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ADMINISTRATION AND MANAGEMENT

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# Defining IT Business Value under Conditions of Economic Austerity

By Athanasios G. Giannopoulos

*University of Economics and Business*

**Abstract-** Investment in Information Technology (IT) has typically been justified as playing a crucial role in assisting business and other Organisations in conducting their business in a more efficient and effective way. The implied “value” that results from such investments is known as “IT business value” and its definition and measurement under conditions of economic austerity and uncertainty is the main subject of this paper.

The question is why, under such conditions, many Organisations fail to realize the positive impacts expected from IT investment, which by itself is then rather scarce and difficult to attain. To answer this question we concentrate in this paper on the issues of IT business value measurement and more specifically we attempt to answer the research question of how best to define the “business value” of IT and what factors may affect it.

**Keywords:** *business value, information technology, economic austerity, industrial organisation theory, information systems, process theories.*

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Athanasios G. Giannopoulos

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The paper first puts forward the main definitions used for both “IT” and “Business value” in the literature. It then goes on to present and critically examine the most prominent of the existing methodologies for measuring “IT Business value” again by resorting to a relevant literature search. Then, we examine the special influencing factors that are at work in times of economic austerity and uncertainty and puts forward a framework for analyzing IT Business value under conditions of economic austerity. This framework is presented in terms of its elements and a description of their main characteristics and measures (metrics). Finally, before the conclusions, a list of the critical success factors for IT investment is presented which is based on a previous published work of the author.

**Keywords:** *business value, information technology, economic austerity, industrial organisation theory, information systems, process theories.*

## I. INTRODUCTION

The business value resulting from investments in IT<sup>1</sup> has been and still is one of the major research topics for researchers in the field of IT and IS<sup>2</sup>. Most of the early studies in the specific research area have failed to find strong evidence in order to support a positive correlation between investments in IT and increased business value, suggesting that investments made in IT provide little, or no, value to the investing organization. Most recent studies though, seem to provide a more solid evidence and arguments that

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investments made in IT actually do provide organizations with both operational and strategic “value” but the causal relationship between IS investments and business value remains partly unexplained (Baker, Song, & Jones, 2008).

The research area of “IT business value” is complex and it involves a great deal of uncertainty that stems from the fact that the core constructs of “IT” and “business value” are conceptualized and interpreted differently each time, depending on the specific research context. This situation can be partially explained by considering the plethora of academic disciplines (each with each own theories and research methodologies) that have been engaged in this area throughout the years. Examples of such disciplines are mainly the ones for Information Systems, the disciplines of Economics, Strategic planning and management, Accounting and Operations Research.

This paper attempts to answer the research question of how best to define the “business value” of IT and what factors may affect it especially under conditions of economic austerity and uncertainty. Many authors have tackled the research question of defining and measuring IT business value, but to this author’s knowledge almost never this issue has been considered for the case in which the implementing Organisation operates under conditions of wider economic austerity and uncertainty. Our main aim in writing this paper is therefore to clarify the concept of IT business value under conditions of economic austerity and recession and by doing so to provide the elements of a methodology, which could be used to measure and identify these impacts in the future.

The paper first puts forward the main definitions used for both “IT” and “business value” in the literature. It then goes on to present and examine the most prominent of the existing methodologies for measuring IT Business value, by resorting to a relevant literature search, as well as to our own findings. Then, the paper examines the special influencing factors that are at work in times of economic austerity and uncertainty and puts forward a framework for analyzing IT Business value under such conditions. This framework is presented in terms of its elements with a description of their main characteristics and measures (metrics). Finally, before the conclusions, a list of success factors for IT investment is presented.

<sup>1</sup> Information Technology

<sup>2</sup> Information Systems

a) *Defining "IT" and "Business Value"*

The *Information Technology* (IT) as a concept can be defined in several ways. According to (Orlikowski & Iacono, 2001), the IT "artifact" can be defined in terms of five different conceptualizations as summarized below:

- i. The "*tool view*". This sees IT as an *engineered tool* that does what its designers have intended for it, for example enhancing productivity. In this definition, the technology used and the largely technical matters that define IT (separate, definable, unchanging, and over which humans have control) are the parameters that define IT. This view first was introduced in (Kling, R., 1987) and (Latour, B., 1987). The "tool" view was represented in the IS research literature in four different ways: as a *tool for labor substitution*, a *tool for enhancing productivity*, a *tool for information processing*, and a *tool for changing social relations*.
- ii. The "*proxy view*". This is based on the assumption that the critical aspects of IT can be captured through some set of (usually quantitative) measures. These measures can be classified as referring to:
  - ✓ *Individual perceptions* i.e. IT as viewed by individual users. In (Moore, G. C., Benbasat, I., 1991) an instrument is developed for assessing individual users' perceptions of the so-called "new technologies", mainly IT.
  - ✓ *Diffusion rates* i.e. measures of diffusion and penetration of a particular type of IT such as electronic mail, within some socio-institutional context such as a firm, industry, or society.
  - ✓ *Dollars spent* to cover the costs associated with the IT tools themselves (e.g. dollars spent on hardware and/or software, or on the information systems infrastructure (e.g. dollars for the IT department budget).
- iii. The "*ensemble view*" which was developed to meet and satisfy criticism of the previous two views and the need that IT technology should be looked upon as one element in a "package," which also includes the components required to apply that technical artifact to some socio-economic activity (Kling and Dutton, 1982), (Illich, 1973), (Kling and Scacchi, 1982). In this view, also known as the "web of computing", additional resources such as training, skilled staff, support services, and the development of organizational arrangements, policies, and incentives to enable the effective management and use of new technologies, are included.
- iv. The "*computational view*". This view concentrates on the computational power of Information Technology being interested primarily in the capabilities of the technology to represent, manipulate, store, retrieve, and transmit information, thereby supporting, processing, modeling, or simulating aspects of the

world (Orlikowski & Iacono, 2001). There are two types of the "computational view" found in the literature: The first involves the actual development of algorithms and the production of running code as applied to particular domains. The second involves the development and use of computational capabilities to create models that represent or simulate specific social, economic, or informational phenomena of interest (e.g., decision-making).

- v. Finally, the "*nominal view*". This refers to IT being invoked by name only, but not in fact. Typically, in this view, the terms "information technology", "information system", or "computer", are used in the literature with no reference to the technology per se. They are used either incidentally or as background information (for more see Beath and Orlikowski, 1994).

More recently, researchers have begun to incorporate and analyze the role of organizational structure and innovations in the process of IT definition and "business value" creation (Brynjolfsson & Hitt, 2000).

Coming now to the notion of "*business value*", this has also been interpreted and conceptualized differently depending on the context in which it is analyzed. Researchers have used notions such as "economic value", "economic benefits" and "economic impact" due to IT, when attempting to define and conceptualize what "business value" is, but there are also non-financial notions that should be considered and used in order to define and understand "business value". Such measures include the "organizational capabilities", "organizational performance", "strategic position" that a firm can adopt due to the business value gained by the IT investment and others.

The concept of "IT business value" refers to the "value" that is attained by the investment in IT for the investing Organisation or business and its definition and measurement has given rise to a number of methodologies proposed in the literature, the most prominent of which are presented in the following section.

## II. METHODOLOGIES FOR MEASURING "IT BUSINESS VALUE"

### a) *Levels of examination*

Before focusing on the main methodologies for IT business value we should mention that there are usually three levels of consideration that play a significant role in the conceptualization of this value. These are:

- a) The *level of examination* i.e. whether we refer to the individual unit level, or the firm level, or the whole industry or the (national) economy as a whole. In each level, different variables can be taken into account as "measures" of business value. For

example, at the firm level the “*IT business value*” has been defined as the impact of IT investment on firm performance (Mukhopadhyay, Kekre, & Kalathur, 1995). Others have used the impact on *productivity* of the investing organization (E Brynjolfsson & Hitt, 1996) or the creation of different *profitability ratios* such as the *Return on Sales* (Bharadwaj, 2000), and so on.

- b) The *object of evaluation*. This level refers to what is specifically being evaluated in a specific context i.e. what will be the element that generates business value. Many researchers have focused their research on evaluating operational level variables such as *capacity utilization* of specific strategic business units or broader higher level variables such as *market share* (Barua, Kriebel, & Mukhopadhyay, 1991).
- c) The *time of the evaluation*. This level also plays an important part in the type of impacts that will be measured. For example, a pre-implementation evaluation will provide information on potential impacts and attributes that can be defined before IT implementation and will aim to provide support to decision makers in order to help them decide which of the different options they should act on. A post-implementation evaluation will provide information about the actual business and the actual impacts that were created by the investment.

