship. This context may include open lines of communication, discussion of personal concerns and providing socio-emotional support. Situational leadership theory states a best leadership style depends on the situational variables surrounding each decision, person, and strategy. One dimension of each person's leadership style is the extent to which he or she is people-oriented or task-oriented. Most people fall somewhere in between the two extremes. However, since cultures influence people through years of socialization and the two countries in this study are from different cultural contexts (high and low),

this study will help in determining whether people of high-context culture are more relationship-oriented or more task-oriented. Furthermore, this study will determine whether people of a low-context culture are more relationship-oriented or more task-oriented. Finally, it has been said that since Americans work many hours on their jobs, they are considered to be more task-oriented (Tajaddini and Mujtaba, 2009). However, the Chinese also work plenty of hours but they are more family-oriented. This study will assess whether respondents from the high-context Chinese culture are more task-oriented or more relationship-oriented.

III. STUDY METHODOLOGY: TASK AND RELATIONSHIP ORIENTATIONS

Paul Hersey (1984, 1997) explains that *leadership* is the process of influencing an individual or a group of individuals while providing an environment where personal, professional, and/or organizational objectives can be successfully achieved. Leaders tend to use various amounts of task or relationship behaviors (Hersey, Blanchard and Johnson, 2001). Generally speaking, *task behavior* is the extent to which leaders engage in top-down

communication by explaining what the follower is to do, as well as when, where, and how each function is to be accomplished; and *relationship behavior* is the extent to which leaders engage in joint communication with followers while providing socio-emotional support (Tajaddini and Mujtaba, 2009). Peter G. Northouse (2010) provides a useful instrument, known as Style Questionnaire, which can be used to obtain a general profile of a person's leadership behaviors regarding task and relationship orientations. The results can show one's use of various task and relationship behaviors. Since the survey for the Chinese respondents were translated from English, a factor analysis was conducted on the responses to make sure there is accuracy. Before conducting a factor analysis, it is necessary to check sampling adequacy and sphericity to see whether it is worth proceeding with the analysis. According to Kaiser (1974), KMO (Kaiser-Meyer-Olkin) is used to test whether the variables in this study sample are adequate to correlate. A general rule of thumb is that a KMO value should be greater than 0.5 for satisfactory factor analysis to proceed. For this study, KMO is 0.859 for task orientation score and 0.832 for the relationship orientation score; therefore, the analysis can proceed with factor analysis. KMO test of the questionnaire results as shown in Table 2.

Table 2 - KMO and Bartlett's Test for This Study

Variables	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	KMO and Bartlett's Test		
		Approx. Chi-Square	df	Sig.
Task Score	0.859	977.29	45	0.000
Relationship Score	0.832	495.967	45	0.000

In addition, the factor loadings after rotation are greater than 0.4, it is not necessary to remove any of the measured response question. For the reliability test, each item had a corrected item-to-total correlation are greater than 0.4 and Cronbach's coefficient alpha are greater than 0.7

(Nunnally, 1978) as shown in Table 3. So the study used the SPSS (17.0 version) output for the reliability data that produced a Cronbach's alpha of 0.8626 for task and 0.7988 for relationship orientations, which means that questions are acceptable in social science research

Table 3 - Results of Factor Analysis and Reliability Test for This Study

Factor Constructs and Items	Factor Loading	Eigen-value	Item-to-total Correlation	Alpha if item deleted	Cronbach's alpha
Task Scores					
TS01	0.653	4.556	0.5458	0.8519	0.8626
TS02	0.775		0.6888	0.8390	
TS03	0.485		0.4052	0.8621	
TS04	0.610		0.5162	0.8561	
TS05	0.724		0.6285	0.8458	
TS06	0.724		0.6218	0.8460	
TS07	0.643		0.5517	0.8514	
TS08	0.762		0.6761	0.8410	
TS09	0.702		0.6138	0.8465	
TS10	0.622		0.5191	0.8545	
Relationship Score s					
RS011	0.729	3.769	0.4189	0.7887	0.7988

RS012	0.504		0.4485	0.7850	
RS013	0.481		0.5402	0.7740	
RS14	0.621		0.6073	0.7717	
RS15	0.635		0.5179	0.7783	
RS16	0.520		0.4133	0.7878	
RS17	0.623		0.5838	0.7727	
RS18	0.657		0.4071	0.7902	
RS19	0.527		0.4632	0.7838	
RS20	0.638		0.4774	0.7809	

For each statement in the survey, a rating of 1 means “Never” and a rating of 5 means “Always” the person demonstrating the specific behavior. To determine one’s scores for the leadership Styles Questionnaire, one can add the responses for the odd numbered items to determine the score for task-orientation behaviors, and add the responses for the even numbered items to determine the score for relationship-orientation behaviors. The scoring interpretation for the Style Questionnaire by Northouse (2010) is as follows.

45-50 = Very high range

40-44 = High range

35-39 = Moderately high range

30-34 = Moderately low range

25-29 = Low range

10-24 = Very low range

It is clear that the degree to which one engages in more task or relationship oriented behaviors should depend on the variables present in the situation; some of the situational variables can include the difficulty of the task, the importance of the job, the time available to get it done, and the readiness of the follower to successfully complete the task without much input (Tajaddini and Mujtaba, 2009). Effective leaders stay in control by managing through a balance of both task and relationship oriented behaviors, as appropriate, to make sure the objectives and goals are accomplished.

The population for the study is the 456 junior and senior managers in the FAW Jilin automotive company (FAW Jilin Automobile Co. LTD), a Chinese firm in Jilin City, Jilin Province, China. FAW Jilin Automobile Co.LTD (FAW Jilin Auto) was founded in 1983, and it is regarded as a base for Chinese mini/compact vehicle. In March 1981, when the first minivan was successfully launched there, the company was still owned by local government. On June 28, 1991, the company was merged by FAW group which is the largest auto maker in China, and designated as the base for mini/compact vehicles as a family member of FAW group. There are 4,135 employees in FAW Jilin Auto, including 456 in management, 94 people for Research and Development, and at least 149 in sales. The annual production volume at FAW Jilin Auto is around 100,000 units of vehicles. FAW Jilin Auto has 8 plants, 17

departments, and one joint-venture corporation inside the company, including 5 body welding, 2 painting, 2 assembling and 3 testing lines. The products are both

supplied to domestic market and exported to 50 countries in the world.

The English version of the survey was translated into Mandarin Chinese by one Chinese expert who spoke fluent English. Then it was back-translated by another Chinese-English language expert to make sure the meaning had not changed. Furthermore, three Chinese colleagues were used for the pilot study to see if they had any challenges in completing the local version of the survey. The pilot study participants did not report any difficulties using the Chinese version of the survey. The survey instrument was provided and made available to participants in both English (for those who read English) and Chinese versions so as to accommodate their language preferences.

The survey forms were given to the respondents and collected back upon completion from the managers of the automotive firm in China over a four-week period. A total of 200 acceptable and usable questionnaires were collected for use in this study (four other responses were incomplete and therefore could not be used). The survey response rate was 44 percent. The data were entered into an Excel file for analysis.

In the United States, during the same period when the Chinese data were being collected, a copy of the survey was given electronically to a convenience sample of working adult Americans in the United States and all scores were recorded for comparison purposes in this study. A total of 484 completed responses by the Americans were used for analysis in this study. These responses came from the general American population, mostly living in the South Florida region. Majority of the American respondents are young business professionals, and some work in entry level to middle management positions. While all of the respondents claimed that their nationality is American, none of these respondents from the United States are from the automotive industry

IV. RESEARCH QUESTIONS AND HYPOTHESES

This research predicted that socialization with the Confucius foundation enables people in China to focus on maintaining a strong network of relationships with others in the workplace. Furthermore, this networking and its obligatory or reciprocal relationships enable them to work hard in order to remain competitive. If the Chinese have high scores on their relationship and task orientations, then this prediction is likely to have some validity.

The research question for this study was to determine whether Chinese respondents have a higher average score on the relationship orientation or task orientation. Another aspect of this study was to determine whether high-context culture Chinese have a higher or lower average score on the relationship orientation or task orientation when compared with their low-context culture American counterparts. The specific hypotheses for this study are as follows:

Null Hypothesis1: Chinese respondents will have similar scores for relationship and task orientations.

- 1) *Null Hypothesis2:* Chinese male and female respondents will have similar scores on task orientations.
- 2) *Null Hypothesis3:* Chinese male and female respondents will have similar scores on relationship orientations.
- 3) *Null Hypothesis4:* Chinese respondents will have similar scores on task orientation as the respondents from the United States.
- 4) *Null Hypothesis5:* Chinese respondents will have similar scores on relationship orientation as the respondents from the United States.
- 5) *Null Hypothesis6:* Chinese male respondents will have similar scores for relationship and task orientations.
- 6) For the purpose of this study, only Chinese respondents working in one automotive company were surveyed. Perhaps due to the nature of the industry, only a small percentage (14%) of the responses came from Chinese females working in s automotive company in China. All the Chinese respondents in this study were at least 26 years of age or higher and the majority had six or more years of management experience.

V. TASK AND RELATIONSHIP ORIENTATION RESULTS

While the average scores of Chinese respondents for task and relationship orientations falls in “high” or “very high range,” there are statistically significant differences among them. On the other hand, the average scores of American respondents for task orientation falls in the “moderately high range” and their relationship orientation scores fall in the “high range.”

As can be seen from Table 4 and using the t-test for differences in two means, at a 0.05 level of significance, the first null hypothesis (“Chinese respondents will have similar scores for relationship and task orientations”) is rejected because the calculated t value (-3.69) does not fall within the critical value of t for statistical significance; in other words, since the t value does not fall within the critical values (+1.97 and -1.97), the alternative hypothesis is supported.

Furthermore, since the p-value (0.000253) is smaller than alpha (α) = 0.05, there is sufficient evidence to reject the null hypothesis. Based on the results, the task orientation and relationship orientation scores of Chinese respondents do not appear to be similar. As such, one can conclude that the Chinese respondents have significantly different scores on the task and relationship orientations. Perhaps because of their high-context and collective culture, Chinese respondents seem to be putting more emphasis on relationships than tasks.

As can be seen from Table 4, the null hypothesis (“Chinese male and female respondents will have similar scores on task orientations”) cannot be rejected because the calculated t of 0.3231 is within the critical value of t for statistical significance (+1.97 and -1.97) and the p-value (0.75) is larger than alpha (0.05). Based on these results, the task orientation scores of male and female Chinese respondents appear to be similar. Therefore, the hypothesis is accepted.

Table 4 – Leadership Orientation Scores (St. Deviation) of Chinese

Gender	No.	Task Orientation Score	Relationship Orientation Score
Males	172	44.11 (5.85)*	46.1 (3.65)**
Females	28	43.71 (7.34)*	45 (5.28)**
		*t= 0.3231; p=0.75	**t= -1.3; p=0.196
TOTAL	200	44.055 (6.064)***	45.93 (3.92)***
		***t= 0-3.69; p=0.000253	

As can be seen from Table 4, the null hypothesis (“Chinese male and female respondents will have similar scores on relationship orientations”) cannot be rejected because the calculated t of -1.3 is within the critical value of t for statistical significance (+1.97 and -1.97) and the p-value (0.196) is larger than alpha (0.05). Based on these results, the relationship orientation scores of male and female Chinese respondents appear to be similar. Therefore, the hypothesis is accepted.

As can be seen from Table 5, the null hypothesis (“Chinese respondents will have similar scores on task orientation as the respondents from the United States”) is rejected because the t value does not fall within the critical values, and the p-value is smaller than alpha (α) = 0.05; so there is sufficient evidence to reject the null hypothesis. Based on these results, Chinese respondents’ scores are significantly different (higher) from the American respondents. The alternative hypothesis is supported since the Chinese respondents have significantly higher scores on task orientation than the respondents from the United States.

As can be seen from Table 5 and using the t-test for differences in two means, at a 0.05 level of significance, the null hypothesis (“Chinese respondents will have similar scores on relationship orientation as the respondents from the United States”) is rejected because the t value does not fall within the critical values and the p-value is smaller than alpha. Based on these results, it can be concluded that the Chinese respondents have significantly higher scores on

relationship orientation than the respondents from the United States.

Table 5 – Leadership Orientation Scores (St. Deviation) of Chinese and Americans

Group	No.	Task Orientation Score	Relationship Orientation Score
Chinese	200	44.055 (6.064)*	45.93 (3.92)**
Americans	484	37.63 (7.69)*	41.99 (6.04)**

* $t=10.58$; $p < 0.001$

** $t= 8.65$; $p < 0.001$

As can be seen from Table 6 and using the t-test for differences in the two means, at a 0.05 level of significance, the null hypothesis (“*Chinese male respondents will have similar scores for relationship and task orientations*”) is rejected because the calculated t value does not fall within the critical value of t for statistical significance; in other words, since the t value (-3.74) does fall within the critical values (+1.97 and -1.97), the alternative hypothesis is supported. Furthermore, since the p-value (0.000216) is smaller than alpha (α) = 0.05, there is sufficient evidence to

reject the null hypothesis. Based on the results, the task orientation and relationship orientation scores of male Chinese respondents from the automotive company do not appear to be similar. As such, one can conclude that the male Chinese respondents have significantly different scores on the task and relationship orientations. Perhaps because of their high-context and collective culture, male Chinese respondents seem to be putting more emphasis on their relationships than tasks.

Table 6 - Male Chinese Task-Relationship Orientation

<i>Task</i>	
Sample Size	172
Sample Mean	44.11
Sample Standard Deviation	5.85
<i>Relationship</i>	
Sample Size	172
Sample Mean	46.0760
Sample Standard Deviation	3.6500
<i>Calculations</i>	
t-Test Statistic	-3.7393
p-Value	0.000216

It was hypothesized that Chinese respondents will have similar scores for relationship and task orientations, and the current study did not support this hypothesis since these workers from the automotive firm have higher scores on the relationship orientation. Similarly, male Chinese respondents have significantly high scores on the task and relationship orientations. Furthermore, when compared with each other, male and female Chinese respondents did have similar scores for task and relationship orientations. These Chinese respondents' scores are higher than the conveniences sample of Americans. So, one can summarize that Chinese respondents have significantly higher scores on task and relationship orientations than respondents from the United States.

VI. IMPLICATIONS AND RECOMMENDATIONS

The results of this study showed that the Chinese respondents from the automotive industry are high on both task and relationship orientations. Their scores were significantly higher on the relationship orientation. The high relationship orientation of the Chinese might very well heavily influence the progress and continuous improvement of employees' performance. Personal interaction and communication with colleagues and clients, such as telephone calls or e-mail communications can be promoted by management (Tajaddini and Mujtaba, 2009) since these skills are essential for enhancing their relationships and creating a stronger bond and trust with their clients and colleagues beyond those generally present in a work environment (Panayides, 2005).

A. *Implications for readers*

The Chinese respondents had significantly higher scores than the American respondents. Due to their collective nature and high-context culture, the Chinese respondents in the automotive industry might be socialized for an orientation toward achievement, competition and success. Therefore, they are demonstrating high relationship-orientation as well as high task-orientation since they compete with people from around the globe. What is interesting is that these respondents demonstrated that they strongly focus on their tasks and still maintain the family-oriented mindset on the relationship. This is very different from the American view of "you can't have it both ways" paradigm, where in some cases individuals devote themselves too much to the job and have a "bankrupt" personal life or they devote all of their time to family matters that they hardly ever accomplish much in their professional lives. One example is the case of the professional golfer, Mr. Tiger Woods, who is known to be calm and very "cool-headed." During November and December 2009, when at least fourteen different women came forward with allegations that they had extramarital affairs with him, the media was focusing on Mr. Wood's personal life day and night. As a result of this negative publicity, a number of the major sponsors decided to discontinue their advertisement partnership with Mr. Woods. Consequently, during the second week of

December, Mr. Woods issued a statement that he is stopping playing golf indefinitely, which is his professional career, in order to focus on his personal life and family. This example can communicate that one cannot focus on both the family and a professional career at the same time. What people need to keep in mind is that having a family and a thriving professional career are not mutually exclusive. You can have both of them at the same time, but one must keep them balanced, and should never lose focus of what is important at any given time in life. Nonetheless, professional actors, politicians, and athletes often make such decisions either on their own or through the suggestions of their agents to "save face" or make-up for the loss of reputation in the industry. Ultimately, each person has to decide what is in his/her best interests. Regardless of the situation, people skills are an important element of relationship building. Actually, research shows that people skills are very important for getting and keeping a job. Experts agree that employers want to see the following traits in prospective employees: technical know-how, years of experience, advance degrees or certificates, and people skills (Ace Any Job Interview, 2010, p. 4). People skills are important for teamwork and effective relationship building. While most Chinese are socialized in a team-based community, Americans applying for jobs are encouraged to discuss situations that highlight their people skills and teamwork initiatives.

B. *Implications for theory.*

Research has been clear that collectivistic people have strong familial networks and communicate more easily with each since much of information already exists in the culture in terms of symbols due to their high context nature. In China, insiders and outsiders are easily distinguished from one another. The Chinese fall in this high context category as they are able to easily create strong relationships among themselves than expatriates trying to networks with them. Due to the high scores on the leadership orientation dimensions, this research has supported the idea that people from a collective and high context culture will be more relationship-oriented than individualistic or low context cultures. This research supports the work of Jiang, Baker and Frazier who recommended that Chinese laborers, who are highly task and relationship oriented, prefer management practices that focus on their overall needs and wants as human beings. Good management practices will lead to lower turnover rates as evidenced by the work of Jiang, Baker and Frazier (2009) with Chinese manufacturing workers.

The Confucius principles seem to have had a positive influence on the leadership of Chinese respondents in the automotive industry since their scores for task and relationship orientations range in the "high" or "very high" category. The scores of Chinese respondents are also significantly higher than their American counterparts in this study. As such, the prediction that a collective or high context culture supported by a belief in Confucianism principles can enhance one's leadership effectiveness has been validated. Therefore, one can say that socialization with the Confucius foundation might enable people to focus

on maintaining a strong network of relationships with others in the workplace. Maybe this is only true because of the obligatory or reciprocal relationships that encourage people to cooperate with each other in order to remain competitive. Diversity of gender and experience on a negotiation team for a Western group would be a plus since the Chinese can haggle, remain patient, focus on the long-term, and make changes to contracts once they have been agreed upon and signed. Female Chinese managers and leaders are highly focused on their tasks and relationship and tend to behave exactly in the same pattern as their male counterparts. Based on a study by Bouffard, Boisvert, Vezeau, and Larouche (1995), women scored higher than men in task orientation in a college sample. Research studies have explored gender differences in management styles (Roziah and Maimunah, 2007) and this study compared the leadership orientation of male and female Chinese from the automotive industry. However, this study shows that Chinese male and female respondents have similar scores on both task and relationship orientations. It should be noted that Chinese males did have higher scores on each factor than their female counterparts. Future researchers can certainly duplicate this study to see if these results hold true in other industries and with larger Chinese samples.

C. *Implications for practice.*

In the United States, oftentimes one manager is able to make the final decision regarding a contract or price; however, in the Chinese culture, consensus is built and agreed upon by the team and not an individual. This consensus building among the team is fully in alignment with the findings of this research and the high scores on relationship orientation. In negotiations, Americans are said to make arguments, while the Chinese are identified as coming from a haggling culture. While the Americans focus on efficiency in each transaction, the Chinese practice patience since they focus more on the importance of "saving face" and long-term relationships. Males and females in this Chinese automotive industry seem to have similar leadership orientations and are likely to be equally successful in high ranking positions. Due to their high focus on a relationship orientation and familial connections, the following are some general recommendations for those who do business with the Chinese:

- 1) Network and find the right people to associate with as friends and business colleagues.
- 2) Think long-term and build the relationship.
- 3) Be patient and make decisions based on facts.
- 4) Consider the needs of your counterparts to have a win-win outcome.
- 5) Remain open-minded and flexible.
- 6) Being vague is okay and avoid the use of "no" responses.
- 7) Control your emotions and be objective.
- 8) Think of a contract as a commencement of the relationship as it is likely to be a moving target.
- 9) Have a diverse group of people, including males and females, on your negotiation team.

When doing business with the Chinese, it is a must for a person to think long-term and build the relationship, remain open-minded and flexible, and control his/her emotions while speaking objectively.

VII. LIMITATIONS OF THE STUDY

For comparison purposes, the authors were not able to obtain responses from the American automotive industry for this paper and thus used the data from the general population in the United States. The authors acknowledge that these general responses from the U.S. population are not comparable to the working professionals in the Chinese Automotive Industry which came from one company and these workers might have received specific training or conditioning in the organizational culture that would influence their leadership orientations. So the differences obtained in this study might not have stemmed from cross-cultural differences; rather, the differences might arise from very different samples of people who (a) occupy different positions in the organizations, (b) work in different industries/sectors, and/or (c) other demographic differences, such as age, education, gender.

Furthermore, there are several other limitations to this study and the small number of responses from the Chinese respondents, especially females, is one of them. Since the automotive industry is typically made up of more males, the low number of female responses was expected. It should be mentioned that this study is not necessarily representative of over one billion Chinese people who may have different religions and cultural practices. Rather, readers and researchers should see this study as a pilot study starting with the Chinese respondents in one automotive firm. Future researchers should attempt to include more females and then compare the results with others in different Chinese automotive companies. One specific limitation is the fact that this sample of Chinese respondents from the automotive industry was compared with a convenient population of Americans. Future studies can compare populations with similar working backgrounds and demographic variables in these two countries.

While the Chinese respondents in the automotive industry seem to have a significantly higher focus on the relationship orientation, this might be true simply because they understand the importance of maintaining a good connection with their vendors, suppliers, and customers. They also understand the importance of remaining competitive in the global market since their scores on the task orientation was significantly higher than the American respondents. It is possible that these respondents are more task and relationship oriented simply due to chance or due to the years of socialization in the high context, collective Chinese culture. However, these results cannot be generalized to the total population as it is based on a small number of working adults in one Chinese firm. As such, future studies can focus on increasing the sample size with similar working populations in China and in the United States. Future studies can analyze the responses based on different training backgrounds and categories of age to see if having more

experience or being older makes a difference in the task or relationship orientation scores of respondents from high and low context cultures. Finally, researchers should also note that management experience may also be a variable or factor in the scores of respondents. Therefore, future studies should compare those who have five or more years of management experience with those who have never been a manager to see if this is a significant variable in the task and relationship orientation scores of respondents.

VIII. CONCLUSION

This study has shown that collectivistic Chinese respondents, who are high context and socialized with the principles of Confucianism, are highly focused on their relationships, while also highly oriented toward completing their tasks. Of course, people usually function in the way that they are accustomed to working based on their cultural upbringing and socialization in the culture or organization. These respondents from the automotive industry certainly understand the importance of getting the job done, while maintaining a good relationship with others. Overall, despite a group's collective orientation in a high-context culture (such as these respondents from China), this research has implied that they can be highly focused on the relationship while completing their tasks to remain globally competitive. This study has demonstrated that relationship-oriented people are not necessarily letting go of their deadlines. Chinese male and female respondents have similar scores on both task and relationship orientations. These high relationship orientation scores can also mean high levels of emotional intelligence which is essential for management and leadership positions in today's stressful workplace. As such, male and female Chinese professionals will be equally effective in leadership and management roles with local and multinational corporations.

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Enhancing The Learning Of Students Of Higher Education Through Innovative Communication Modes Of Knowledge: Educator's Support Mode

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Abstract-Learning is not a spectator sport. Students do not learn much just by sitting in classes listening to teachers, memorizing pre-packaged assignments and spitting out answers (Arthur W. Chickering and Zelda F. Gamson, 1987). The educators should transfer their knowledge in a way that students should engross and should be able to apply it in the relevant fields to solve the practical problems in life or in their respective professional fields. This study assess different ways of disseminating knowledge in higher education and on the basis of the conducted survey, an Educator's Support Model is proposed to enhance the capability of the educator to decide his/her teaching methodology and hence the students learning.

A 88-item survey was conducted through well structured questionnaire. A field test concluded that the instrument was reliable (97%) and content was validated by a panel of experts. The survey was conducted on the students of higher educational institutions. 125 students responded out of which 100 replies were considered for the study. Statistical tools were used to analyze the data. Student's learning capability depends not only on intelligence and prior education but also his/her learning style preference. In the era of Information and Communications Technologies (ICT), many new teaching methods and tools have evolved. The educator should very circumspectly decide the approach and tools which complements to transfer of knowledge. This paper suggests a dynamic model which assists the educator's of higher education to decide his/her approach for the specific course which will realize the task to its maximum, of transferring knowledge and learning. The eight aspects of learning and skills acquired during a course have been identified which are: Knowledge Acquisition, Understanding Logic, Problem Solving Strategies, Individual work, Research Capability, Doubt Clarification, Communication Skill, Interest/Attentiveness. A survey was conducted on the learners to find out which teaching mode tends the most to the above respective aspects which served as a basis for designing an educator's support model.

Keywords: Knowledge management, Knowledge Acquisition, Information and Communications Technologies (ICT)

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I. INTRODUCTION

Over the years, an institution's educators attain knowledge while performing their specific tasks which resides in their minds and that has not been put in structured and documented based form. That knowledge been acquired along the years doing research and solving problems and spending numerous hours in studying. It is one of the most difficult task to transfer this knowledge to others but on the other hand its one of the most valuable asset for any organization/society to lose.

Kidwell et. al. (2000) have described that Knowledge is classified mainly in two kinds: *Explicit* and *Tacit*.

Knowledge is classified mainly in two kinds: *Explicit* and *Tacit*. Explicit knowledge (sometimes referred to as *formal knowledge*) can be articulated in language and transmitted among individuals. It is relatively easy to communicate to others in words. Explicit knowledge is:

- It can be expressed in formal, shared language (Kidwell et al. 2000). Examples include formulas, equations, rules, and best practices. Tacit knowledge (also, *informal knowledge*), personal knowledge rooted in individual experience and involving personal belief, perspective, and values. It accumulates primarily from one's experience and is difficult to codify or express in words. It is often viewed as the real key of getting things done and creating new value. Tacit knowledge is:
- Personal
- Context-specific Difficult to formalize Difficult to communicate More difficult to transfer.

There is a difference in ranking in two universities with identical numbers of faculty, degree programs, expenditures, and enrollment as those surveys conducted by U.S. News and World Report. The difference is probably made by the standard of learning of students who pass out, how learned/efficient they are and how do they perform in the industry, how they resolve/tackle the challenges. The amount of knowledge attained by the students is the test of the educational quality. Educational Institutes endeavor is to transfer both explicit and tacit knowledge since both kinds of knowledge is important for the intellectual growth of the students.

II. TEACHING AN ART OF KNOWLEDGE COMMUNICATION

Leo P.K. Yam(1986) has mentioned that Aristotle (384-322 B.C.), a great Greek philosopher, once remarked that successful human interaction depends on rhetoric communication. He suggested that three major modes of proof be studied (Scheidel, 1967):

A. Logos

The speaker must be able to provide accurate evidence to substantiate his argument, and the theme of the presentation must meet the objectives of the planned message in a logical manner — deductively or inductively. All facts, ideas and supporting statements stem from a well-organised plot.

B. Ethos

The speaker must believe what he says. His personality should be congruent with what he instructs, verbally or and nonverbally. In order to be effective, the speakers should speak in "good-will" terms and possess a refined and distinct character, respecting himself and others. In other words, he must be trustworthy.

C. Pathos

The speaker should be emotionally stable, however. Virtually, pathos is an emotional drive and disposition. The message being conveyed should appeal to the hearts and minds of the audience.

Leo P.K. Yam(1967) has explained that communication within the teaching learning process is further complicated by the fact that the teacher, as a person, is in many respects different from the student. There are factors which affect the fidelity of the teaching learning communication process; for example, the teacher may use different ways to elicit responses (communication skills); the teacher's own attitude may influence the viewpoint of the student (attitude); the teacher must teach something which is based on the student's past experiences and perception (knowledge level); the teacher must pay attention to the environment and background in which the student learns, i.e. (social-cultural systems) because the student may not be able to understand things derived from foreign cultures. The teacher, when planning the lesson and communicating with the student, must evaluate these elements in communication before, he selects materials and teaching media. In university teaching, and learning situation, the art of communication must not be overlooked.

II. TEACHING AND LEARNING

As discussed, there are different types of learners in a same class and they prefer different kinds of mode of knowledge transfer. In this age of Information Communication Technology (ICT), educators are overwhelmed by the different tools available for teaching. However they are faced with equally myriad types of learners who come from diverse backgrounds and respond to different learning stimuli very differently. The challenge for the educator is to select the optimal set of knowledge delivery techniques and seamlessly integrate them in a manner which maximizes on

each of the learning objectives that he/ she has set. This state is depicted in the Fig 1.

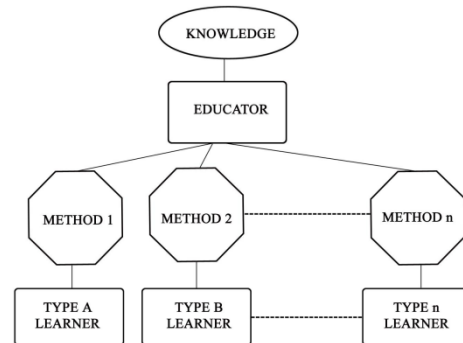


Fig. 1 Various options available to the educator

In any form of teaching and learning situations, learning cannot take place unless objectives are clearly stated and defined. Bloom's taxonomy and the three domains of instructional objectives (Bloom, 1956) should be studied when a lecturer plans his lectures:

The Cognitive Domain-The students are expected to:

- interpret and understand the lectures;
- analyze the content critically;
- reproduce the content deductively or inductively, or modify it;
- synthesize or summarize what has been taught, from general to specific.

The Affective Domain- The students are expected to:

- receive, respond, appreciate and evaluate what has been learned based on their attitudes and beliefs,
- make their own value judgments,
- feel the impact of the message.

The Psycho-motor Domain- The students are expected to acquire, act and perform movement skills e.g. to able to write, read and speak, to dance, to walk and to move about through their sensory motors;

Research has been done on the question "How is it that the very same curriculum, classroom activities, or teaching behaviors can leave some learners feeling excited and their needs well met, while others feel deserted or lost?" by Eleanor Drago-Severson, Deborah Helsing, Nancy Popp & É Robert Kegan, Maria Broderick, Kathryn Portnow. They have explained the reason behind this fact is that in such cases, teachers may unknowingly be using materials or teaching strategies attuned to one way of knowing while neglecting others.

III. EDUCATOR'S SUPPORT MODEL

To enhance the capability of the educator to support every student in the class an Educator's Support Model has been proposed. An educator can employ two or three modes of teaching a course to augment the learning of majority of students. Eight foremost aspects of learning and skills acquired by the learner during a course have been identified which are:

- Knowledge Acquisition
- Understanding Logic
- Problem Solving Strategies
- Individual work
- Research Capability
- Doubt Clarification
- Communication Skill
- Interest/Attentiveness

.No.	Factors	Cronbach Alpha
1.	Lecture	0.921
2.	Lecture with Discussion	0.945
3.	Brainstorming	0.890
4.	Video Tapes	0.905
5.	Class Discussion	0.907
6.	Small Group Discussion	0.915
7.	Case Studies	0.887
8.	Lab./Practical	0.873
9.	Role Playing	0.795
10.	PBL	0.866
11.	Work Sheets	0.886

A survey was conducted on the learners to find out according to them which teaching modes supports the most to the above mentioned criteria. There are many ways/modes through which an educator can transfer his/her knowledge. The following choices were given to the learners to rate them according to their effectiveness corresponding to the particular criteria:

- Lecture
- Lecture with discussion
- Brainstorming
- Videotapes
- Class Discussion
- Small Group Discussion
- Case Study
- Laboratory/Practical Classes

Role Playing The overall reliability of the questionnaire was 0.973 and for the different factors shown below:

Table 1: Reliability of the questionnaire

- Problem Based Learning Worksheet/Assignment

An educator should be clear about the objectives before taking the course i.e. student should not only listen, memorize and write the principles, theories, related text in the exam but he/she should be ready to take the challenges of a particular field in the real world e.g.

- An objective of a programming language (C, C++ etc.) course should be to develop the abilities in the learner to design his own software rather than memorizing the rule and syntax of the language.
- A scientific student should understand the logic and should be able to solve the problem and must have attained the ability and attitude to conduct the future research at the completion of the course rather than listening or cramming the theories and formulae and writing them in to the exam.
- A management student should become proficient in communication skills and in solving problems practically while acquiring the knowledge about the subject.

An educator should emphasize on Active Learning so that the learner should not loose the interest in the course and remain attentive in the class. The educator should very circumspectly decide the approach and tools which complements to transfer of knowledge. This paper suggests a dynamic model which assists the educator's of higher education to decide his/her approach for the specific course which will realize the task to its maximum, of transferring knowledge and learning. A survey was conducted on the learners to find out which teaching mode tenders the most to the identified criteria.

This serves as a basis for designing an educator's support model which will enhance the capability of the educator to decide his/her teaching methodology and can help learners to become power learner.

The learners want to discuss the more while acquiring knowledge with educators and peers. So the educator introduce more discussions in his/her curriculum.

EDUCTAOR'S SUPPORT MODEL

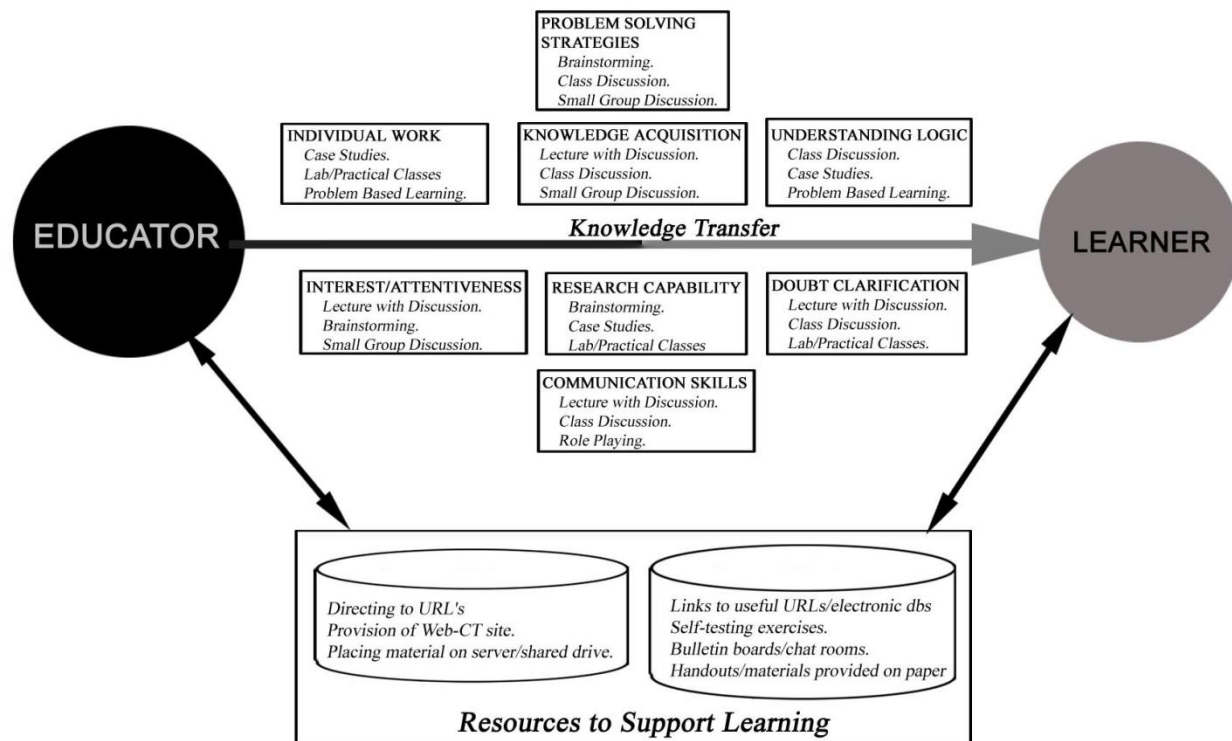


Fig. 2 Educator's Support Model Knowledge Acquisition

The learners have shown the maximum interest in the following methods in case of knowledge acquisition as shown in Fig. 3:

- Lecture with Discussion

- Class discussion
- Group discussion

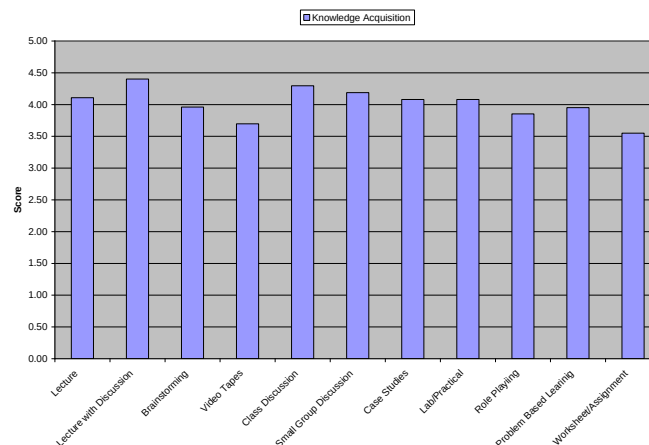


Fig. 3 Modes preference for Knowledge Acquisition

A. Understanding Logic

In a survey the following top three ways are chosen by the learners for understanding logic are:

- Case Studies
- Problem Based Learning
- Class Discussion

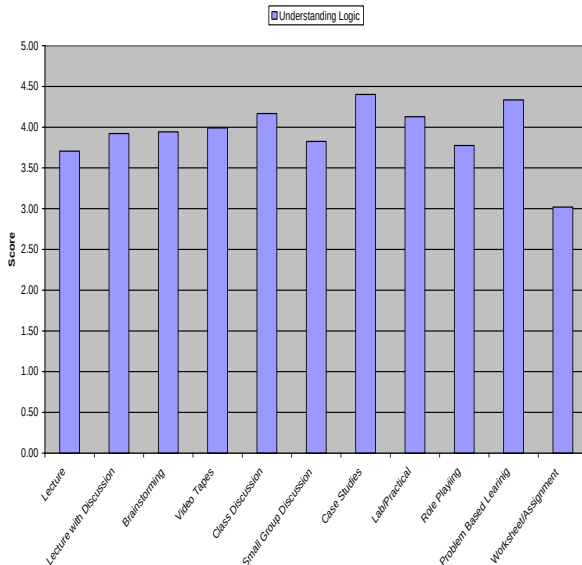


Fig. 4 Modes preference for Understanding Logic

The courses which are logic oriented, with lectures the educator can also introduce case studies in the curriculum and further can have class discussions for the same. Alternatively, learners can be given authentic problems or similar to those faced by professional in their respective fields e.g. a computer student can be given a code to debug or management student should be given a difficult office situation to resolve.