Taking into account the above, we refer below to a number of the most prominent specific methodologies that have been proposed in the literature for the definition of “IT business value”.

b) *The Microeconomics method and paradigm*

From the microeconomics research, the theory of production has been employed in understanding and measuring the IT business value. By understanding the production processes that take place within an organization, as well as the economic processes of converting inputs into outputs, the method conceptualized the processes involved and provided estimates of the overall economic impact that investments in IT have on the organization and its “business value”. In using the theory of production to define and measure IT business value, Erik Brynjolfsson described what he called “the productivity paradox of Information Technology” (Erik Brynjolfsson, 1993) i.e. the negative or non-existent relationship between IS spending and an organization’s productivity. He also identified and analyzed four explanations for this “IT productivity paradox”:

- a) Data miss-measurement,
- b) Existence of time lags (i.e. that IT productivity benefits, only show up after an investment has matured within the organization),
- c) Redistribution effects, and

- d) Mismanagement issues i.e. due to mistakes and ineffective management.

A later study by the same author assessed the contributions that IS had on firm-level productivity by applying the theory of production on firm-level data (E Brynjolfsson & Hitt, 1996). It concluded, that IS spending had made a “substantial and statistically significant” contribution to firm output, accrediting their positive findings on the fact that their data set at the time of the study was larger and more recent.

Other publications have also used the microeconomics paradigm and produced relevant methodologies and definitions for assessing “IT business value”, e.g. (Dewan, et al, 1998), (Brynjolfsson, 1996), (Brynjolfsson & Hitt, 2003).

c) *The Industrial Organization Theory method*

The industrial organization theory has offered some valuable insights to business value research. By building on two existing organization theories, the “agency” theory and the “transaction cost” theory, Gurbaxani and Wang created an elaborate framework in order to examine the impact of IT on two main attributes of firms, namely *firm size* and *allocation of decision rights* (Gurbaxani & Whang, 1991). These two factors were chosen because the study was mostly based on the notion that firm size and the allocation of decision-making authority among the various firm actors are determined by the costs that are associated with acquiring, storing, processing and disseminating information. Although the theoretical framework was not further analyzed by the authors by using for example firm or industry level data, this research revealed that the allocation of decision rights depended heavily on organizational and environmental factors such as culture and the role of IS within a specific firm context. Finally, further research by the authors also indicated that a firm would be more likely to grow horizontally and vertically if IT was used for the reduction of internal coordination costs.

In a more recent work on oligopolistic competition, game theory was employed in order to give explanations for the overinvestment in IT that had been documented over the past years and the productivity slowdown, referred to earlier as the “productivity paradox” (Belleflamme, 2001). The results of this research confirmed the notion that, if firms can use IT not only for cost reduction but also for product differentiation, it is more likely that a fall in total factor productivity would occur when the latter usage is preferred to the former.

d) *Organizational Behavior Theory*

The organizational behavior theory has been used in order to investigate the impacts that IT has on firm performance and the combined effect of technology

and BPR<sup>3</sup> on the performance of the investing organization. A prominent example of this approach was the application of the organizational behavior theory in the context of the health-care industry (Devaraj & Kohli, 2000). The issue investigated there, was the link between technology and process reengineering with profitability and quality, as well as the combinational effect that technology and process reengineering have on organizational performance. Using both cross-sectional and time-series data between several hospitals over a 3-year period, the authors showed that IT investments contribute significantly to both increased profitability and quality. Most notably, similarly to the "time-lags" theory of Brynjolfsson mentioned earlier, this study also found that the benefits resulting from BPR initiatives do not manifest immediately and that it was the combination of investments in IT and BPR initiatives that was shown to have significant effects on the profitability of the hospitals examined.

A more recent work, (Silvius, 2006), proposed that in order to thoroughly assess the business value created by IT investments one must first have a detailed understanding of the organisational impact that IT has and the relationship between IT impact and organisational performance. His method consisted in building so called *IT investment-balanced scoreboard*, which contained four elements:

1. Financial, i.e. traditional financial valuation methods such as Return on Investment etc.,
2. Customer related, i.e. the impact on the marketing of the organisation,
3. Innovation & Growth, i.e. a perspective on the future options and possible competitive effects of the investment, and
4. Internal, i.e. the impact of the investment on internal business processes of the organisation.

#### e) *The "Variance" approach*

The *variance approach theory*<sup>4</sup> focuses on portraying relationships with variations in the values of their descriptive variables but with the assumption that the relationships between the entities and their properties will remain constant. One of the benefits of this approach is that entities can be re-calculated according to the area that is being studied, providing flexibility at the hands of the researcher. This approach allows for a widespread variety of statistical mechanisms that are available and can be used to test the theories that are created without making it necessary to use fixed (deterministic) variable values.

The variance approach assumes that there are always the necessary and sufficient conditions at play, as well as measurable dependent and independent variables, in order to describe concepts and their

properties which are called "factors". Although the properties of these entities can assume different values, the definition of the entity that is used as a description of the property, will always remain the same.

#### f) *Resource based approaches*

These approaches utilize the resource-based view of the firm in order to examine (mainly through empirical observation) the relation between IT capabilities (IT viewed as an organizational capability) and business performance. The resource-based view of the firm is helpful since it can be used to provide links between the performance of an Organization and the specific resources and skills that are unique to that Organization, rare and difficult to imitate.

A representative study of this approach is a study reported in 2000 entitled "A resource-based perspective on information technology capability and firm performance: an empirical investigation" (Bharadwaj, 2000). The results of that study showed that the IT capability when combined with other complementary investments creates a unique pool of resources that cannot be easily matched by rival organizations. Although some of the firms examined were able to create a strong IT capability, not all of them gained in terms of profitability from it. According to the study, this result shows that although many may be in a position to acquire strong IT capabilities, only few are in a position to create an organization-wide IT capability with the right resources in place in order to achieve positive end long-standing results.

#### g) *Process Theories*

The approaches based on the "process theory" attempt to provide explanations even when causal agents are not sufficient for the outcome to occur (outcome uncertainty). All relevant approaches examined, contained a cause-effect argument of the "necessary, but not sufficient" form, which is mainly a common characteristic of process theories. Soh and Markus attempted to synthesize already existing processes and variance theories in order to resolve apparent contradictions between them in addressing the issue of how IT creates business value (Soh & Markus, 1995). In doing so, they have created one single process theory model that consists of three process sub models (*IT expenditure to IT assets, IT assets to IT impacts, and IT impacts to Organizational performance*).

Another notable work was that of Mooney, Gurbaxani, and Kraemer who followed an approach to measuring business value based on the impacts on business processes (Mooney, Gurbaxani, & Kraemer, 1995). A number of "metrics" categorized by the type of business process (operational or managerial) and the so-called "dimensions" of IT business value (defined as auto mational, informational, and transformational) measured these impacts.

<sup>3</sup> Business Process Reengineering

<sup>4</sup> For details, see (Burton-Jones, McLean, Monod, 2015).



### III. DEFINING IT BUSINESS VALUE IN TIMES OF ECONOMIC AUSTERITY

Economic austerity measures are taken as the response of a government whose ability to borrow money is curtailed or diminished due to several reasons the main one being large public debt and inability to service the required payments on this debt and therefore there is a “default risk”. Raising taxes and reduced expenditures on public projects and programs are the main tools that a government in financial distress use to reel in their deficits. At the same time, falling private income reduces the amount of tax revenue that a government generates. In such environment, businesses are squeezed between falling demand for their products or services, reduced public expenditure, and increased taxation. Many European countries such as Greece, Italy, Spain and Ireland, (but also more recently Finland too) were forced into a mode of austerity of higher or lesser degree in order to stabilize their economies following the massive credit crisis and global recession of 2008, which left their balance sheets crippled.

The regimes of economic austerity that were implemented in Europe since 2009 have run contradictory to the schools of economic thought that have been prominent since the Great Depression and which were influenced by the so called Keynesian economics<sup>5</sup> which stipulated that the governments should increase spending during a recession in order to replace falling private demand. The logic was that if demand is not propped up and stabilized by the government, unemployment will continue to rise and the economic recession will be prolonged. Under the regime of strict economic austerity, currently followed in Europe, the opposite trend is followed especially for the countries mentioned earlier which belong to the European Union.

Countries that belong to a monetary union, such as the European Union, do not have as much autonomy or flexibility to use their central banks to artificially lower interest rates or increase the money supply in an attempt to encourage the private market into spending or investing its way out. In this case, the only feasible option for these countries is to reduce spending and raise taxes thus enacting the business squeezing cycle mentioned above. By contrast, autonomous countries can use a number of other options mainly lowering interest rates and increasing the money supply to get out of a downturn<sup>6</sup>.

<sup>5</sup> Named after John Maynard Keynes, the British thinker who fathered the school of Keynesian economics.