B. Problem Solving Strategies

The learners have chosen a conference technique of solving specific problems, amassing information, stimulating creative thinking, developing new ideas, etc., by unrestrained and spontaneous participation in discussion i.e. brainstorming as a best way for the development of problem solving strategies. The following modes can be helpful to cultivate problem solving skills in the students:

- Brainstorming
- Small Group Discussion and Class Discussion
- Case Study

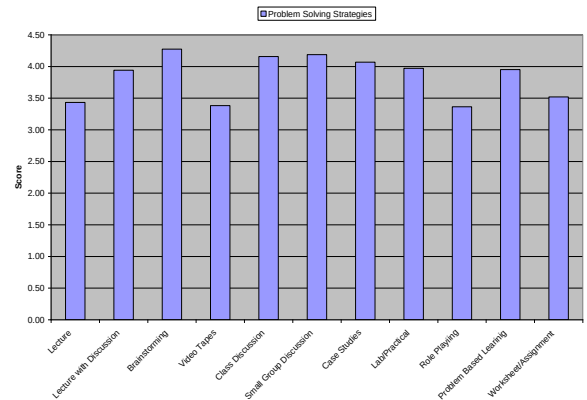


Fig. 5 Modes preference for Problem Solving Strategies

C. Individual Work

In a course, students should be encouraged to involve independently not only in groups as they have to take the challenges of their own accord in the real world. The practices which can be helpful are as follows:

- Laboratory and Practical Classes
- Problem Based Learning
- Case Study

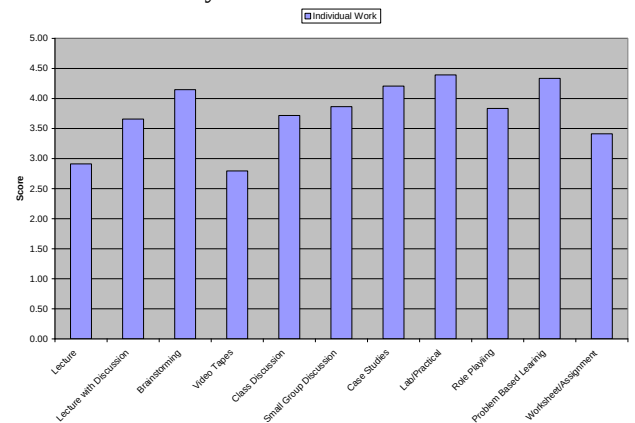


Fig.7 Modes preference for Research capability

D. Doubt Clarification

While taking new course, learner can have doubts about some points about which they are uncertain or skeptical which can lead to wrong understanding or later lack of interest in the subject. A definite effort should be made to clarify the student's doubts. The following ways can be helpful in the process:

- Laboratory and Practical Classes
- Class Discussion
- Lecture with Discussion

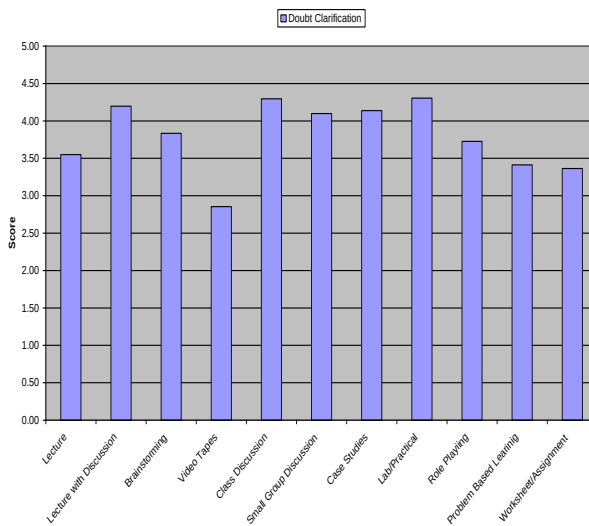


Fig. 8 Modes of preference for Doubt Clarification

E. Communication Skills

Communication is a basic trait to express oneself, building good business and having good relations with others in fact it affects every aspect of human interactions. This is one of important trait that should be developed in the students to be successful in their professional lives. He should be able to express himself, put his ideas in the meetings, able to explain solutions, give presentations and speeches. The involvement of the students in the following can be helpful to boost their communication skills:

- Class Discussion
- Role Playing
- Lecture with Discussion

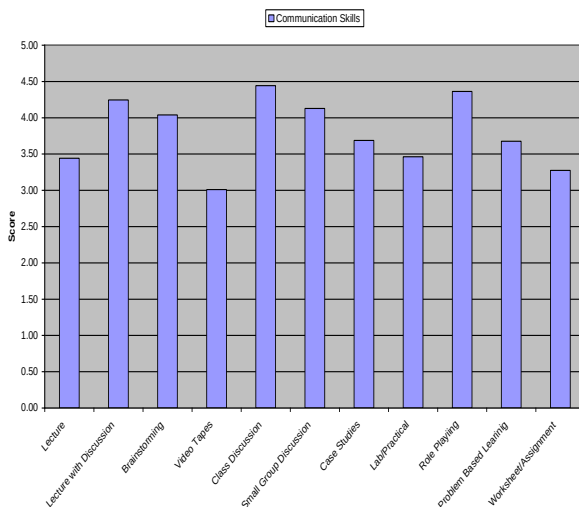


Fig. 9 Modes preference for Communication Skills

F. Interest/Attentiveness

A learner's state of curiosity or attention towards the topic/subject should be maintained through out the lecture and course period. A learner's interest can be maintained if the educator makes them to participate in activities and respond. The following can help:

- Brainstorming
- Lecture with Discussion
- Small Group Discussion

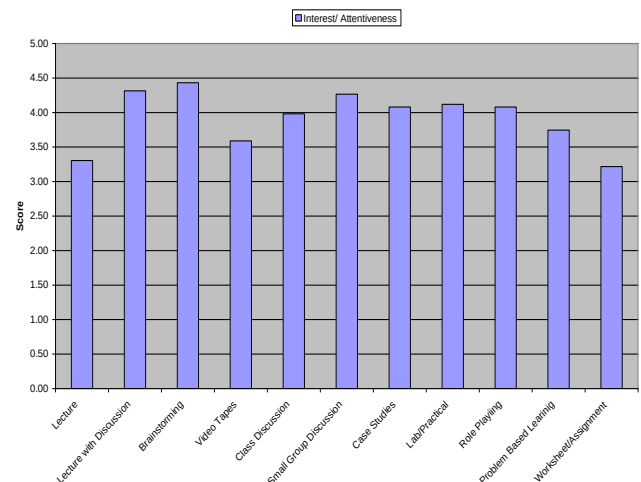


Fig. 11 Modes preference for Interest/Attentiveness

The learner's choices of methods which make them engrossed in the course are shown in Fig.9.

G. Resources to Support Learning

In addition to the appropriate choices of teaching methods, the educators can direct the learners to the following resources of information and useful study material:

- Direction to URLs
- Provision of Web-CT site
- Provision of other website
- Placing material on server or any shored resource
- Handouts/material provided on paper
- Bulletin boards/chat rooms

IV. CONCLUSION

An educator has significant opportunity to use new concepts of innovation in education supported by ICT to optimize the transfer of knowledge. No matter which mode instruction, and whether teaching takes place in elementary or secondary or higher education, interpersonal communication should be considered as the most essential factor

with a view of achieving instructional objectives and helping our young people to become a "whole person" (Yam 1987). But implementing new ways wisely and according to the need of the learners and course objectives can make a big difference in the quality of education. References

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The Promises and Challenges of Privatization in Least Developed Countries (LDCs)

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Abstract- One major manifestation of New Public Management type of public sector reform has been privalization. Donor and aid agencies continue to pressurize countries – developed and developing alike – to privatize their public enterprises based on the rationale that privalization will reduce budget deficit, will make the enterprises profitable, will lower prices for customers and improve quality of service. This paper argues that although theoretically possible, the potential benefits may not be realised in LDCs where converting a public monopoly into a private monopoly may be counterproductive. The answer lies in either public enterprise reform to achieve both efficiency and social objectives or in accompanying privatization with liberalization and competition.

Keywords -Public Enterprise, Privatization, Liberalization, competition

I. INTRODUCTION

The 1960's and 1970's witnessed an enormous expansion of government intervention in developing countries when the public sector was seen as a major contributor for economic growth and socio-political stability. Public enterprises were set up to serve a variety of economic, social and political objectives (see Wortzel L.H & Wortzel H.V; 1989, Cook P & Kirkpatrick C; 1988, and Bienen H & Waterbury J; 1989). Bienen and Waterbury identified the rationale and goals for setting public sector enterprises in LDCs as for: serving social-equity objectives for distribution of income; job creation and rural development; infrastructure development and other 'lumpy' investments like steel and petrochemicals; collection of monopoly rents, especially on minerals; filling in for a deficient private sector; taking-over failed private enterprises; countering capitalist monopolies; nationalising foreign or indigenous private enterprises; strengthening economic sovereignty, especially vis-à-vis multinational corporations; and building national strength through defense sector. The span of public sector in certain LDCs like Algeria, Egypt and Zambia has spread so much that at various moments in the 1980's, public enterprises were accounting for between 40% and 60% of GDP (Nellis J & Kikeri S; 1989).

However, the weaknesses of public sector institutions and operations subsequently began to show, especially after the world economic crisis of the 1970's compounded by the two oil shocks of the decade. Although one must be cautious in making generalisations, public sector enterprises have increasingly failed in meeting their objectives. Even those that were considered as successes, observed by Mary Shirley's research and highlighted in the 1983 World Development report, 'have since then gone wrong and are

no longer thought as successes (Summers L. in Galal A. *et al*; 1994:13). In fact, the public enterprise sector in LDCs has frequently failed to generate an investible surplus and instead has created a budget burden for the public sector. The overall budget deficits of public sector enterprises in LDCs averaged 4% of GDP in the mid 1970's as compared to an average of 1.7% in the industrial countries (Short R.; 1984 & Floyd R. *et al*; 1984 in Bienen H & Waterbury J; 1989). Following Nellis J & Kikeri S (1989), a 1985 study of public enterprises in 12 West African Countries revealed at the end of the 1970's that 62% had net losses and 36% had negative net deficits varied between 66% and 76% (Bienen H & Waterbury J; 1989). The results in whether the benefits of public ownership are worth the cost.

Public sector, as has been used in this paper refers to all institutions and operations in which the government has a majority of stakes. One of the major strategy that has been proposed for the reform of the public sector in LDCs is 'privatisation'. Although, the term has been used to mean different things to different people (Adam C *et al*; 1992), for the purpose of this essay 'privatisation' will be taken as 'the transfer of public sector activities to the private sector' (Hemming R & Mansoor A; 1988, Ellis – Christensen, T.;2008). Privatisation is a strategy which has become popular both because it is a felt need for developing countries and because it comes as part of structural adjustment policy package imposed on them by the International Monetary Fund (IMF) and the World Bank.

The aim of this paper being to evaluate 'privatisation' as a strategy for public sector reform in LDCs, this will be done by reviewing the arguments for and against privatisation and outline some of the problems involved in implementing a privatisation programme in the context of LDCs before reaching any realistic conclusion.

Professor Heald D (1990), however, succinctly notes that, 'policy analysis should be built on a proper analysis of the weaknesses of the public enterprise sector.' Indeed, if privatisation is to be an appropriate cure, it must cure the weaknesses in public sector institutions and operations rather than poor performances which are merely the symptoms arising from weaknesses in the latter. The case for privatisation will therefore be made, initially, by looking at the weaknesses in the public enterprise sector of LDCs followed by an investigation into whether or not private ownership is the panacea to the problems.

II. THE CASE FOR PRIVATISATION

A. Causes of Public Enterprise Sector Failure in LDCs

Although Millward's R. detailed examination of studies undertaken on public sector productivity performance in Ides in Cook P & Kirkpatrick C (1988: 143-161) does not reveal that public enterprises are always outperformed by private enterprises, poor performance does occur in the form of productive and allocative inefficiencies.

Productive inefficiency results due to a combination of factors. The most common cause of inefficiency in the public enterprise sector is political interference. In many LDCs the public enterprise sector is an important instrument for political patronage. 'Senior staff are often political appointments with little industrial management experience; employment, purchasing and pricing decisions are subject to political intervention; the boundaries of government and enterprise control are ill-defined and continually shifting. The absence of clearly defined objectives and the limited operational autonomy given to public enterprises inevitably have an adverse impact on the efficient internal operations of the public enterprise sector' (Cook P & Kirkpatrick C; 1988: 12-13). Other causes of productive inefficiency pertain to poorly motivated, badly paid and inadequately monitored managers who may be less interested. Also, because of the nature and importance of public sector activities, labour unions tend to be unusually powerful leading to relatively higher paid employees adding to the cost of production. These factors have combined to reduce the cost efficiency of public production, 'often leading to heavy dependence on budgetary support' (Hemming R & Mansoor A; 1988).

Allocative efficiency is usually defined as a situation in which consumers' needs are met at prices that reflect the cost of provision (Cook P & Kirkpatrick C; 1988:13). Public sector enterprises usually fail to achieve allocative efficiency because, more often than not, they operate in monopoly environments.

Would Things be Different Under Private Ownership?

Public sector enterprises are characterised by productive and allocative inefficiencies which to a large extent explain their poor performance. If privatisation is to be a valid strategy for public sector reform in Ides, it must make possible the improvement of economic performance by eliminating the sources of inefficiency.

Following Hemming R & Mansoor A (1988), a private firm can be characterised as one for which the product market guides prices and output while the capital market (including market for corporate control) controls costs. A firm that cannot sell its products will not make profits; unprofitable firms will go bankrupt or taken over by other firms or management changed. The market, therefore, regulates firms by providing the incentive for them to become efficient. This theoretical rationale for privatisation, although conveying a message of superiority of private ownership, seems exaggerated especially in the case of LDCs.

Certainly, a change to partial or complete private ownership can be expected to lessen the scope for political interference in the enterprise. The enterprise's objectives will be

simplified, overly complex networks of dysfunctional controls will be reduced and the likelihood of arbitrary interference in operating decisions will be lessened (Cook P & Kirkpatrick C; 1988:19). Also, the labour unions influence will be weakened; managers may be better paid, motivated and monitored; the threat of take-over may threaten management to aim at profitability and so on. Each of these changes can be expected to contribute to an improvement in productive efficiency.

Some would argue that the above changes are not conditional on privatisation. Internal reform of the public enterprise is an alternative option for realising the same gains. 'In theory, it is possible to create the kinds of incentives that will maximise efficiency under any type of ownership' (Shirley M; 1983:50). Others like Summers L. in 'A Changing Course Towards Privatisation' (Galal A. et al; 1994: 11-17) would argue that most of the firms studied by Mary Shirley which were successes under reform have since then failed. He would conclude that 'ownership matters'. Mary Shirley herself, in 'The Experience With Privatisation' (1988) was very much in favour of privatisation as opposed to her 1983 views. To the extent that ownership is concerned, therefore, it seems that the balance nowadays is in favour of private ownership, although it must be admitted that this is not always true as in the case of Mexico where change in ownership did not bring much change in the performance of PEs (Weiss J, in Cook P & Kirkpatrick C; 1995:p213-224).

The argument in favour of privatisation is based on the assumption that a change in ownership will impose the discipline of private capital markets on the enterprise thereby forcing it to improve efficiency. 'While this argument may be important in industrial countries, it has limited relevance to Ides where the capital market is typically underdeveloped and denationalisation will normally involve the sale of enterprises to individual purchases; or the introduction of private capital with joint ventures' (Peacock A; 1984 as cited in Cook P & Kirkpatrick C; 1988:19-20).

Private ownership is also based on the assumption that there is a private sector which is willing to invest. This argument seems to overlook the fact that in LDCs resources are often not available to finance privatisation, or interested buyers may be unacceptable, for example, because they belong to particular ethnic or religious groups, or are foreigners. In South-East Asia, for instance, private interests that might be able to purchase public assets are drawn from the Chinese minority. Same is the case in Africa where those with the purchasing power are minority Indians and Syro-Lebanese and in Kenya they are from the 'wrong' indigenous Kikuyu group (Bienen H & Waterbury J; 1989). The risks of selling the 'store' to minorities or unwanted buyers are too high if one is not cautious enough.

Although it may be admitted that private ownership will in general be more commendable than public ownership in LDCs, there is a problem of practical feasibility which may decrease its attractiveness as a strategy for the reform of the public sector. For the sake of argument, let us assume that the problem of capital market can be solved. In that case if

the privatised firm is a monopoly as it was under public ownership, the latter may only impose an incentive to lower costs solely to improve profits rather than benefit consumers through lower prices which, in fact, should be one of the objectives for privatisation in Ides.

Indeed, converting a public monopoly into a private one without any change in regulatory regime will only provide the privatised enterprise the incentive to improve productive efficiency but no reason whatsoever to make prices reflect costs. Newberry D in 'Comments on the Jigsaw Puzzle' (Galal A. et al; 1994:115) beautifully puts it as '...the private sector is better at restructuring the public sector. I would argue that when it comes to breaking up monopolies, that is, patently untrue. The private sector has a very strong vested interest in preserving, creating and generally trying to reassemble monopolies, and handing one over to the private sector is putting the fox in charge of the henhouse.' So, breaking up monopoly enterprises before privatisation is absolutely central to trying to improve the competitive environment, especially in LDCs where the interest of the vast majority of the poor has to be protected. Such findings are also confirmed by recent studies (Li, Wi and Xu 2004; Ros A.J, 2004)

The case for privatisation as a strategy for the reform of the public sector in LDCs is, therefore, a controversial one. Following the above discussions, it seems that many if not the major problem/s associated with public enterprises arise not from the fact that the argument in favour of private ownership is not to be totally ruled out. However given the thinness of the capital market in LDCs and other constraints which we will see alternative to privatisation, although such an environment should be central to privatisation also. Privatisation with competition, however is not a simple issue and is likely to face major complications.

III. PRIVATISATION AND COMPETITION

Most public enterprises are not subject to national or international competition. Many benefit from the statutory protection of the monopoly status or some other artificial barrier to entry by competitors. As we have already argued, privatisation in the form of divestiture will not succeed in making public enterprises efficient unless the process is accompanied by deregulation so that market forces are allowed to influence market behaviour. In this context, it can be argued that deregulation on its own is inappropriate. 'Indeed, market concentration may increase if deregulation permits the monopoly firm to engage in anti-competition, predatory activities designed to eliminate competing firms by, for example, reducing prices below cost in markets which rivals are attempting to enter' (Vickers J; 1984 as cited in Cook P & Kirkpatrick C; 1988:p22-23). Deregulation, therefore, be it in the private or public sector must be accompanied by appropriate regulation to limit predatory or anti-competitive behaviour. In fact, at times the government must even use selective protection and provide government support to infant industries to allow firms to become established and through time competitive before complete deregulation and liberalisation is undertaken (Cook P & Kirkpatrick C; 1988:24). The issue of

privatisation is, therefore, not only one of divestiture or divestiture with deregulation but also one of timing and sequencing for the process, and paradoxically, accompanied by some other forms of regulation to ensure that set objectives are met.

Following Hemming R & Mansoor A (1988), for a variety of reasons such as the need to generate maximum revenue or to secure compliance of management and workers, it may be thought appropriate to restrict competition at the time of privatisation, a protected monopoly being more attractive for sales. Still following Hemming R & Mansoor A, not only does this call into question the motives of a privatisation programme, it also makes it more difficult to believe that liberalisation will ever take place. The maximum efficiency gain will result from privatisation with deregulation. Governments of LDCs are likely to face a policy trade-off between economic and financial objectives when their immediate priority is the need for money. Given the poor performances of public sector organisations in LDCs governments may be just too tempted to provide monopoly status to firms to be privatised thus putting the fox in charge of the henhouse as we have already argued.

To the extent that public ownership reflects circumstances in which markets do not work well or produce outcomes that are considered socially or politically undesirable, removing barriers to competition would be insufficient or inappropriate. Following Hemming R & Mansoor A (1988), natural monopoly, for example, is a market outcome; to introduce competition in a monopoly setting, the market has to be redefined. One solution is to make the right to run a natural monopoly the object of competition by auctioning franchises to the private sector. Also, some activities associated with a natural monopoly such as maintenance can be contracted out has been successfully employed in a wide range of public services, such as street cleaning and garbage collection. To the extent that core activities of natural monopolies are inherently non-contestable, because they involve large national networks, public ownership is likely to remain the most efficient way of regulating such activities in LDCs where the social objectives of distribution to the large number of poor people need to be given some priority. Privatisation even with competition, therefore, is not likely to always be the best possible strategy for LDCs, especially when it comes to natural monopolies.

Social objectives would also be subjugated in a private market where there is a case for it. The public sector can support loss-making activities of social value through cross-subsidisation by profit-making concerns. In a liberalised market, the private sector will undertake only profitable activities and leave social needs to be met by other means. In such cases, the public sector may still have to intervene by payment of subsidies or the like to provide essential services say to sparsely populated areas where it is unprofitable for the private sector to operate. The issue in such a case should be one of cost-effectiveness of different types of interventions (Hemming R & Mansoor A; 1988). Having said that, it can be deduced that privatisation alone will not eliminate or considerably reduce the need for government interventions in LDCs.

Privatisation, therefore, even in its best possible form, privatisation with competition, does not really solve the problems of public sector in LDCs. Putting it into practice is not only complicated but the incentives of doing it wrongly are also quite high in LDCs. Setting the right regulations, contemplating more effective alternatives to privatisation, deciding about the minimum level of government intervention given widespread poverty and market failures, among others, are some of the important considerations that make privatisation a risky strategy if wrongly handled. Following the above discussions it seems that privatisation is not very much in the interest of LDCs at least in the short run. Privatisation, however, has other objectives in LDCs that does not totally eliminate it as a strategy for public sector reform in the latter countries.