<sup>6</sup> This was the response of the US Federal Reserve, which has engaged in a dramatic program of quantitative easing since November 2009.

Under such conditions of economic austerity, the definition of the “business value of IT ”would require a more holistic and multidimensional approach in order to be able to take into account the influence of the complex “environment” (economic, business, social) under which the organisation operates. It therefore will not always be possible to use existing methodologies for measuring “conventional” business value and IT investments under such conditions may be likely to cause a variety of impacts that will comprise potential benefits as well as dis benefits<sup>7</sup>.

Thus, under conditions of economic austerity it is important to understand and take into account – in defining the business value of IT investment – all possible impacts in a multidimensional sense including the non-economic ones. This can be done more efficiently by use of a *process*-based methodology. The tools provided by the *process theory* enable the involvement and analysis of a wide variety of different variables that affect and take part in the creation of business value but also it could be combined with elements from other methodologies within an integrated framework of “IT business value definition under an economically austere and turbulent environment”.

Such framework is examined in more detail in the following.

### IV. A FRAMEWORK FOR ANALYZING IT BUSINESS VALUE UNDER CONDITIONS OF ECONOMIC AUSTERITY

#### a) *The interacting factors*

Figures 1 and 2, below, show a possible framework for defining IT business value in times of economic austerity. The novel feature of Figure 1, is the entry and interaction of the so called “environment” factors (meaning all relevant elements of the environment under which an Organisation is operating) with the pure IT related elements. The result of this interaction is the overall (operational) performance of the Organisation as this is expressed by a number of variables and factors.

The main elements of this framework are described in more detail below.

#### b) *IT Resources*

As “*IT resources*” are meant a combination of *IT investment allocations (assets)* and a mutually reinforcing system of *competencies* and *practices* all interacting in order to produce the background IT infrastructure and competence of the organisation. An organisation,

<sup>7</sup> It is reminded that even in times of normal economic conditions there are researchers who argued that organizations may have overestimated the strategic value of IT and thus overspend resources in adopting IT expecting an increase in the overall performance of their organisation (Melville, Kraemer, & Gurbaxani, 2004), (Oh & Pinsonneault, 2007).

operating in an uncertain economic and business environment, is obliged to make its IT investment decisions and allocations by carefully evaluating the varying landscape of different business strategies of itself and its competitors, the available overall resources and IT *capabilities* that will ultimately result in performance. However, the ultimate and true *IT resources* that will result from investment decisions, are difficult to estimate and forecast because developing effective combinations of *IT assets* and *IT capabilities* takes time and concerted efforts spent learning and optimizing.

The above statement simply underlines the fact that possession of superior IT resources is not automatically linked to enhanced performance but it can generate competitive value only if IT is deployed in a way that it leverages pre-existing resources in the firm via “co-presence” or “complementarity”(Wade & Hulland, 2004).

The *IT resources* element of the framework is distinguished, in<sup>8</sup>:

- *Inside-out resources*, i.e. capabilities deployed from inside the firm, in response to market requirements and opportunities. These include:
  - *IT Infrastructure*, i.e. the standard IT (or IS) infrastructure resources such as off-the-shelf computer hardware and software which generally have not been found to be a source of sustained competitive advantages for a firm.
  - *IT Technical skills*, i.e. appropriate up-to-date technology skills that are held by Information Systems (IS) employees of the firm and relating to both system hardware and software. They include the ability to deploy, use and manage technical skills and knowledge that is advanced, complex and therefore difficult to imitate.
  - *IS Development*, i.e. capability to develop or experiment with new Information technologies and systems and alertness to take advantage of new technological developments. It includes capabilities associated with managing a systems development life cycle that is capable of supporting competitive advantage.
  - *IS operations*, i.e. ability to provide efficient and cost-effective IS operations on an on-going basis (e.g. avoiding cost overruns, unnecessary downtime and system failures etc.).
- *Outside-in resources*. These are resources originating outside of the organisation, with emphasis on: a) anticipating market requirements, b) creating durable customer relationships and understanding competition. They are relevant to:
  - *Market Responsiveness*, i.e. collection of information from external sources, as well as dissemination of a

firm's market intelligence across departments and the firm's response to that learning (e.g. develop and manage project rapidly, react quickly to changes in market conditions, strategic flexibility: undertaking strategic change when necessary).