IV. OTHER OBJECTIVES OF PRIVATISATION

While the prime objective of privatization is to improve the performance of the public enterprise sector in LDCs, it has got other important objectives. The most important of these objectives is that privatization, in most developing countries is, in part, a response to the need for fiscal austerity and is designed to reduce deficits generated by state enterprise (Bienen H & Waterbury J; 1989). Still following Bienen H & Waterbury J, given that LDCs usually have large external debts relative to GDP, it is crucial that they maintain their credit worthiness and access to external capital. Budget deficit reduction may be the quickest and most direct route to improving public finances and reducing inflation. Inflation reduction will protect efforts to expand exports through currency devaluation, and export expansion may be a measure of international competitiveness.

Some may argue that deficit reduction through asset sales is only temporary. Following Hemming R & Mansoor A (1998), rather than being a structural measure akin to a tax increase or an expenditure cut, an asset sale is more closely related to bond financing in its impact. In both cases, there is an implicit commitment to raise additional revenue in the future--- in the case of an asset sale to replace forgone income, and in the case of bond issue to service debt. Only if an enterprise is run more efficiently and profitably in the private sector, will the budget benefit from privatization on a permanent basis.

Governments can try to attain other socio-economic objectives by privatization viz.: relieve administrative and financial burden; balancing national budgets by eliminating/reducing subsidies to public sector; encourage popular capitalism by wide-shareholding - 'a nation of shareholders'; reduce taxes and thereby stimulate the economy; stimulate economic growth by encouraging entrepreneurship; development of capital markets; improvement of managerial performance and business efficiency; eliminating bureaucratic and monopolistic tendencies of public enterprises; encourage foreign direct investments by liberalizing the economy, among others. These objectives are not to be considered as ends in themselves. They are only means to ends---the real end being surplus cash generation for further growth of the

enterprises and the economy and consequently to improve the quality of life of the population at large (Adam C. et al; 1992:8).

Mauritius is one country which has successfully adopted such a strategy and taken the opportunity to attain the above objectives, but the extent to which Mauritius is a Idc is debatable. Attaining the above objectives in a Idc will depend on the realities of the country depending on the availability of private capital, the extent of market failures, the ability of Idc technocrats and institutions to handle a privatization strategy and so on. In fact a recent survey covering the post - 1980 period found that partial or total sale of public enterprises had occurred in only 15 developing countries (excluding Chile and Bangladesh) and involved fewer than hundred enterprises. 'In most cases the privatized firms were small in terms of asset value and employment, and had previously been in private ownership' (Berg E; 1995 as quoted in Cook P & Kirkpatrick C; 1988: 28). Because of obstacles, the pace of privatisation is projected to be slow in LDCs however much strong a case for it.

V. OBSTACLES TO PRIVATISATION IN LDCS

Part of the explanation for this slow progress is the few enterprises that are actually suitable for privatization, the practical difficulties in effecting privatization, and the socio-political obstacles to carrying through this type of programme, especially in LDCs. Indeed, many of the financial-lossmakers may not be attractive to the private sector and we have already argued resources are often not available to finance privatization, or interested buyers may not be acceptable because they come from unacceptable groups. Birdsall N. in 'The Jigsaw Puzzle' (Galal A. et al; 1994: 101-110) notes that there are two ways to characterize these difficulties.

First, there is a political problem because the gains are diffused. No interest group can know in advance that it will be certain to benefit from privatization, but the losers-to-be know who they are---the workers, the bureaucrats, the managers and all other interest groups involved with the public enterprises. Privatisation is likely to lead to resistance from interest groups who will be negatively affected even if the latter may be in the interest of the country. Given that such unpopular measures may be equivalent to political suicide, governments may be very much unwilling to go for it just to maintain power and ensure political continuity. Rajiv Gandhi's attempts to liberalise and deregulate the economy, for instance, saw 'India's democratic system producing paralysis'. Same is the case in Egypt, Turkey, Tanzania and Algeria where the coalitions between interest groups and the respective governments have been remarkably stable.

The second difficulty is that in many LDCs there may be no competitive private sector or an underdeveloped one into which to privatise enterprises, and getting one established requires all kinds of institutional development first---contract enforcement, legal framework, a reasonable capital

market, among others. In Nigeria, for instance, where 92 companies, valued between \$2 and \$3 billion was being considered, it was virtually out of question that the local stock exchange could handle the share issues (Lewis; 1998 in Bienen H & Waterbury J; 1998). Let alone setting the appropriate institutions, most LDCs face a shortage of technocrats capable of managing a reform process and setting the regulatory framework. And, the situation is worse if the process is carried out in an atmosphere of crisis (Bienen H & Waterbury J; 1998). In Turkey, for instance, it took three months to find a general manager for Sumerbank, a large public enterprise for privatization, and to begin what is envisaged as a two year process of corporate restructuring before privatization.

So, the bias is not only political, it is also institutional in settings where there is a tremendous scarcity of people with the necessary know-how. So, even where the benefits may be potentially enormous, so are the difficulties in reaping them in LDCs. 'Just doing the privatization at all is likely to be a daunting task, let alone doing it right' (Birdsall N; *ibid*).

VI. CONCLUSION

What is the conclusion therefore following the above discussions? It may be true that public sector organizations have greatly failed in meeting their objectives. The case for privatization, at least on economic grounds, is, however, not as clear as it is often made out and the instances where it is appropriate are frequently limited in LDCs. Its justification rests heavily on grounds of efficiency and its success on accompanying measures to promote a competitive environment as evidenced even by recent research in Telecommunications Sector around the world (Li, W and Xu, 2004) 'While the creation of competition with or without privatization is central to improving efficiency of an industry and the economy, it is probable that the public sector will remain large throughout the world' (Hemming R & Mansoor A; 1998). This will be especially the case in LDCs where market failures are more widespread and the non-economic benefits of public ownership tend to take greater significance. Even where there may be a strong case for private ownership, economic, socio-political and institutional obstacles in LDCs are likely to slow down the pace of privatization, let alone the incentives of doing it wrongly. As Handoussa H in Galal A. et al. (1994: 115-117) notes, 'for the least developed countries, privatizing on a large scale is a luxury because of the scarcity of entrepreneurial skills and private savings and the greater number of people living in poverty.'

Privatisation, nevertheless, does have some benefits that are likely to come with it if properly handled, and done at a time when LDCs will be ready for it. There are other alternatives, like contracting out and franchising, to radical change of ownership for which LDCs do not seem to be prepared. All these lead me to conclude that the arguments for divestiture of public enterprises in LDCs should be carefully examined on a country basis and appropriate alternatives considered.

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Role Of Farmers' Club As A Model Micro Finance Institution For Rural Areas: A Case Study Of Some Selected Farmers' Club Operating In Assam, India

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GJMBR Classification (FOR)
140201,140104

Abstract- Economy of Assam is mainly based on agriculture and some agriculture based small scale industries. Majority of the population (more than 70%) of Assam is based on agriculture. No such big industries are visible except the petroleum industries which are coming up in the govt. sector. There are some tea industries operating in the upper Assam districts. The condition of agriculture productivity is also not up to the mark as most of the cultivators are engaged in agricultural activities with some traditional tools and equipments. Technological development in agriculture has not yet adequately touched the agriculturist from this state. It is because of land holding pattern, financial condition, lack of awareness about latest development takes place in this sector, some other infrastructural bottleneck etc. The concept of Farmers' club may show some positive results to the agriculture sector of Assam.

Farmers' Club is a voluntary organization, which is organized by rural branches of bank with the support and financial assistance from NABARD for the mutual benefit of the banks and concerned rural people. The banks and other promoting agencies are covering the rural people engaged in agricultural and agriculture base activities.

The paper has dealt with the brief profile of the Farmers' Club programme launched by NABARD and the role played by the selected Farmers' Clubs to achieve inclusive growth in the study area by selecting three FCs as a case. It is based on primary data collected from some farmers' club operating in Assam. Moreover some secondary data has also been used in the study. It has been found that the FCs are not only functioning for creating economic benefits of the members but also engaged in some social welfare activities. The study has come out with a model for successful implementation of the FCs in rural development. Some practical suggestions also been given to make it more practical.

I. INTRODUCTION

India is a rich country with poor people as about 70% of the total population is earning or supporting their livelihood from agriculture and some other allied activities. The govt. is giving lot many facilities to the small and marginal farmers like subsidized loan, manure, free seeds etc. Although, the govt. is spending a huge amount for the benefit of the agriculturists but these are not reaching the hands of the actually deserving people. The portion which actually reached the hands of the needy is also not available

in time and as a consequence the people are not very much benefited. There has been lot of improvement taking place in our financial system but the people from the rural areas are not getting the benefits of all these improvement rather many of them are becoming the victim of the traditional money lenders.

Recently, the govt. has started thinking seriously about the rural people so that they can get the benefits of the modern financial system. The intellectuals and the academia are also started talking and working for inclusive growth. The banks were urged to review their existing practices to align them with the objective of financial inclusion in regard to banking services. In many cases we have seen that it is not possible to establish a full fledged financial institution (FI) to work for the betterment of the rural community. For the existing FIs, it is not possible to open a rural branch in remote area with business perspectives. Therefore, it has been thought that if these people can bring to a platform and the FIs approached such forum then it can be expected that the rural people will get something from the sophisticated financial system. The present financial system is doing tremendous job for the formal sector but very few has done for the betterment of the informal sector including the agriculture sector. There is an urgent need to provide a package of initiative for transfer of technology, improving input, use efficiency, promoting investment in agriculture and creating a favorable economic environment in the rural area. The emerging needs in this sector now are adoption of location specific skill and knowledge based technology, promote greater value addition to agriculture product, encouraging new partnership between public and private institutions, technology users and corporate sector, making IT more effective to realize financial sustainability and compete in the international market etc. The NABARD an apex body for financing agriculture and agriculture based small scale industries has come forward with a new strategy, which is known as Farmers' club all over the country. The state of Assam has also been covered by this new strategy to offer financial help to the rural poor.

Economy of Assam is mainly based on agriculture and some agriculture based small scale industries. Majority of the entire population (more than 70%) of Assam is based on agriculture. No such big industries are visible except the petroleum industries which are coming up in the govt. sector. There are some tea industries operating in the upper Assam districts. The condition of agriculture productivity is also not up to the mark as most of the cultivators are

engaged in agricultural activities with some traditional tools and equipments. Technological development in agriculture has not yet adequately touched the agriculturist from this state. It is because of land holding pattern, financial condition, lack of awareness about latest development takes place in this sector, some other infrastructural bottleneck etc. The concept of Farmers' club may show some positive results to the agriculture sector of Assam.

A. *Farmers' Club*

Farmers' Club is a voluntary organization, which is organized by rural branches of bank with the support and financial assistance from NABARD for the mutual benefit of the banks and concerned rural people. The banks and other promoting agencies are covering the rural people engaged in agricultural and agriculture base activities. These institutions are mainly concerned with providing financial resources at the door step of the rural poor so that they can improve their financial condition and can contribute to the economy of the nation. These institutions also organize training program, work shop etc. with the intention of giving knowledge to the rural people on their respective area of work.

These institutions are functioning on five principles to bring development in rural areas through credit circulation. The principles are as follow:

- Credit must be used in accordance with the most suitable method of science and technology.
- The terms and conditions of credit must be fully respected.
- Work must be done with skill so as to increase productivity and income.
- They must contribute something towards savings out of the additional income generated by utilising credit.
- Loan installments must be repaid in time and regularly so as to recycle of credit.

B. *Evolution of Farmers' Club*

The concept of farmers' club came into focus several years ago. But then that was known as "Vikas Volunteer Vahini"(VVV). That was introduced in 1983 as a method of social engineering for inculcating repayment ethics and effective development among rural people. VVV was a program implemented by the rural financial institutions and voluntary agencies, including a few Krish Vigyan Kendras (KVKs) and Agricultural Universities (AU) under the guidance and financial support from NABARD. The VVV program was implemented at village level through a group of volunteers formed as club, like VVV club, Krishak Club etc. The club volunteers work voluntarily for the betterment of villages through a participatory approach. They tried to establish a better banker borrower relationship. They help the banks in their deposits mobilization, credit dispensation and recovery efforts. They propagated the above mentioned five principles among the people, so that rural sector can be developed through credit circulation.

The club volunteers/designated banks assumed respectability in the villages through their exemplary behavior and their activities. They organized training programs, workshop etc. for the proper utilization of borrowed money by the villagers. As a result, people became conscious about the utilization part of credit offered to them. Presently, the VVVs are in existence but newly coming up VVVs are renamed as Farmers' Club. So far their objectives and nature of work are concerned they are almost same.

C. *Mission of Farmers' Club*

Farmers' Club is operating with the mission of Development of rural areas through credit, technology transfer, creating awareness and capacity building.

D. *Organizational Structure of Farmers' Club*

In village/ cluster of villages at least 10 members can form a farmers, club. The maximum number of members is not specified and both male and female can have their membership in the club. It is generally formed in the operational area of a bank with the co-operation and guidance of NABARD and its designated bank. All the members have to work under the regulation of the designated bank and NABARD. This designated bank is also known as Sponsor Bank. In the activities of the Farmers' Club both bank and NABARD offer their help by providing adequate training and necessary funds. Again, they also help the villagers in forming SHGs and they also motivate the people to be more productive

Organizational Hierarchy of the members of Farmers' Club

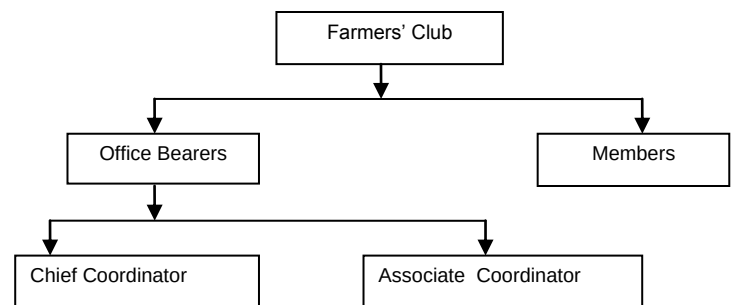


Diagram -1

Every Farmer's Club must have two office bearers, one of them is known as Chief Coordinator and other is known as Associate Co-coordinator. They are elected by club members on a democratic basis for tenure of two years. The two office bearers may continue in their office beyond two years subject to consent of the other members of the club. They may be selected for more than two years if they are able to work properly and the members are satisfied with the services of the office bearers..

The office bearers must be a resident of the area of operation of the club. NGO representative can not hold such official designation. Geographically, the Farmers' Club can expand

its area of operation in more than one village. But the number villages cannot exceed more than five per farmers' club.

E. Functions of Farmers' Club

As the Farmers' Club is a social organization, which provides various kind of services in the rural area specially in relation to agriculture and other agriculture based activities. The functions of Farmers' Club can be summed up as:

- Under the supervision of branch manager of the designated bank, the Farmers' Club have to formulate new schemes for the development
- of rural area and providing necessary facilities relating to it.
- They help the banks to select eligible borrower.
- They help in creating and maintaining relationship among the Farmers' Club, Bank, NABARD, other institution and the villagers.
- They are supposed make a survey in their area of operation for future reference to find out the economic prospect in that area.
- They have to organize loan repayment camp, agricultural fare, animal fare, health camp and other social activities.
- NABARD and other organization like Health Deptt., Development Block etc. should be made aware about different problem facing by the rural people. Over above they should also try to foresee any problem that may arise in the near future. They are also supposed to take remedial action to tackle such present and future problem.
- They are also to assist the promotional agencies and the villagers to make different Govt. schemes like PMRY, SGSY etc. a success.
- They also help the bank in collecting their loan money in time

F. Criteria to be fulfilled to become member of Farmers' Club.

A person can become a member of a farmers' club if he /she fulfills the following criterion:

- A person who has already taken a loan from bank and utilized properly and repaid the amount in time.
- A person cannot be an active member of a farmers' club if he/she is an active member of any political party.
- The person should have goodwill or reputation in his or her locality.
- The person should be able to devote sometime for socio-economic development of the common people.
- The person should take part in socio economic development activities like community work, education awareness program, environment

awareness program etc. organized by Farmers' club and other organization.

There are some additional qualities required to be fulfilled by the office bearers. Such qualities are stated below:

- He or she must possess some special skill and knowledge regarding making and implementation of various plans and programs.
- He or she must be from the same locality (from same village) not an outsider.

G. Duties of the members

- Duties of the office bearers of the Farmers' Club as stated in the NABARD guidelines are:
- He or she has to arrange meetings, discussion etc with the villagers.
- He or she is responsible to arrange meetings with the experts from NABARD, Bank etc. visiting the area or the club.
- He or she has to take leadership in every activities of the Farmers' Club.

H. Duties of the members of the Farmers' Club

- He or she must follow the five principles of the Farmers' Club.
- The people from the area should be informed periodically about various schemes of NABARD and other organization.
- They are to share their experiences of success or failure among the people so that the people can be motivated to work more efficiently.
- Rules and regulation regarding bank loan must be distributed and explained properly among the villagers.
- They are act as recovering agent for the bankers. They are supposed to help the bankers in selecting eligible borrower/s from the area.
- They must try to make themselves a good customer for the banker.
- They are supposed to help in creation of direct relationship between the bank and the borrowers.
- They should also make aware the bankers about the borrower's problems and their financial position.
- They are responsible for maintaining daily records of their activities for ready reference.
- They are to work as a middleman between the rural people and various Govt. organizations like DRDA, Development Block etc.
- They are to maintain a good relationship among other members and the villagers

I. Meetings organized by Farmers' Club

Every Farmer's Club has to arrange twelve meetings annually. But now the number of meetings has been reduced to four. For the purpose of conducting meetings the particular Farmers' club gets financial aid from NABARD. Generally, all the members of the Farmers' Club, Bank

Branch Manager and other experts attend the meeting. Govt. officer, representative of any development organization and other farmers can also attend the meeting. They are to make a time table for the meeting well in advance and all the members are responsible to attain the meeting. Generally following matters are discussed in the meeting.

- Their on going activities and its progress till the previous meeting etc. are discussed in the meeting.
- Whether the eligible person are getting loan or not and the causes of getting or not getting such loan are also discussed.
- The loan repayment position of the borrowers and to review the position of the defaulter if any.
- They also discuss about different inputs required to maintain healthy environment for the agricultural output and animals.
- They also make discussion about the steps to be taken in the next year or meeting for improving performance of the members and other borrowers.
- Any step to be taken in relation to rural development like health camp, awareness camps etc.
- They are to announce about every training programme detail to be held in their area and also to explain the importance of the same.

- History of a successful person is required to bring to the notice of the members so that their success story can be used as a model for success by other person.
- The people should be made aware about SHG with its formation and importance.
- The members are advised to deposit money into the bank periodically so that Farmers' club can become financially sound.
- Discussing all the matters in a meeting makes the system of FCs stronger and it can be expected that the rural people will be really benefited to maximum extent.

J. Financial Support from NABARD

As Farmers' club is a strategy taken by NABARD for the rural and agricultural development of our country. So, NABARD bears the responsibility of it till its 5th year. From the 6th year it has do their activity under the supervision of the designated bank. Farmers' club gets some financial aid from NABARD through its designated bank. The financial support given to the FCs by NABARD for different activities are shown in Table-1.

Table- 1

Sl. No	Name of the program	Maximum eligible grant other than NER	North (including Andaman island)	East Sikkim & Nicobor	Region
1	Maintenance of Farmers' club	Rs. 3000 per Club per year for 3 years.	Rs. 3000 per Club per year for 5 years		
2.	Inauguration	Rs. 5000	Rs. 5000		
3.	Meet with expert	Rs. 1250 per meet for 4 meets for 3 years	Rs. 1250 per meet for 4 meets for 3 years		

Source: NABARD records

II. OBJECTIVES, SCOPE AND METHODOLOGY OF THE STUDY

A. Objectives of the Study

The paper has been prepared to achieve the following objectives:

- To study the brief profile of the Farmers' Club programme launched by NABARD.
- To study the role played by the selected Farmers' Clubs to achieve inclusive growth.
- To suggest some ways and means so that the role of Farmers' Clubs in providing financial support to the rural community.

B. Scope and Limitations of the study

For the purpose of the study the researcher has selected three Farmers' Clubs located in remote area under Dibrugarh District, Assam. Since we could not collect a considerable number of such clubs operating all over the state we have applied case study method. The study is

expected to give some idea and the present status of this programme and its level of popularity and effectiveness in promoting rural economic activities.

C. Methodology of the study

The study is based on both primary and secondary data. Under the primary source interview method and questionnaire method have been used. There are more than 300 Farmers' Clubs in Assam as per official record of NABARD. Out of the total population three clubs have been selected from Dibrugarh District at random and data has been collected by meeting the members of the clubs and other office bearers of the sample clubs with the help of questionnaire. Moreover, data and information have also been collected from secondary sources like books, periodicals, and also from web sites. We have also used some data and information collected from the official records of the NABARD, Dibrugarh District office. Data so collected have been analysed with the help of some

arithmetic tools like ratio, percentage etc and inference has been made on the basis of the analysis.

III. ANALYSIS OF INFORMATION COLLECTED FROM THE SELECTED FCS

Data has been collected from three Farmers' clubs from Dibrugarh District, Assam. The name of the clubs are Surujmukhi Krishak Sangha, Krishalaya Club and Modhupur United Farmers' Club

A. Surujmukhi Krishak Sangha

It is situated in Jokai Khamtighat, which is about 17 Km away from Dibrugarh Town. This area is a purely agriculture base area and majority of the population are engaged in agriculture. The cultivable land of this area is very fertile and suitable for paddy and vegetable cultivation. The people are very much hard working but they are not very much aware about modern tool and techniques that can be used in agricultural to get more output and in some cases lack of financial resources debar them to use available land for maximisation of their output. As a result, the cultivable land remains underutilized and they are not getting optimum output. In this background, at the initiative of some active person with support from the NABARD the Surujmukhi Krishak Sangha came into existence in the month of August, 2005 with eleven members with a view to change the agriculture sector in the area under their domain. With the intention of bringing change in agriculture sector of that village some local personalities like Montu Dutta, Lalon Prashad, Saurabh Gohain and few more from that village have come forward and decided to form a Farmers' Club.

This club was formed with the following objectives:

- To facilitated loan to the rural people at easier terms and conditions.
- To motivate the rural youth for agricultural activities by using modern tool and techniques.
- To make aware the local farmers about the various schemes of NABARD, DRDA and other promotional agencies.

B. Activities undertaken by the Surujmukhi Krishak Sangha (Farmers, Club)

- They organize vaccination camp for cattle at free of cost. The expenses are borne by NABARD and Jokai Veterinary.
- They help in promoting SHGs and they introduce the SHGs with the banker for financial support.
- They are helping the bankers as well as the local people by searching eligible borrower.
- They are encouraging the local people to open saving bank account in bank only at a minimum balance of Rs 10.
- They also organize various sports competition like Football, Cricket, Volleyball etc.
- They cultivate basically chilly, Cabbage, Tomato, potato, pumpkin, paddy etc.
- They have also started some broiler farms.

C. Krishalaya Club

In the month of March, 2006, Mr. Padma Rajkhowa with some other person of Podumini Village, Duliajan has taken the initiative to establish a Farmers' Club and named it as Krishalaya Club. Their Motto is *Karmai Sanghar Dharma, Krikhiyein Raijor Pran (means work is our religion, agriculture is life of the people)*.

The Krishalaya Club is situated at Podumini Bhadoi Panchali, near Duliajan Town of Dibrugarh District. The village is about 10 km. away from Duliajan Town. It is formed with 30 members and geographically they cover 30 villages in the periphery of Podumini Bhadoi Panchali. This club is engaged not only in agricultural activities they are also running an NGO for the help of the society at large.

As revealed by the members of the club, we have come to know that some of the members of the club were engaged in some unethical activities before the club came into existence. Mr. Rajkhowa has motivated them to think positively and work in a group. They are now the members of this club and their contribution is also very good.

They have started this club with the following motives.

- To get financial support from bank and other financial institutions. So that agricultural land can be fully utilized by using some advance technology.
- To motivate the people to work and earn money and make themselves a productive human resource.
- To help the villagers by creating a smooth link for credit mobilization between the grass root level people and bankers and other financial institutions like NABARD etc.
- Moreover, this club is also engaged in some other social welfare activities. Some of such impressive works undertaken by the club are:
- Organized health camps, iodine test camp etc. for the benefit of the common people.
- They also organize sanitation awareness camp, plantation program, agricultural land test programmes etc.
- They take necessary steps to prevent pouring poison in the river for fishing.
- They cultivate mainly paddy, banana, mustard seed, cabbage, lemon etc.
- They have started very recently to produce organic manure called Varmicompose.
- They started piggery farm and broiler farm too.

Within a period of less than 3 years from its inception, the club has become financially sound enough. They purchased 13 bighas of agricultural land and dig 10 huge fisheries; each such fishery is covering more than one bigha of land. As reported by the club members and the bank officials, quality of the out put of those fisheries is also quite good and can be sold readily in the local market. On an average, annual output from each fishery is around 2500 kg of fish. One more feather has been added to this club when it has

got recognition from the society when they have been awarded “Special Social Award for Best Social Activity” in the year 2008 but the members could not inform us from whom they got the award

Table-2
Profile of the selected Farmers’ Clubs

Sl No.	Name of the Club	Year of establishment	Location
1	Surujmukhi Krishak Sangha	2005 (August)	Jokai Khamtighat
2	Krishalaya Club	2006 (March)	Duliajan Bhadoi Panchali(Podumuni)
3	Modhupur United Farmers Club	2007 (May)	Modhupur Dewri Gaon

Source: Field survey

D. Modhupur United Farmers’ Club

Modhupur United Farmers’ Club is formed in Modhupur Dewri Gaon, Dibrugarh in the month of June, 2007. It is nearly 24 km away from Dibrugarh town. This area is a flood affected area and surrounded by Madla Forest. So, the people of that locality are disturbed by wild elephant. They formed the Farmers’ Club with 10 members, which comprises of few servicemen. The service holders are not in a position to devote time for the betterment of the group like the other members; as a result, their achievement is not like the other clubs under study. The objectives of this club are also similar to that of the other clubs. Some of the major activities done by the club are:

- They are engaged in cultivation of paddy and some vegetable like squash, ladies finger, brinjal, potato etc.
- They have started a nursery of various plants and flowers.
- They have promoted few SHGs of the people from this area.

E. Educational qualifications of the members

The researcher has enquired to the members about their educational qualification and it has been observed that most of the members are under-graduate and few are graduates. This has showed that gradually educated youth are becoming interested to enter into the agricultural sector which is a very good symptom for a state like Assam. If this

Table-3

Educational qualification of the members of Farmers’ Club

Sl No	Ed. Qualification	Name Of the Farmers’ Club			Total number of members
		Surujmukhi Krishak Sangha	Krishalay Club	Modhupur United Farmers’ Club.	
1	Under Graduate	10	28	8	46
2	Graduate	1	1	2	4
3	Post Graduate	Nil	1	Nil	1
Total		11	30	10	51

Source: Field survey

Trend continues for some time we can expect that the agriculture will grow in Assam in the pace with that found in Punjab and U.P. and other agriculturally developed states of our country

F. Farmers’ Club and bank linkage programme

The Farmers’ Club scheme of the NABARD seems to be a successful one in creating a linkage between the banks and the rural people. From the business perspective, it is not viable for a bank to open a rural branch in a village and as such the rural people are being deprived of banking services in spite of reforms in the financial sector during post liberalization period. The farmers’ club is an organization created by a minimum 10 people to help themselves and also other needy in and around their area of operation. They are authorized to act as Business Facilitators (BF) or Banking Correspondents (BC) to help the rural poor to get financial service at their door step in right time and also enable the banks to catch the rural financial market through networking system of the farmers’ clubs. The linkage created through the Farmers’ clubs in some villages can be seen from the following part as being reported by the villagers:

- Now it has become possible for the farmers to cultivate collectively by using modern tools and techniques and getting more agricultural output.
- The members and non-members are getting credit from the banks on easier terms and conditions reducing the hurdles between the parties. In this regard, the club takes the initiative on behalf of the borrowers so that the loan can be disbursed in time. They also facilitate the borrowers who availed loan through the club to repay the installment to the club and the club deposits the same in the bank. The borrowers get the financial services at their door steps through the system of the farmers’ clubs.
- The farmers started functioning in a competitive but friendly environment and they started giving more thrust on their efficiency and productivity that creates a favourable condition in the market.

- The farmers' clubs also provide training to the farmers in consultation with bank personnel and other expert in the respective field.
- Although in the name of the club the word farmer

Types of loan	Name of the Farmers' Club/Bankers			Total
	SKS and Banker CBI (Rs)	KC and Banker UBI (Rs)	MUFC and Banker IOB(Rs)	
KCC	150000	475000	200000	825000
GCC	45000	175000	Nil	220000
Others	61000	130000	180000	371000
Total	256000	780000	380000	1416000

is attached but it is not only means to the cultivators but also for others who are engaged in productive activities and asking for financial support from financial institutions.

- The farmers' club has systematized the agriculture process; for example we can see the process of Surujmukhi Farmers' Club of Jokai Khamtighat. The club initially made a survey of the land and after ascertaining the quality of land; they select a particular variety of seeds for cultivation in the land so tested.

Table-4:

Loan received under different heads from banks

Source: Field survey

SKS- Surujmukhi Krishak Sangha, KC- Krishalaya Club, and MUFC- Modhupur United Farmers Club
From the above table it has been observed that all the three

clubs have selected three different banks for convenience of its operation. The clubs are taking credit from the bankers mainly in the form of KCC (Kishan Credit Card) scheme followed by GCC (General Cash Credit) and the KCC is more popular for its simplicity in getting the card by them. The small entrepreneurs started taking loan by using KCC to finance their short term requirement and for the purpose of simplicity and incentives attached to it.

It has been observed that the farmers' club scheme has been successful in creating linkage between the rural people and the banks in the urban and semi urban areas. For further improvement of this scheme we have developed the following model to cover up various other components to the network of farmers' clubs.

From **Table-5**, it has been observed that the FCs are promoting SHGs in the rural areas and the success rate is also appeared to be satisfactory. If the SHGs and the FCs are working in a coordinated way then it may grow further. The FCs under study are also engaged in helping individual rural people to engage themselves in agricultural activities in association with the banks. They help the rural people in getting loan from banks under various schemes like KCC, GCC etc. and they are also authorized to collect loan repayment installment in the capacity of business facilitator. This help the rural people in getting loan without directly approaching the banks that minimized the hurdles that are being faced by the rural people in getting direct loan from banks.

Population of SHGs promoted by the Farmers' Clubs

Table-5

Position of SHGs	Name of the Farmers Club			Total
	SKS	KC	MUFC	
Active	6	253	80	339 (82)
Shut Down	0	51	25	76(18)
Total	6	304	105	415(100)

Source: Field survey

SKS- Surujmukhi Krishak Sangha, KC- Krishalaya Club, and MUFC- Modhupur United Farmers Club.

Table-6 has shown the turnover of the FCs for the financial year 2008-09. The figures disclosed by them to the researcher, it has been observed that after their inception they are operating very comfortably creating surplus to the club. When they have disclosed the fact we have seen that their accounting needs some modification. They are not preparing

Table-6

Turnover and surplus generated by the FCs under study in the financial year 2008-09

	Name of the Farmers Club			Total
	SKS	KC	MUFC	
Sale (Rs)	8,90,000	25,00,000	7,15,000	41,05,000
Expenditure (Rs)	3,51,000	8,78,050	2,60,750	14,89,800
Surplus (Rs)	5,39,000	16,21,950	4,54,250	26,15,200

their Profit and Loss accounts under formal double entry system that may create problem in the near future. Here, we suggest them to keep their books of accounts by following

double entry system to minimize errors and misunderstanding among the members.

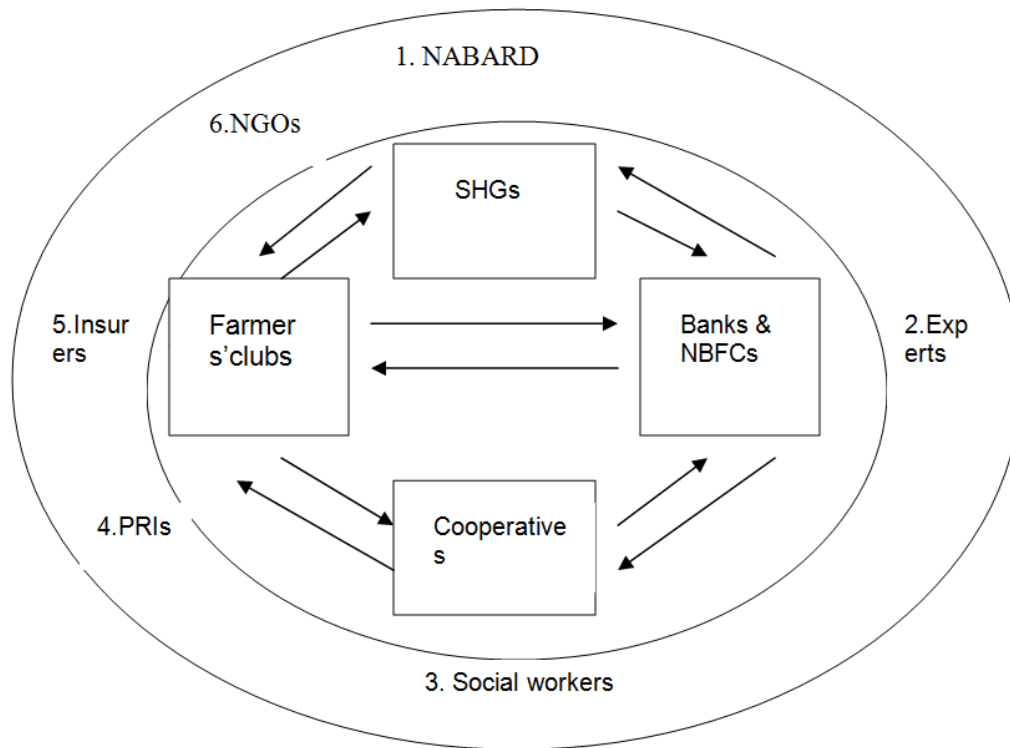


Diagram: 2

Micro Finance Model for Inclusive Growth

The paper has made an attempt to develop Farmers' club as a micro finance model as shown in Diagram-2. The model is to be covered by six layers i.e. NABARD, experts in various fields, social workers, the Panchayati Raj Institutions (PRIs), insurers and the NGOs dedicated to rural development. The first layer is NABARD to work as the apex premier body in promoting the FCs in rural areas. The second layer, the role of experts is also very much essential for up-gradation of the production process, lending their expertise in other areas like in selection of seeds, technology, searching new market and other improved method etc. The third layer of this model is the social workers working for the people with dedication can influence the people to start their venture. The PRIs can take a lead role to make the FCs a success as the fourth layer of the model. The insurers can be considered as the fifth most important layer of this model. Through the promotion of micro insurance products like crop insurance among the agriculturists they will be able to minimize the risk of product loss resulted from natural calamities and bad weather condition. The sixth layer of this model consists of the NGOs working for the cause of rural development. The NGOs operating in rural areas can take initiative to attract more people from the rural area to economic activities in a new ways and they must provide necessary help and support to the deprived section. All these six aforesaid layers will

encompasses the four pertinent elements of this model i.e. the farmers' club itself, the SHGs promoted and nurtured by the FCs, bankers and other NBFCs as the financiers and cooperative institutions promoted by the FCs with the village people. All these four components must work with a common zeal that is to make the rural people an integral part of economic development of our country.

IV. SUMMARY AND FINDINGS OF THE STUDY

- The summary of the findings are being highlighted as follows:
- Educated youth are gradually being attracted to form FCs for the benefit of the members and the under privileged population of the rural areas.
- The FCs are giving priorities in formation of SHGs only for agricultural activities.
- There has been no female member in the clubs under study but adopting some female in the process may be beneficial for the FC and also some female members of the rural areas.

- The clubs under study are not only engaged in creating economic benefit of its members but also organize health camp, HIV test etc. for the villagers to make the people health conscious.
- The clubs are performing their agricultural activities scientifically by taking help from experts/scientist in the related field.
- After emerging this concept of FC the role of village money lenders have been minimized that saved the rural people from facing debt trap of the money lenders. Before the clubs came into existence the rural people were taking help from some middle men in getting loan from banks but now the role of middle men is unexpected that minimized their cost of capital.
- The system of maintaining accounting records is not satisfactory as they are maintaining it in double entry system.

A. *Problems facing by the FCs and some recommendations for its improvement*

Although the FCs are earning a very much encouraging return by engaging in agricultural activities but they are struggling for some acute problems. Some of such common problems facing by the FCs are highlighted with some probable remedies to sort out those problems:

- As per the guidelines of NABARD, one FC can expand their activities beyond five villages from the periphery (although few FCs have crossed this limit). But we feel that this restriction should be abolished so that the active FCs can expand their activities.
- Farmers' Clubs are carrying on their activities at high level of risk. As agricultural activities are highly depended on monsoon and climatic condition. To minimize the uncertainty/risk they can avail the facilities of the micro insurance plans being promoted by insurance service providers at very affordable rate of premium. The insurers must come forward to help the FCs and other parties involved with this model.
- One very pertinent problem faced by the FCs is marketing problem of their products. Some middle men are taking major benefit by purchasing their products from their firms at very lower rate and they sell the same in the urban market at higher price. It can be suggested to the FCs that they are to take the marketing of their products on their own with making some arrangement with whole sellers from the urban area.
- Under the FC system, it is easier to have a loan from banks if the individual get a certificate from the chief coordinator of the club as an eligible borrower it is easier to have a loan facility, if the chief coordinator certifies the borrower as an eligible for that particular loan. It is said by the people that now and then some prospective borrowers get problem from the coordinator in getting such certificate. Although, it has been said that finance is to be provided on priority basis in a democratic way but in some cases it become a sole man affairs.
- The FCs are facing labour problem mainly insufficient number of skilled and semi skilled labours. Local labours are not properly trained up to do agricultural activities scientifically. This problem can be sorted out by organizing short term training programme targeting the local labours. The FCs themselves can organize such training programme by taking help from agriculture scientists available in this region. Agriculture University can take initiative to help the FCs in this regard.

V. CONCLUSION

Farmers' Club is a very noble concept to help the needy rural people. In the present context inclusive growth is highly talked and pertinent issue. This concept of farmers' club can successfully cover the rural people who are not getting adequate coverage by the modern development in banking and financial sector. The farmers' club may overcome the problem of covering the almost un-banked or under-banked rural sector. The Panchayati Raj Institutions (PRIs) can also play significant role in this regard as they are more acquainted with the rural condition. The PRIs can also offer help to the banks who are coming forward to help the rural people and the nodal agency like the NABARD in formulating policy as a part of their rural development programme.

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A Total Productive Maintenance (TPM) Approach to Improve Production Efficiency and Development of Loss Structure in a Pharmaceutical Industry

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GJMBR Classification
FOR:150305,150399

Abstract-Total Productive Maintenance (TPM) is a manufacturing program whose sole purpose is to maximize the effectiveness of equipment throughout its entire life by the participation and motivation of the entire workforce. The three main objectives of TPM are zero defects, zero breakdowns and zero accidents. These goals can be achieved through implementation of activities planned to increase equipment efficiency, the creation of a program of autonomous maintenance, the establishing of a planned maintenance system, the organization of training courses for workers and design of plant management system. This paper addresses the issue of implementing the total productive maintenance (TPM) philosophy in a pharmaceutical industry. In the first phase, the possible losses and the factors contributing to those losses have been identified. The critical factors which affect the overall equipment efficiency (OEE) of the pharmaceutical industry are loading time, down time, standard cycle time, actual cycle time, unit produced and defect unit. Overall equipment efficiency (OEE) is an indication of eight major equipment related losses which are equipment failure, set-up and adjustment, cutting blade change, start-up, minor stoppage and idling, speed, defect and rework and equipment shutdown. In the second phase of TPM implementation, a planned maintenance program has been suggested to make the production process quite smooth and proficient with increased efficiency.

Keywords-TPM; Production Efficiency; Loss Structure; Overall Equipment Efficiency

I. INTRODUCTION

Any industry needs to keep proper vigilance for producing product without defect, reducing product rejection and wastage, reducing equipment breakdown and down time, increasing worker and equipment efficiency, maximize equipment and manpower utilization, eliminate accident of any types. TPM is the new concept evolving to meet this tremendous requirement of the modern competitive industry. TPM ensure the maximum use of the existing equipment and perform the increased production within regular working hour to achieving the cost reduction without sacrificing the product quality. Any company can achieve production efficiency and other excellence by

successful utilization of the TPM concepts and the tools and techniques of the TPM. Total Productive Maintenance (TPM) is a maintenance program, which involves a newly defined concept for maintaining plants and equipment. The goal of]

the TPM program is to markedly increase production while at the same time increasing employee morale and job satisfaction. TPM brings maintenance into focus as a necessary and vitally important part of the business. It is no longer regarded as a non-profit activity.