- *External relationship management*, i.e. ability to manage linkages between the organisation and stakeholders outside the firm (it also refers to managing the outsourcing partners, customer relationships and so on).
- “*Spanning*” of resources, i.e. the interconnection and integration of both internal and external or “inside-out” and “outside-in”, resources. They include:
  - *IS-business partnerships*, i.e. the process of integration and alignment between IS functions and other functional areas of the firm. Building internal relationships between the IS function and other departments such as business strategy, etc.
  - *IS planning and change management*, i.e. ability to plan, manage and use appropriate technology architectures and standards. This ability involves a) anticipation of future changes and growth, and ability to choose platforms that can accommodate this change, and b) effective management of the technology change and growth. This involves ability of IS managers to understand how technologies can and should be used, as well as how to motivate and manage IS personnel through a “change management” process.

#### c) *IT Assets*

The “IT Assets” element refers to IT investments allocated for particular strategic purposes. They have been distinguished in<sup>9</sup>:

- *Infrastructure*: i.e. all IT infrastructures including shared IT services.
- *Transactional assets*: i.e. infrastructures that relate to the facilitation of the firm's transactions with the outside world such as automated processes for cutting costs or increasing the volume of business per unit cost.
- *Informational assets*: i.e. all assets facilitating the provision of information for managing, accounting, reporting, planning, analyzing and data mining, and
- *Strategic assets*: i.e. those that support entry into a new market, provide a new service, or enable a new product.

#### d) *IT Capabilities*

This refers to IT capabilities that consist of a “mutually reinforcing system of competencies and practices that enable greater business value generation per IT dollar” (Aral & Weill, 2007). IT capabilities in this sense refer to an Organization's:

<sup>8</sup> As in (Wade & Hulland, 2004).

<sup>9</sup> See for example (Aral & Weill, 2007)



- a) *Human capital skills*, i.e. the technical or business skills of individuals or groups that work in the Organisation and actively manage or accomplish various tasks e.g. IT skills of employees at all levels or senior and middle management skills championing of IT initiatives in the various business units.
  - b) *Practices*, i.e. those referring to recurring sets of activities or routines that serve both as a means of accomplishing organizational tasks and as a mechanism for storing and accessing knowledge about the most effective ways to accomplish specific tasks.
  - c) *Intensity of IT use for communication*. This refers to the intensity of IT use for both internal as well as external electronic communication (e.g. e-mail, intranets, wireless devices, etc.).
  - d) *Degree of digitization*. This is the degree to which both internal and external transactions are performed electronically for key functions such as purchasing, sales, etc.
- Internet capability*, i.e. the degree to which firms employ internet architectures in sales force management, employee performance measurement, training and post-sales customer support, and so on.

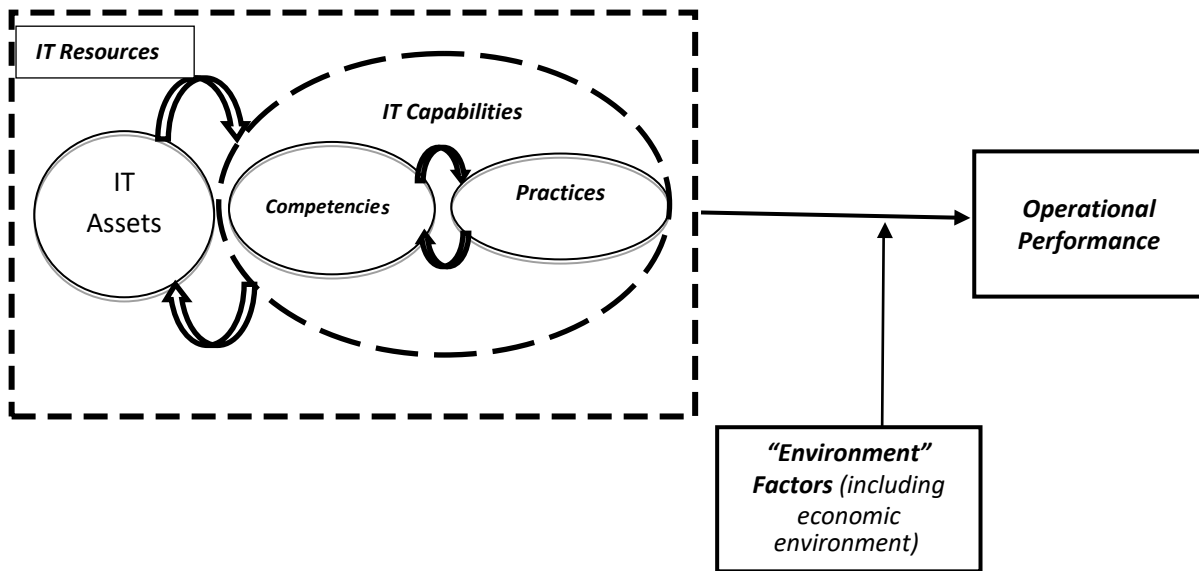


Figure 1: Schematic representation of the interactive way to define IT business value under economic austerity environments