TPM is an innovative Japanese concept. The origin of TPM can be traced back to 1951 when preventive maintenance was introduced in Japan. The Japanese, based on the planned approach to preventive maintenance (PM), evolved the concept of total productive maintenance (TPM). Nakajima

(1986) outlines how, in 1953, 20 Japanese companies formed a PM research group and, after a mission to the USA in 1962 to study equipment maintenance, the Japan Institute of Plant Engineers (JIPE) was formed in 1969, which was the predecessor to the Japan Institute of Plant Maintenance (JIPM). In 1969, JIPE started working closely with the automotive component manufacturer Nippondenso on the issue of PM, and when the company decided to change roles of operators to allow them to carry out routine maintenance this was the beginning of TPM. Tajiri and Gotah (1992) point out that whilst TPM was communicated throughout Japan only a small number of factories took up the challenge. It was the severe economic situation in the early 1970s that accelerated the adaptation of TPM, propagated by the seven-step programme developed by the Tokai Rubber Industries. In the early 1990s, Western organizations started to show interest in TPM following on from their total quality management (TQM) interventions. While there are a number of publications: Suzuki (1994); Sekine and Arai (1998); Hartmann (1992); Wilmott (1994) on the subject, there is little in the way of empirical study and analysis. The more academic papers focus on the relationship of TPM with other productivity initiatives by Maggard and Rhyne (1992) and discussion of a specific application of TPM and the benefits by Koelsch (1993) show potential advantages of TPM in the industries. McCall (1965) and Bain and Engelhardt (1991) publish papers focusing on modeling the reliability of equipment and on developing policies to inspect, repair, or replace equipment based on its specific reliability characteristics. But there are lagging in academic

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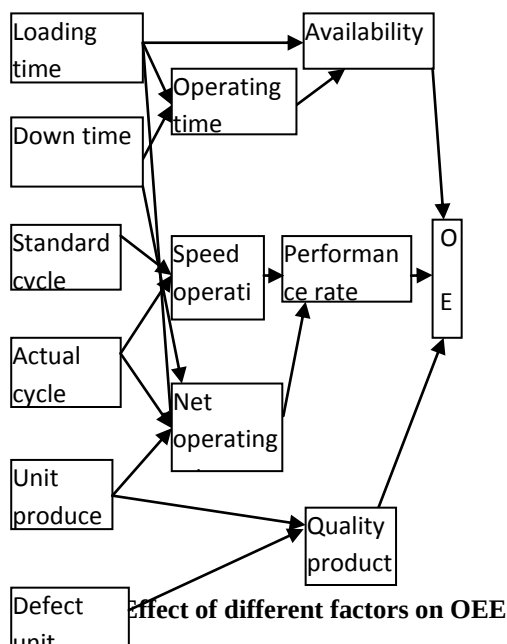
research that goes beyond these traditional modeling approaches and adequately supports the implementation of TPM activities, practices, and management systems. McKone and Weiss (1995) identify significant gaps between industry practice and academic research and emphasize the need to bridge these gaps by providing guidelines for implementing TPM activities. As the goal of the TPM program is to markedly increase productivity without losing product quality which is the major concern of business organizations, enormous companies of Bangladesh are trying to adopt TPM. The Pharmaceutical industry is one of the most promising foreign earning sectors of Bangladesh. So there is a great scope to improve production rate as well as quality product in which field TPM approach can be applied. But unfortunately, a few Pharmaceutical companies are aware of the situation. This paper tries to find out the scope of TPM approach and the way of implementation in Bangladeshi Pharmaceutical companies.

II. OBJECTIVE OF THE STUDY

The objective of the present work is to study how the tools and technique of TPM can be applied in a Pharmaceutical industry, calculate the present Overall Equipment Efficiency (OEE) of the equipment in the tablet manufacturing line in a Pharmaceutical industry, focus on the losses occurred during production activity, develop a loss structure of the equipment in tablet section, design a procedure for the employee to use different type of analytical tool to explore a problem and eliminate it.

III. METHODOLOGY

The work has been carried out in a pharmaceutical company to do this job. Six factors have been identified which affect the overall equipment efficiency (OEE) of drug production. Those are: loading time, down time, standard cycle time, actual cycle time, and unit produced and defect unit. The combined effect of these six factors of this process is shown in Fig.1.



The measured values of input variables, output variables and overall equipment efficiency are shown in Table 1, Table 2 and Table 3 respectively.

The necessary equations that have been used in this study to find the overall equipment efficiency (OEE) have been listed below:

$$\text{Availability} = \frac{\text{Operating time}}{\text{Loading time}} \quad (1)$$

$$\text{Operating Time} = \text{Loading time} - \text{Downtime} \quad (2)$$

$$\text{Performane rate} = \frac{\text{Speed operating rate}}{\text{Net operating rate}} \quad (3)$$

$$\text{Speed operating rate} = \frac{\text{Standard cycle time}}{\text{Actual cycle time}} \quad (4)$$

$$\text{Net operating rate} = \frac{\text{unit produced} \times \text{Actual cycle time}}{\text{Operating time}} \quad (5)$$

$$\text{Quality product rate} = \frac{\text{Unit produced} - \text{defective units}}{\text{Unit produced}} \quad (6)$$

$$\text{OEE} = \text{Avaibility} \times \text{Performance rate} \times \text{Quality product rate} \quad (7)$$

Table 1. Values of input variables

Input variables	Measured values
Loading time	420 min
Down time	10 min
Standard cycle time	0.8×10^{-3} min/pcs
Actual cycle time	1.303×10^{-3} min/pcs
Unit produced	184 kg
Defect unit	3kg

Table 2. Values of output variables

Output variables	Measured values
Operating time	410 min
Speed operating rate	61.4 %
Net operating rate	95.34%
Availability	97.6%
Performance rate	58.54%
Quality product rate	98.3%

Table 3. Value of overall equipment efficiency

Output variable	Measured values
OEE	56.16%

IV. LOSS STRUCTURE ANALYSIS

Though loss is an inevitable scenario of a production system, now the organizations are trying to minimize production related losses as much as possible. To do this a loss structure has to be developed to analyze the losses for an organization. In this paper, equipment related losses have been identified and summarized for a Pharmaceutical industry in order to enhance quality of products as well as to increase the rate of production through implementing the total productive maintenance (TPM) approach.

A. Eight Major Equipment Related Losses

As OEE is an indication of eight major equipment related losses, using the calculated OEE these causes can be easily minimized. These losses are:

B. Eight Major Equipment Related Losses

As OEE is an indication of eight major equipment related losses, using the calculated OEE these causes can be easily minimized. These losses are:

Equipment failure loss-This is the largest factor which obstructs efficiency is the equipment failure loss. The failure can be classified into two types; one is the function-stoppage type and the other is the function-deterioration type. The function-stoppage type failure is the one which occurs unexpectedly, while the function-deterioration type failure is the one in which the equipment function decreases

Set-up and adjustment loss-This loss is usually caused by stoppage due to set-up change. The set-up change time is the period during which the production is stoppage to prepare for subsequent production. The factor which spends the most time is "adjustment".

Cutting blade change loss-The cutting blade change loss is caused by the line stoppage for replacing the grinding wheel, cutter, bit etc.

Start-up loss-The start-up loss is the one that occurs until the start-up, running-in and machining conditions of the equipment have been stabilized.

Minor stoppage and idling loss-The minor stoppage loss differs from the failure and is the one in which temporary trouble causes the equipment to stop or idle. It might be called a minor trouble. For example, idling of a line caused by a low supply of work in the chute due to clogging and temporary line stops caused when the sensor detects a non-conforming product are examples of minor stoppage loss. These losses can be eliminated and the line returned to normal operation so long as the clogged work is removed. The losses are quite different from natural equipment failure losses.

Speed loss-The speed loss is the loss caused by the difference between the designed speed and the actual working speed. For example, when the line was operated at the designed speed, it was found that the line caused poor quality or mechanical trouble in the line. In that case, the line had to be run at a slower speed than the designed one. This loss from this situation is called a speed loss.

Defect and rework loss-This is the loss caused when defects are found and have to be reworked. In general, the defects are likely to be considered as waste which should be disposed of. But since even the reworked products need wasted manpower to repair them, this must be considered as the loss.

Shutdown loss-This loss is referred to as production shutdown loss, which is caused by stopping the equipment for periodical maintenance inspection and for scheduled shutdown for legal inspection during the production stage.

For a typical pharmaceuticals company, a regular and irregular production loss structure is shown in Fig.2.

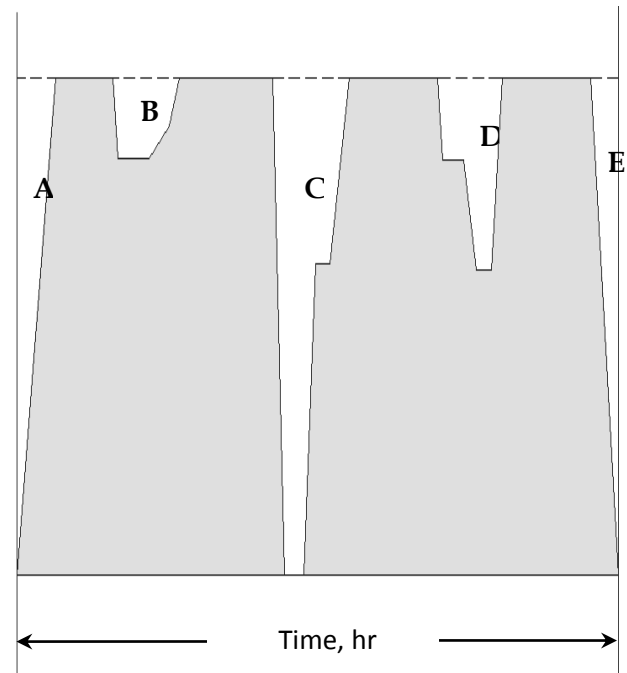
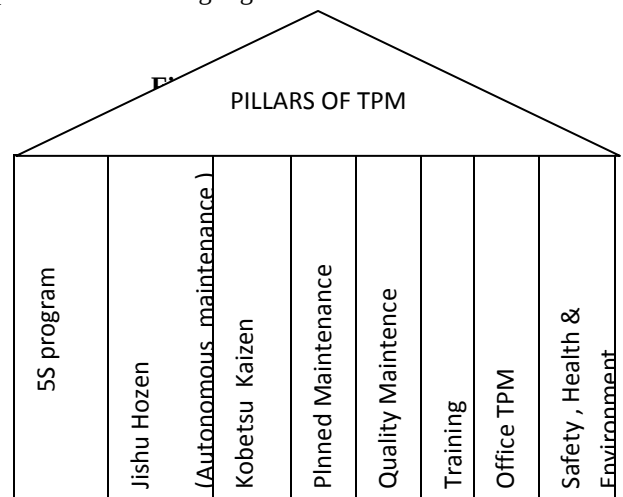


Fig. 2: Regular and irregular production loss structure in a shift of an industry

Theoretical Production Rate	: U units/ hr
Regular Production Loss	: A and E
Irregular Production Loss	: B,C and D

V. STATUS OF EIGHT BASIC PILLARS OF TPM

After identifying these losses, TPM implementation phase can be introduced. But to introduce this phase the condition of eight basic pillars (as shown in Fig.3) of TPM in the company has to evaluate. The scenario of a typical Bangladeshi Pharmaceutical company under TPM perspective has been highlighted in this section.



C. Status of Pillar

This pillar is regarding to make the workplace is an organized one, as problems are really difficult to define in an unorganized organization. It consists of five approaches which are Seiri (Sort out), Seiton (Systematize), Seiso (Shine the workplace), Seiketsu (Standardization) and Shitsuke (Self discipline). According to Seiri the items should be placed and organized according to the frequency of their usage and in this company as per observation they follow this rule to some extent but not for all the equipments and accessories. According to Seiton each and every item should have a fixed place to keep. In the factory, they try to maintain this to some level but not for all the material. Regarding Seiso the workplace must neat and clean. The pharmaceuticals company is very much strict about their hygiene to maintain the quality product. Seiketsu rule makes us conscious about maintaining the standard to keep the workplace clean throughout the organization and the pharmaceutical company maintains this rule as deals with the human life. Shitsuke says about the employees' self discipline and in the company they pursue all the considerable rules and regulations.

D. Status of Pillar 2 (Jishu-Hozen)

In the Pharmaceutical Company as per observation they carry out this autonomous maintenance to some extent. The operators clean up the machines time to time during the production activities but they don't have any kind of formal training. They just learn the procedures and necessary processes from the seniors and supervisors. By this they cannot solve the some day to day problems. For this they need to call people from engineering section. This is waste of efficiency as well as time.

E. Status of Pillar 3 (Kobetsu-Kaizen)

Continuous improvement through eliminating the losses at zero level is basic concept of kaizen. In the organization presently they are not using any of the tool of kaizen like PM analysis, Why-why analysis.

F. Status of Pillar (Planned Maintenance)

Planned maintenances are needed for maximizing the equipment efficiency and by this producing defect free product. In the Pharmaceutical industry, the employees clean up the machines by two steps; firstly during the running of the machine and at the end of the day and secondly at time of the set-up changes. But they don't have any planned maintenance program.

G. Status of Pillar(Quality Maintenance)

The Pharmaceuticals organization is very much conscious about their quality conformance. The quality control department checks the products after each new set-up of the equipments and taking their clearance the production is carried on. Besides this the quality control department continuously collects samples to ensure quality.

H. Status of Pillar(Education and Training)

The sixth pillar of TPM is the training which focuses on the operators so that they can be able to find out the root cause of any problem and to eliminate that cause making the process problem free. But in this company, they do not have any scope of train up their operators.

I. Status of Pillar(Office TPM)

Office TPM should be started after activating four other pillars of TPM (JH, KK, QM, and PM). But due to lack of implementation of other pillars Office TPM cannot be implemented now.

J. Status of Pillar(Safety, Health and Environment)

Keeping the target of zero accident, zero health damage and zero fires in mind this pillar focuses on to create a safe and hazard free workplace. As a pharmaceuticals company they are very much conscious about a safe workplace and environment but the working procedures are not always safe for the people and as per our observation sometimes there might have chance of hazardous condition as in some cases they do not wipe off the rooms perfectly after washing which cause untidiness.

VI. TPM DEVELOPMENT STAGE

As the condition of the industry is analyzed, now comes the TPM development stage.

A. Steps of TPM Development Program

Stage 1 : Preparation

- Step 1 : Announcement by top Management to all about TPM introduction in the organization
- Step 2 : Initial education and propaganda for TPM
- Step 3 : Establish TPM promotion organization and pilot organization model
- Step 4 : Basic policy and target setting for TPM
- Step 5 : Creation of master plan to develop TPM.

Stage 2 : Kick off

- Step 6 : TPM kick off

Stage 3 : Implementation

- Step 7 : Establish the system to achieve production efficiency.

Kobetsu – Kaizen
Planned maintenance
Jishu - Hozen

- I.
- II. Education and training for operation and maintenance skill upgrade

- Step 9 : Establish the Hinsitsu – Hozen system
- Step 10 : Establish the system to realize operation efficiency in the administration departments
- Step 11 : Establish safety, hygiene and working environment protection system
- Stage 4 : Steady application**
- Step 12 : Application of TPM

VII. TPM IMPLIMENTATION STAGE

A. Establish System to Improve Production Efficiency

The purpose of this step is to pursue maximum efficiency of production which can be achieved by four concepts. Among them two major phases are discussed below:

Kobetsu-Kaizen-After the identification of losses, it needed to identify the root causes, take remedial action and perform Kaizen to prevent the further loss occurrence. Different tools and techniques are available for loss analysis. Four of these analysis techniques applicable in a typical Pharmaceutical Ltd. are shown in Table 4.

Table 4. Loss analysis techniques for Kaizen

Analysis Technique	Purposes
1. WWA (Why-Why Analysis)	Simple breakdown
2. WWBLA (Why-Why Because Logical Analysis)	Repetitive & complicated breakdowns
3. PMA (Phenomenon, Physically Mechanism Analysis)	Chronic losses & quality defect
4. ECRS (Elimination, Combination, Reduction, Simplification)	Changeovers

Planned Maintenance Master Plan-Preventive Maintenance Master Plan is formed for some year forward undertaking a number of activities. These activities may be are as follows:

- Evaluate equipment and understand current status
- Restore basic condition of equipment
- Establish information management system
- Built periodic maintenance system
- Built predictive maintenance system
- Built spare parts management system
- Built lubrication management system

VIII. CONCLUSION

Present business field is becoming more challenging due to facilitate the inevitability of increased productivity, cost effectiveness and to maintain global standards For this the major focus of the manufacturers now-a-days is on the total

productive maintenance (TPM) program which is basically a maintenance program to take the whole production system into a level of zero defects. The study validates the relevance of strategic TPM initiatives into the manufacturing strategy for realization of organizational objectives in the successful organizations. In this work a loss structure has been developed to enhance the production efficiency. Defining the different equipment loss during the production activities, “Overall Equipment Efficiency (OEE)” has been calculated and after that the TPM implementation procedures for planned maintenance of the equipment have been prepared so that the production line can remain in smooth operating condition. This study clearly reveals that the successful TPM implementation program can facilitate the manufacturing organization’s quest for achieving enhanced manufacturing performance leading to competitive advantage.

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System Dynamics Approach To Simulate KMS Success Model

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GJMBR Classification (FOR)
150301,150399,150313,50302

Abstract- A growing notion these days is that organizational competitiveness is determined largely by effective management of its most important intangible asset “knowledge”. The success of Knowledge Management (KM) initiatives is leveraged by the application of Knowledge management systems (KMS) that effectively create, share and use knowledge through KM techniques. KM research, however, has focused more only on these factors to ascertain organizational competitive advantage. There has been little research on applying modelling to understand benefits derived by knowledge workers of such systems. In this research paper, we map a KMS Success model using System Dynamics tools to better understand the structure of the model identifying the key variables. The paper concludes with the main observations from this research and proposes some lines for further research in this area. This paper intends to fuel a thought about KMS working via System Dynamics.

Keywords- System Dynamics modelling, KMS Success Model, Knowledge Management, Jennex-Olfman KMS Success Model

Objectives:

- To explore the relationship between system dynamics and knowledge management.
- To identify the key variables to understand the dependencies.
- Seeking a relationship between components of the model and knowledge worker and drawing implications for enhancing service quality.
- To develop causal loop diagram for a KMS Success model
- To build a stock and flow diagram.

I. INTRODUCTION

A. Knowledge Management

"KM is getting the right knowledge to the right people at the right time so they can make the best decision."

Davenport and Prusak [1] define knowledge as an evolving mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information.

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B. Knowledge Management Systems (KMS)

The vital role that the effective use of knowledge management plays in any organization is emphasized by the fact that institutions, organizations and governments all over the world have been implementing KM as a part of their business strategies and embedding the same in their policies and implementation processes [2]. This also highlights the relevance of Knowledge Management Systems (KMS) in these organizations as an effective knowledge creation and dissemination tool.

Alavi and Leidner [3] referred to KMS as an emerging line of systems targeting professional and managerial activities by focusing on creating, gathering, organizing and disseminating an organization's 'knowledge' as opposed to 'information' or 'data'.

C. KMS Success Model

Once implemented in any organization, it becomes crucial to measure the success of that KMS in order to evaluate its effectiveness as a knowledge dissemination tool and an employee productivity enhancement tool. Furthermore the measurement of KMS benefits KM academics and practitioners, to better understand building and implementation of such systems. Jennex and Olfman [4], elicit that in order to meet this need, several KMS success/effectiveness models have been proposed. In line with this view, they proposed a model referred to as the Jennex-Olfman KMS Success model in 2004. Figure 1 illustrates the model that will be referenced in this paper.

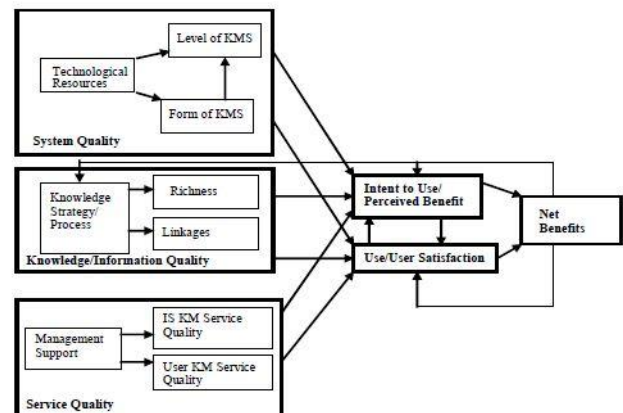


Figure 1: J-O KMS Success Model 2004

D. Jennex Olfman (J-O) Kms Success Model

The J-O KMS Success model (refer figure 1) has 6 dimensions and of these six, quality has 3 dimensions namely service, knowledge or information and system quality. These three dimensions when measured together affect the intent to use/perceived benefits and the use/user satisfaction dimensions. (User would be henceforth termed 'knowledge worker') That there are dependencies between the various dimensions is obvious due to the feedback loop incorporated in this model. Much of the studies conducted by Jennex and Olfman [4] reaffirm this, however this paper attempts to view this model as a dynamic system suggesting an improvement in the service quality that determines the rate of use of the KMS by knowledge workers.

The service quality dimension of the model makes sure that the KMS has enough management support for maintenance along with the requisite technical support for the users of such systems.

This J-O KMS Success model also recognizes that the use of knowledge may have good or bad benefits. It is feedback from these benefits that drives the organization to either use more of the same type of knowledge or to forget the knowledge. It also provides knowledge workers with feedback on the benefit of the KMS. Thus, such an inference further adds weightage to our view of mapping such a model using system dynamics approach.

II. THE SYSTEM DYNAMICS APPROACH

C. Research Methodology for Modelling Process

The steps in System Dynamics modelling are:

Problem Articulation

The most important step in modelling is problem articulation or simply identifying the purpose of modelling. According to Sterman [5] every model is a representation of a system – a group of functionally interrelated elements forming a complex whole. However, for a model to be useful, it must address a problem as well as attempt to simplify rather than merely replicate the entire system as a model.

Therefore, the problem identified for this paper with respect to the J-O KMS Success Model is **“Seeking a relationship between components of the model and knowledge worker and drawing implications for enhancing service quality.”**

Additionally, Sterman [5] categorically states “Always model a problem. Never model a system”.

Formulation of Dynamic Hypothesis

Once the problem has been identified, a dynamic hypothesis that is the working theory of how the problem arose is formulated. This is a sort of a guide that helps formulate the structures in the model.

It is in this step that mapping of the system structure, is possible using various system dynamics tools. A model boundary chart, sub-system diagram, causal loop diagrams, stock-flow diagrams are examples of such tools at the

disposal of the modeller. This step brings out the conceptual model.

Formulation of Simulation model

The next step in the System dynamics methodology for modelling is to move from the conceptual realm of diagrams to a fully specified

formal model, complete with equations, parameters and initial conditions that can be simulated via computerised software [5]. This paper does not probe into this step completely and is treated as a future scope for further research.

Testing

Sterman [5] elucidates that testing begins as soon as the first equation is begun. Testing partly involves comparing the simulated behaviour of the system under study with the actual behaviour. It also involves something more where each equation is checked. Whether each variable under consideration has a meaningful concept in real time is also verified. Testing is incorporated in the modelling procedure of this paper to some extent.

Policy design and Evaluation

Once the structure and behaviour of the model have been finalised and there is a certain amount of confidence in the simulated model, the modeller can now move on to designing and evaluating policies for improvement. We have not dealt with any policy changes or decision rules in this paper.

III. MAPPING SD TO KM

Causal loop diagrams are powerful tools to map feedback structure of complex systems but they are limited by their inability to show stocks and flows [5].

D. Causal Loop Diagram for KMS Model

The J-O KMS Success model is driven by the feedback mechanism as described in the figure 1. A knowledge worker in any organization utilises the KMS to capture contextual knowledge applicable to his area of work. The service quality of the KMS influences the knowledge worker's further intent to use the system. Keeping this in mind, we developed the causal loop diagram for J-O KMS Success model (Figure 2). A knowledge worker's competence depends on his understanding of his work profile together with the information or knowledge seeking attitude he possesses. But this is possible if the KMS existing in the organization provides all the available knowledge to the knowledge worker. This has been the focus in the development of causal relations, as a system that fails to provide the required service level adds to 'service quality gap', which in turn affects the use of KMS and knowledge worker satisfaction rate. Various influences are represented in the form of feedback loops. A computer simulation of this model is possible but is not in the scope of this paper.

Figure 2 depicts the causal loop relations in a KMS and how the service quality influences KMS use.

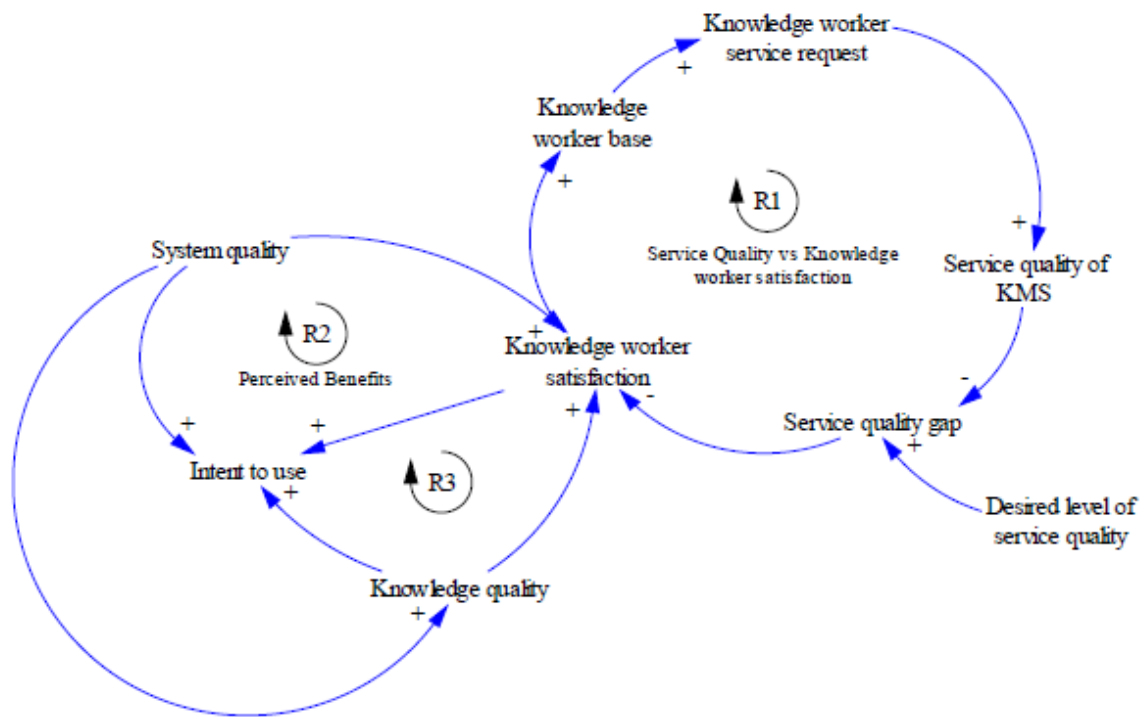


Figure 2: Causal loop diagram of JO KMS Success model.

Figure 3 illustrates that management support is needed for improving the service quality of a KMS that can in turn

motivate the knowledge worker to make more use of the system

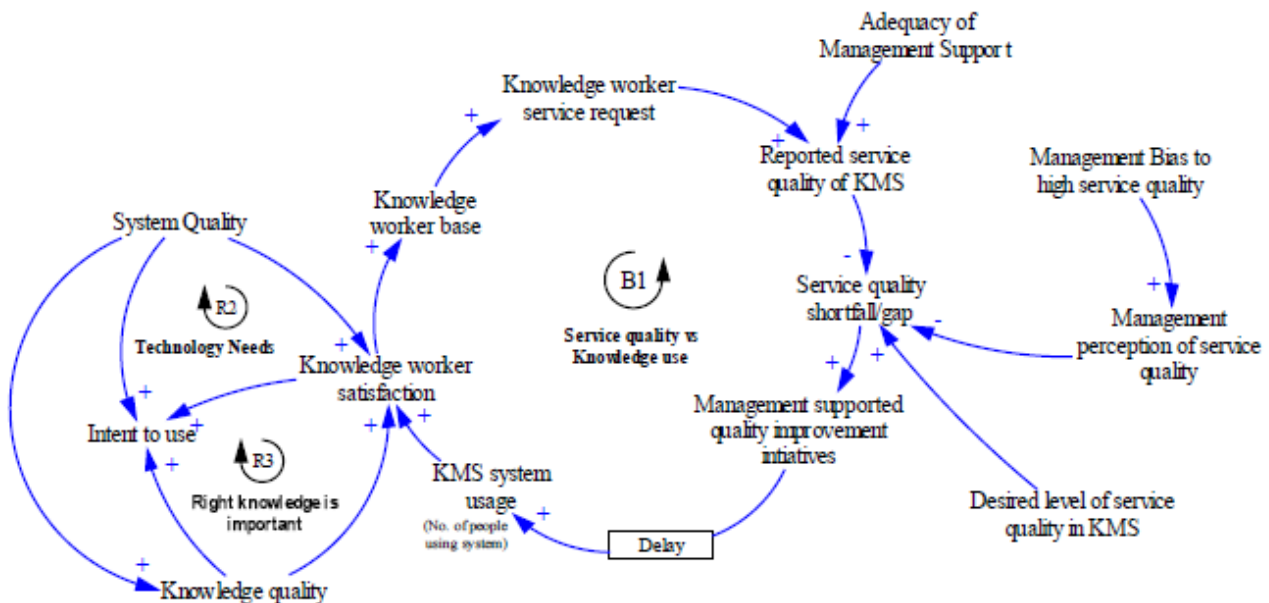


Figure 3: Causal loop diagram including management support initiatives

The knowledge usage and satisfaction level of knowledge workers has been captured in the causal loop diagrams in figures 2, 3 and 4.

In figure 2, initially a causal relation is identified for the service quality versus knowledge worker satisfaction

parameters. The loop R1 was found to be a self-reinforcing loop.

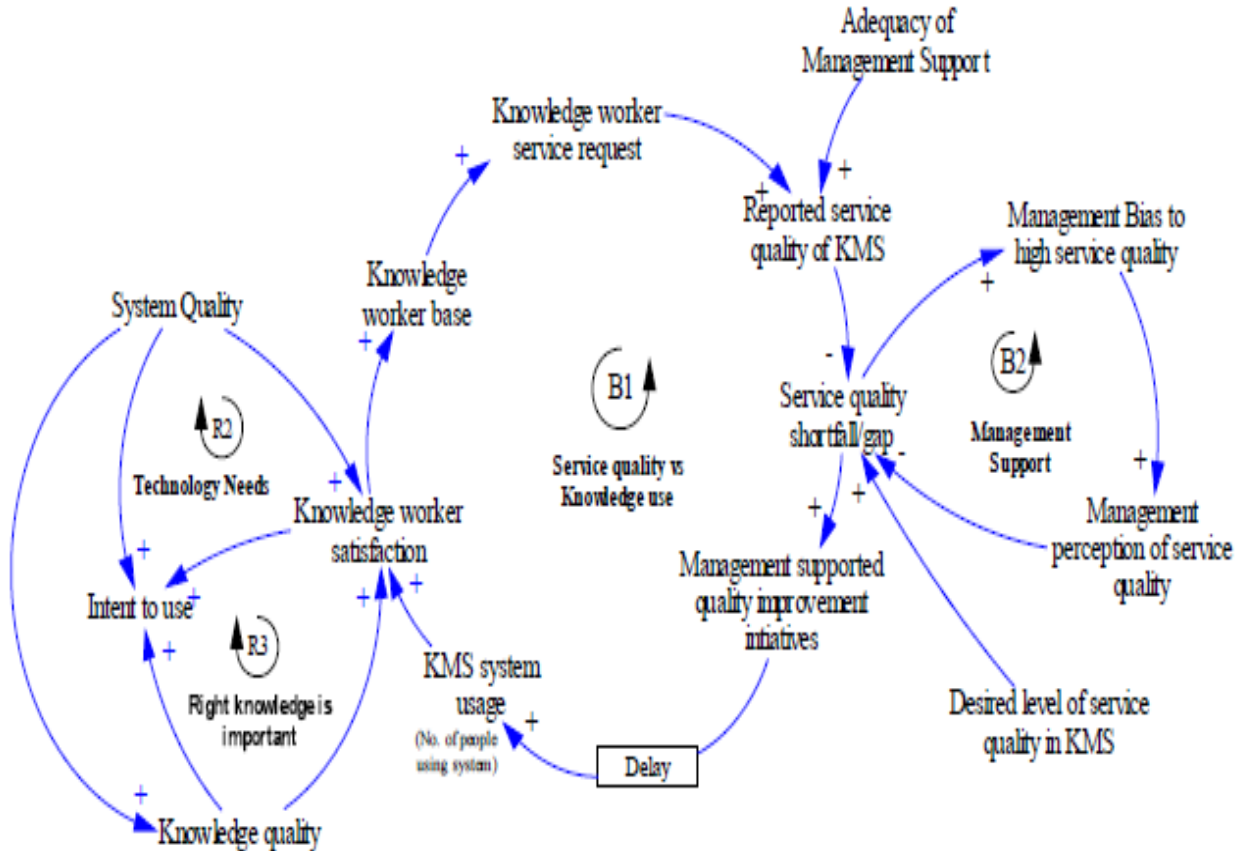


Figure 4: Closing the management support feedback loop structure.

The lower the difference between actual service quality and desired quality it was found the higher the knowledge worker satisfaction factor.

In figure 3, the service quality versus knowledge use is depicted as a balancing feedback loop (B1). Here, the management factor was also included in this causal diagram as the service quality dimension of the J-O model involves the management support construct. The management interference is described as another balancing loop B2 whereas the system quality and knowledge quality dimensions are part of self-reinforcing feedbacks R2, R3. Refer figures 3 and 4.

The system consists of interlinked variables, causal relationships as well as the sign of effect. The arrows indicate the causal relationships; the

‘+’ sign indicates the effect is positively related to the cause and ‘-’ indicates the effect is negatively related. The net effect of the causal links decides the polarity of the feedback loop, self-reinforcing or positive feedback and balancing feedback or negative feedback

E. Stock and Flow Diagram

Stock and flows, along with feedback, are the two central concepts of dynamic systems theory. Generally, stock and flow structures are included to represent physical processes, delays, or stocks whose behaviour is important in the dynamics that needs to be explained [5].

The knowledge worker base is modelled as a state variable since it changes over time through the ongoing service quality levels.

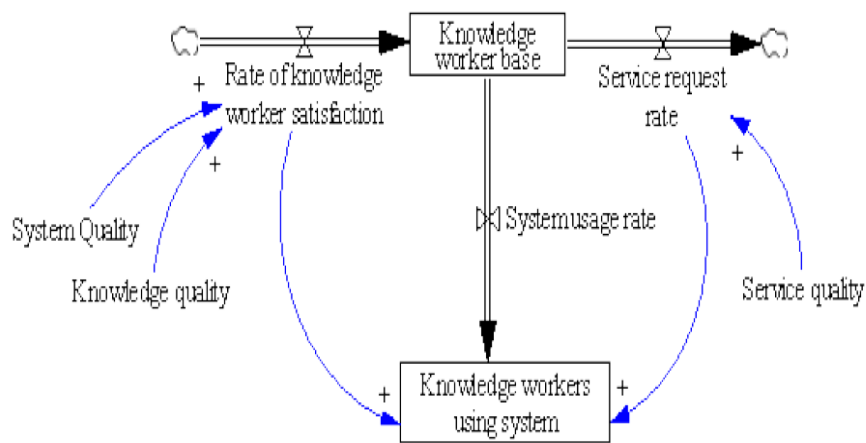


Figure 5: Stock and flow diagram for J-O KMS model

The knowledge workers actually using the system is also taken as a state variable that changes over time depending on the rate of satisfaction or the service quality levels. This is shown in figure 5

F. Relationship between System Dynamics and Knowledge Management

The studies by Hlupic et al. [8] and Luban and Hincu [7] establish a distinct relationship between system dynamics and knowledge management.

The figure 6 clearly shows the interdependencies that exist between system dynamics and knowledge management. The similarity between the simulation modelling process and knowledge management is very evident from the figure.

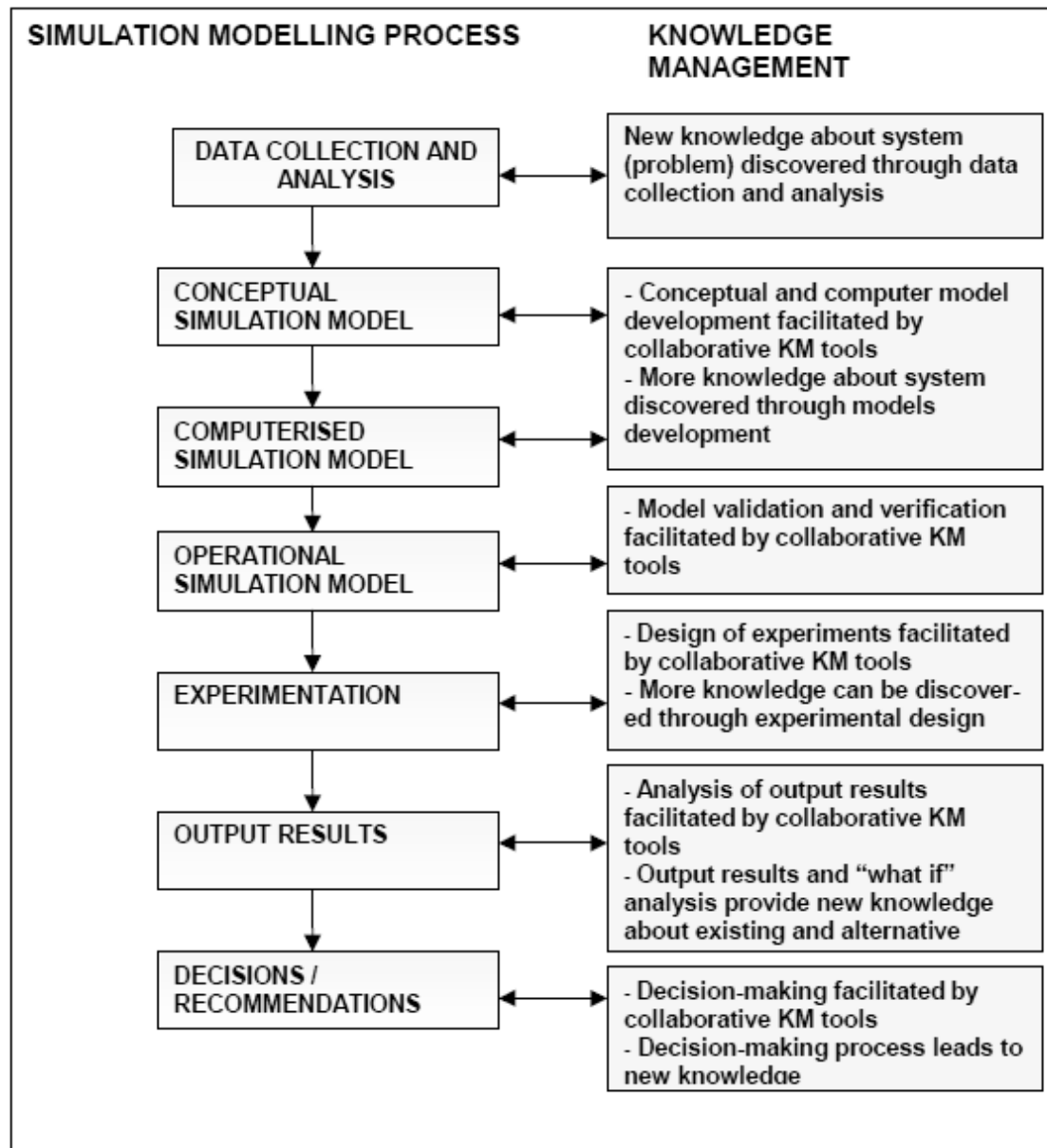


Figure 6: Interdependencies between simulation modelling process and KM [8]

Furthermore, figure 7 illustrates how simulation modelling can be incorporated in knowledge management.