Coming now to the “external” factors of the framework shown in Figure 1, we note:

e) *Operational Performance*

Many dependent variables can be used, to express operational performance outcomes. According to (Aral & Weill, 2007) suitable performance measures, are:

- *Profitability*: Net margin & return on assets (ROA).
- *Product innovation*: Revenues from new or modified products.
- *Market valuation*: This usually comes by comparing the market value of a company's equity and liabilities with its corresponding book values as the replacement values of a company's assets is hard to estimate. The most usual measure is the so-called *Tobin's q ratio*<sup>10</sup>.

- *Cost efficiency*: This expresses performance outputs in relation to the cost of producing the goods sold.

Either, or a combination, of the above performance measures can be used in defining and measuring IT business value in times of economic austerity, but in general it may be difficult to relate one set of variables to another. By using as a basis for our analyses, the *Resource Based View (RBV)* approach, result scan be more focused. In addition, the “*Sustained*

*net worth* for incorporated companies. If the market value reflected solely the recorded assets of a company, Tobin's q would be 1.0. If Tobin's q is greater than 1.0, then the market value is greater than the value of the company's recorded assets. This suggests that the market value reflects some unmeasured or unrecorded assets of the company. High Tobin's q values encourage companies to invest more in capital because they are “worth” more than the price they paid for them. If *Tobin's q* is less than one, the market value is less than the recorded value of the assets of the company and this suggests that the market may be undervaluing the company.

<sup>10</sup> This is approximately equal to the ratio: *Equity market value / Equity book value* for single companies and *value of stock market / corporate*

*Competitive Advantage*” (SCA) concept, although difficult to operationalize, has proved to be a good representation of performance output but researchers employing the Resource Based View (RBV) approach have resorted to looking, instead, at related dependent constructs such as “above-average performance in the long run” and similar, in order to overcome these difficulties (Wade & Hulland, 2004).

Calculating the SCA (sustained competitive advantage) of an Organisation that is gained through IT investment and IT resources, in relation to enhanced organizational capabilities and efficiency is perhaps the most feasible measure of the performance of an Organization under a regime of (national) economic uncertainty.

f) “*Environment*” Factors

These refer to all factors reflecting the surrounding environment (legal, economic, social, political, and so on) within which an organisation operates. Under conditions of economic austerity the “uncertainty” that is reflected in this surrounding environment, becomes a fundamental factor of influence in almost all aspects of an Organization’s operation including the way that IT investment produces “business value”.

The dimensions of the “environment factors” under conditions of uncertainty that are likely to influence an organization’s performance over time are<sup>11</sup>:

- *Environmental turbulence*: Unpredictable changes in the complexity of an organization’s environment (not similar to a “dynamic” environment since the extent of change is unexpected). It is characterized by the:
  - Ability to stay on top of business trends and quickly respond to changing market needs (this is critical for superior performance).
  - Utilization of many and different types of resources in order to respond to the level of turbulence in the environment.
- *Environmental munificence*: The extent to which the prevailing business “environment” can support sustained growth. Relative to this notion it is noted, that:
  - Absence of munificence puts pressure on organizations to reduce investments in outside in and spanning of resources.
  - The competitive position of an organisation is affected by how environmental munificence affects the relationship between outside-in and spanning resources.
- *Environmental complexity*: This refers to the heterogeneity and range of an industry and/or an organization’s activities. It refers to the:

- Complexity of the surrounding environment that makes it difficult for firms to both identify and understand the key drivers of an organization’s performance, and
- Link between key resources and superior performance, which - under conditions of high environmental complexity - will tend to be stronger and more enduring.

<sup>11</sup> See also (Wade & Hulland, 2004).