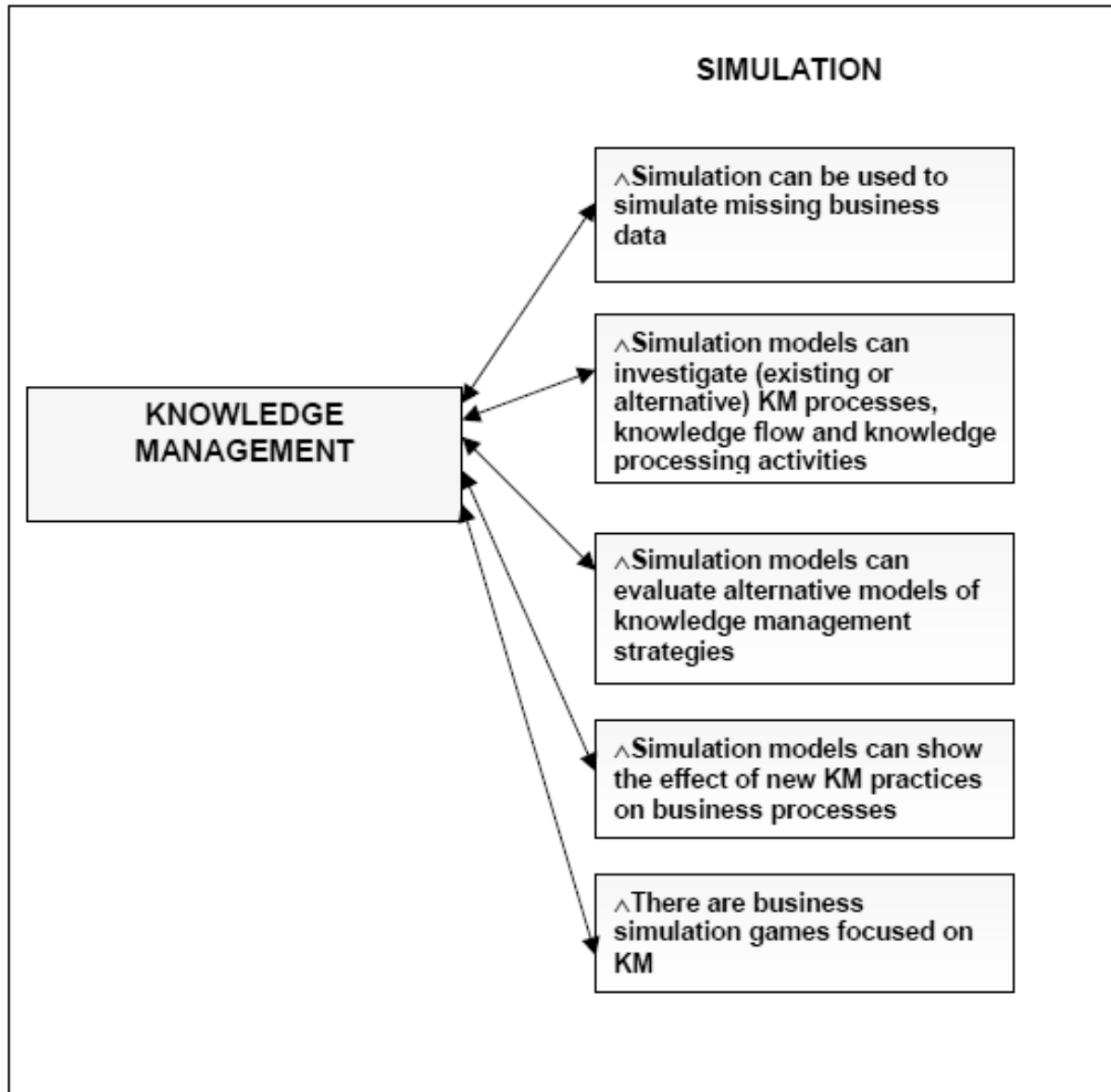


Figure 7: Simulation models in the context of knowledge management [7]

IV. DISCUSSION AND INFERENCES

Rodrigues et al. [6] state that a large group of researchers have very successfully applied system dynamics in industrial system, customer service level, production control system, supply chain management, and efficient consumer response. This research paper moves ahead and employs system dynamics concepts in studying knowledge management implementation.

The research methodology followed was in line with that proposed by Sterman [5]. We began by narrowing down on a problem. The key variables needed to be identified. The next step was to use the system dynamics tools to develop

causal relationships and map the same to the given problem articulated.

The problem identified included the J-O KMS success model which associated quality with three dimensions in a KMS namely system, knowledge or information and Service quality. This paper dealt with the dynamics of service quality influencing worker satisfaction and subsequently the usage pattern. Both the feedback loops B1 and B2 (refer figure 3) were found to be balancing loops. In system dynamics context, B1 would be described as a negative loop that seeks balance so as to bring the state of the system, in this case, the service quality in line with the goal or the desired state which is an ideal service quality measure that

would motivate all knowledge workers to benefit from the use of KMS. Feedback loop B2 is termed as a negative loop with a delay added. Such a loop defines state of the system that is compared to its goal along with corrective actions taken to eliminate any unexpected outcome.

- 1) We then worked on a stock and flow diagram (Refer figure 5). The task on hand was to correctly distinguish between the stocks and flows and to understand that stocks change only through their rates.
The major inferences from this paper are:
- 2) A relationship exists between the two disciplines namely knowledge management and system dynamics.
- 3) A causal loop diagram identifying significant key variables is possible.
- 4) Stock and flow diagram for the model under study is also feasible.

V. CONCLUSION AND FUTURE SCOPE

As mentioned in the previous section, the J-O KMS Success model under study identifies three quality dimensions. We dealt with the service aspect alone in this paper. The study does not consider the effect of feedback of the other two dimensions on the satisfaction levels of a knowledge worker. We suggest further breaking down the system and knowledge dimensions may add value to the study.

Causal loop diagrams are typically never comprehensive which is right considering that the basis of modelling is to simplify and not to be overly detailed. These diagrams are provisional and thereby leaving scope for incorporating changes by adding or removing variables that may lead to a different perspective of the given problem definition

A computer based simulation would be ideally the next step after this paper. Testing of the simulated behaviour could be looked into as future scope.

A further study could also bring out a more comprehensive stock and flow diagram considering stocks and flows that have not been considered in this paper.

Additionally, policy design and evaluation including what-if analysis may also be performed going ahead in this research. In this paper, we have tried to highlight the need to implement system dynamics approach in knowledge management initiatives thereby also attempting to bridge two distinctive fields of study - system dynamics and knowledge management.

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Innovation- A Tool For Modern Marketing

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GJMBR Classification (FOR)
150301,1500505

“Every organization- not just business -needs one core competence: innovation-

Peter Drucker

Abstract- Management of innovation is about being illogical and thereby being creative. Most of the people, firms & organizations use the tools of logic to achieve various rationales. What do you do, when logic fails? Do you try to build one more logic and then fail again? Actually the remedy is somewhere else. When logic fails, illogic should start & this is where I feel that most of the breakthroughs are achieved. When tatas said that they would come up with nano (Rs 1 Lakh car), people laughed it off as illogical and foolish. Look what is happening, the car is a reality and the illogical is converted into logical. Recently Godrej announced to sell its furniture range through sheer innovation. Check this out-“ godrej lifespace, a division of godrej is launching its new concept- Godrej moodspace. As part of their marketing push, the company intends to sell ‘moods’ instead of just products at their outlets. “ Moodspace is an innovation that will draw upon the emotional element within the shopper to help him or her create the mood which translates into the product selection.”

Look at the case of postal department. Indian postal department is planning to sell OTC medicines through its 1.5-lakh strong network across the country. Seems illogical, but it is not, infact this is logic. This is innovation management or as I put it- “The conversion of illogic into logic is innovation.” It is the conversion of new knowledge into new products and services. Innovation is about creating value and increasing productivity and thereby growing your business. Success in business does not come from feeling comfortable. Those who innovate best will win in the future. Innovation is the conversion of new knowledge into new products and services. Innovation is about creating value and increasing productivity, and therefore growing your business.

Success in business doesn't come from feeling comfortable. With many markets, those who innovate best will win in the future. You need to accept from global or deregulated markets, those who innovate best will I the future. You need to accept risk, measure performance, and embrace innovation.

In today's technology-driven world, business life cycles have accelerated exponentially, but good innovation management basics always apply. The challenge is to keep a step ahead of changing market conditions, new technologies and human resources issues To remain competitive, today's companies need to do more than simply deliver products or services that are better or.

cheaper than those of their rivals. They must also add features, improve performance, and reduce prices more quickly. They must be faster to launch new lines. To grow, they may need to create entirely new markets and develop venture strategies. According to knowledge Management magazine, the goal of knowledge and IP (innovation management) management is to create new value by improving the efficiency and effectiveness of individual and collaborative-knowledge while increasing innovation and sharpening decision –marking.

Manufacturer that harness the power of their corporate-wide knowledge can innovate far more effectively than those that don't. On a fundamental level, knowledge management and Ip initiatives aim to eliminate non-value-added work, such as manual tracking and validation. Engineers report that they spend 50 percent or more of their time looking for the information they need to do their jobs. When tedious and manual tasks are automated, knowledge workers can focus more time on what they do best creating innovative new products. Making knowledge readily available and putting it where it's needed can clearly impact time-to-market.

- A. A knowledge management and IP initiative requires a strategy focused on:
 - B. Setting clear knowledge management and IP goals
 - C. Identifying the processes and business-critical knowledge required to execute the processes that support the goals
 - D. Prioritizing the most important and “doable” processes in order to ensure a successful start to the initiative and get near-term payback
 - E. Identifying bottlenecks or failure points and the knowledge that is required to address them
- Leveraging existing IT investments.
 - I. Closed & Open Innovation Principle
 - Closed innovation principle
 - The smart people in our field work for us
 - To profit from R&D, we must discover it, develop it & ship it ourselves
 - If we discover it ourselves, we will get it to the market first.
 - The company that gets an innovation to the market first, will win.

- If we create the most & the best ideas in the industry, we will win.

- *Open innovation principle*

Not all smart people work for us. We need to work with smart people inside and outside the company.

External R&D can create significant values.

We don't have to originate the research to profit from it.

Building a better business model is better than getting to market first

Generation	Key features
First and Second	The linear models – need pull and Technology push
Third	Interaction between different elements and feedback loops between them-the coupling model
Fourth	The parallel lines model integration within the Firm, upstream with key suppliers and down stream With demanding and active customers, emphasis On linkages and allianc
Fifth	Systems integration and extensive networking, flexible and customized response, continuous innovation

Table1: Progress in conceptualizing innovation: Roth well's Five generations of innovation models

Source: Adapted from Tidd, Bessant and Pavitt,

II. SOME SELECTED CASES OF INNOVATION AND KNOWLEDGE MANAGEMENT

A. Tatas One Lakh Rupee Car (Case Study 1)

Tatas one lakh rupee car is a tool for inclusive growth. It is 'Resurgence of Innovative India'. It has given this nation a breakthrough in knowledge, which everyone was so desperate of. India has finally arrived at the world stage and is being taken note of.

It should be noted how the small car concept first struck Ratan Tata, who was also in the race to acquire two iconic British brands - Jaguar and Land Rover (now acquired). One day, Ratan tata was going on the road and saw a family of four getting soaked in the rain. That was when he decided to create a small car for all. All the experts those who have visited the Tata Motors factory in Pune and met their engineers and their fantastic team there, were surprised by their innovation. According to them the car is incredible. It is spacious both in the front and in the rear. In terms of acceleration, it is equivalent to a Maruti 800 and has an incredible design finished by indigenous Tata Motors' engineers.

Talking on the potential of economics of this car, the top-notch scientist said: "It will create a paradigm shift in low-cost transport and the whole world is looking forward to a quarter", Novartis vice chairman and managing director ranjit shahani said. About half a dozen pharma companies

car that efficiently runs 25 km on a litre of petrol and offers international specifications. These kind of fuel-efficient cars will be in demand as pollution is on the rise, climates are changing and fossil fuels are running out. People are looking at a new global eco-car and I have a feeling that this can be the new eco-car not only in the country but elsewhere - in other countries. I feel a sense of pride that it will be manufactured in India."

B. Godrej To Sell Moods (Case Study 2)

Life space, the home and office- improvement retail division of Godrej & Boyce Mfg Co, is launching its new concept- Godrej Mood space. As part of their marketing push, the company intends to sell "moods" instead of just products at their Life space outlets.

The new initiative, according to the company, comes after exhaustive consumer research."Moodspace is a concept that will draw upon the emotional element within the shopper to help him or her create the mood which translate into the product selection," said Godrej & Boyce Mfg Co vice-president and business head (retail division) Shyam Motwani.

To be able to understand the customer needs better, the company is creating "mood consultants" who will be trained by Godrej through a special certification course that the company is launching. "We are launching mood-based ranges. So, the new ranges will be classified as romance and freedom and not just according to the size, shape and cost of the products," he added.

On entering the store, life space mood consultants will assist the shopper with exclusive Mood space kits that will comprise mood cards and catalogues.

In the next five years the company will increase their Life space stores from 58 to 150 across the country. The company is also foraying into newer categories like soft furnishings and home décor. The total organized home furniture market is estimated at around Rs.3, 000 crore, growing at 12-15%. In the next few years, however, the growth rate is expected to increase due to the real estate boom the country has been witnessing over the last few years. The Godrej Life space division may clock revenues of Rs150 crore this fiscal compared to Rs 120 crore in FY08.

C. POSTAL DEPARTMENT CONSIDERING SELLING OVER-THE-COUNTER MEDICINES (CASE STUDY 3)

Besides posting a letter you may also stop at a post office to pop up a pill. Postal department is considering using its 1.5 lakh strong network across the country to sell OTC medicines including painkillers, medicines for diarrhoea, essential cold and cough medicines and contraceptives. OTC drugs are medicines one can buy without a doctor's prescription. 'Companies are planning to start pilot projects in Uttar pradesh, M.P. and Maharashtra from the next

are expected to be involved in the pilot project that includes novartis. The move would substantially increase the market

of OTC drugs. Major players like novartis, DABUR, RANBAXY, Cipla, GSK, Pfizer & Zandu control nearly 51% of the total OTC market. The project will involve the department of pharmaceuticals and department of posts. “This is likely to be a public – private partnership project and would be implemented by the department of posts and the concerned Pharma companies,” a government official said. The move aimed at ensuring accessibility of OTC drugs in rural areas. There are about 150000 post offices across the country. “We have been in talks with the government to use the network to sell OTC drugs,” said novartis MD, ranjit that by creating ideas one could manage innovation.

shahani. Nearly 70% of India’s population lives in rural areas where health care infrastructure is low as compared to urban areas. Only 20% of India’s total healthcare is in rural areas. While there are close to 450000 chemists across the country, companies are willing to use the supply chain and logistics facilities of the post offices and petrol pumps to make medicines available in remote areas.

The above cases are the clear illustration of collecting knowledge and then converting it into innovation. One should understand

Table 2: Problems of partial views of innovation

If innovation is Only seen As...	The result can be
Strong R&D capability	Technology which fails to meet user needs and may not be accept
The province of Specialists	Lack of involvement by others, and a lack of key knowledge experience input from other perspectives in the R&D
Understanding and Meeting customer Needs	Lack of technical progression, leading to inability to gain competitive edge
Advances along the technology frontier	Producing products or services which the market does not want or designing processes which do not meet the needs of the user and whose implementation is resisted
The province only of large firms	Weak small firms with too high a dependence on large customers. Disruptive innovation as apparently insignificant small players seize new technical or market opportunities
Only about ‘breakthrough’ changes	Neglect of the potential of incremental innovation: with an inability to secure and reinforce the gains from radical change because the incremental performance ratchet is not working well
Only about strategically targeted projects	May miss out on lucky ‘accidents’ which open up new possibilities
Only associated with key individuals	Failure to utilize the creativity of the remainder of employees, and to secure their inputs and perspectives to improve innovation
Only internally Generated	The ‘not invented here’ effect, where good ideas from outside are resisted or rejected
Only externally Generated	Innovation becomes simply a matter of filling a shopping list of needs from outside and there is little internal learning or development of technological competence
Only concerning single firms	Excludes the possibility of various forms of inter-organizational Networking to create new products, tramline shared processes, etc.

Source: Adapted from Tidd, Bessant and Pavitt, 2005.

PROCESS OF MANAGING KNOWLEDGE AND INNOVATION

CREATIVITY (TO BRING NEW IDEAS)



INVENTION (CONVERTING IDEAS INTO PRODUCTS)



INNOVATION

(CONVERTING PRODUCTS INTO REVENUES AND PROFITS)

Most companies strive to create a work environment, which help innovation and creativity to flourish in the organization. Towards this end, RPG Enterprises has set up a special team of professionals known as ‘incubators.’ It is the responsibility of the organizations are tapped and converted into profit avenues for the organizations.

‘Incubators.’ at RPG Enterprises are specially identified senior executives of the company who will nurture the ideas sourced from employees and ensure their implementation. The company uses a recognition and rewards program to encourage and reward the employees who contributes practical ideas to the organization.

Traditionally, in most companies, whenever a problem arises, the employee approaches the superior who then gives employee a solution to the problem. In such situations, only the brainpower of the superior is being utilized. All others in the organization merely serve as means of implementing the ideas of superiors. By introducing a new ‘innovation culture’, RPG Enterprises makes its employees undergo a series of training sessions to encourage them to ‘think outside the box.’ Along with training its employees, the company is also training its managers to encourage

subordinates to think of new ways of doing things, instead of providing them with ready solutions. Thus the company tries to encourage idea generation at every level in the organization.

The ideas generated are pooled using an intranet, reviewed by a management committee at the apex level of the

organization, and those, which seem practical, are they sent to the team of ‘incubators.’

Through this initiative, the company creates a work environment in which employees are encouraged to take risks and experiment with new ideas without the fear of failure. Likewise, the managers are trained to adopt a managerial style that encourages subordinates to come up with innovative ideas and allows creativity to flourish in the organization.

R P G has implemented this program in one of its companies. The 50 new and innovative ideas that resulted from the program are now contributing nearly Rs 20 lakh each to businesses of RPG Enterprises.

Table 3: Stages in the innovation life cycle

Innovation characteristic	Fluid pattern	Transitional phase	Specific phase
Competitive emphasis placed on ...	Functional product Performance	Product variation	Cost reduction
Innovation stimulated by ...	Information on user needs, technical inputs	Opportunities created by expanding internal technical capability	Pressure to reduce cost, improve quality, etc.
Predominant type of Innovation	Frequent major changes in products	Major process innovations required by rising volume	Incremental product and process innovation
Product line	Diverse, often including custom designs	Includes at least one stable or dominant design	Mostly undifferentiated standard products
Production processes	Flexible and inefficient – aim is to experiment and	Becoming more rigid and defined	Efficient, often capital intensive

	make frequent changes		and relatively rigid.
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Source: Adapted from Tidd, Bessant and Pavitt, 2005

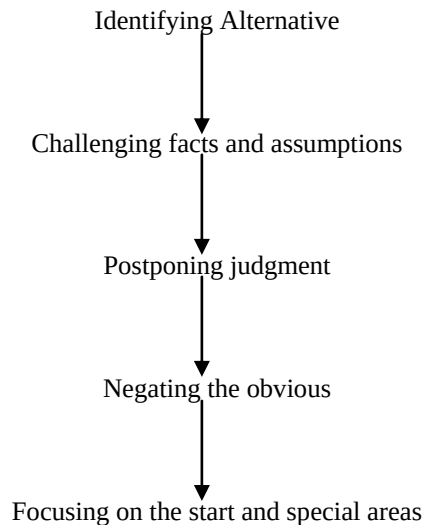
Companies should look for internal innovators rather than external consultants. Every innovation should be rewarded accordingly so that it results into motivation.

finding unusual solutions. This type of thinking is generally used when there is time on hand for dealing with a situation.

D. Companies should learn to use lateral thinking

Steps involved in lateral thinking

Edward de Bono made this technique of thinking popular. Lateral thinking is about thinking from diverse angles and



It has to be accepted that knowledge is around us and the methods should be developed to capture it, nurture it, retain it and then managing it.

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