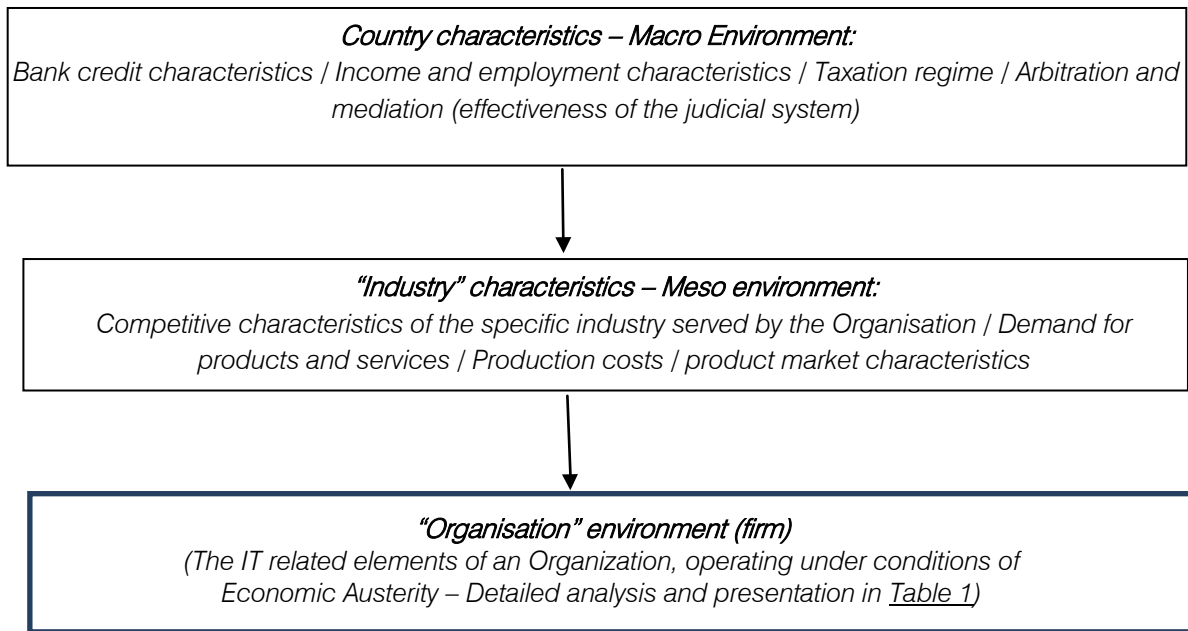


Figure 2: Definition and interrelation of the three levels that define the “environment” factors(A process theory approach)

Table 1: Analytic presentation of “environment” factors at the level of the Organization (\*)

Focal point or process	Possible Metrics	Likely impact of EA	Impacts on output and performance
<p><i>Management functions</i> (With understanding of the organisational impacts that IT has, and of the relationship between IT and performance).</p>	<ul style="list-style-type: none"> <li>○ Admin expenses ...</li> <li>○ Use of IT tools ...</li> <li>○ Decision quality ...</li> <li>○ Speed of reaction...</li> <li>○ Organizational skills...</li> <li>○ BPR application...</li> </ul>	<ul style="list-style-type: none"> <li>○ ... Reduction</li> <li>○ ... Limited and well scrutinized</li> <li>○ ... Superior</li> <li>○ ... Limited due to complex “environment” interaction</li> <li>○ ... Improved</li> <li>○ ... more likely</li> </ul>	<p>Necessary but not sufficient condition for increased organisational and overall performance. Clear and competitive position towards the competition and gaining advantages for the Organisation. By using a single process analysis model it can guide the relationship between IT resources and increased organisational performance</p>
<p><i>IT capabilities (Competencies – practices)</i></p>	<ul style="list-style-type: none"> <li>✓ Human capital (no. of persons) ...</li> <li>✓ Intensity of IT use ...</li> <li>✓ Digitization degree</li> <li>✓ Internet capability...</li> </ul>	<ul style="list-style-type: none"> <li>✓ ...Reduced (quantity - quality)</li> <li>✓ ...Increased</li> <li>✓ ...Increased</li> <li>✓ ....Increased</li> </ul>	<p>Necessary but not sufficient condition for achieving business value. Through use of a process theory model, need to study the transformation of raw materials (data and technology) into IT impacts. Through use of the variance theory, link the impacts of IT investment to other areas’ performance to calculate overall IT business value.</p>

IT assets (Acquisition and deployment)		<ul style="list-style-type: none"> <li>o Technologies used...</li> <li>o Infrastructures for:                             <ul style="list-style-type: none"> <li>▪ Managing...</li> <li>▪ Accounting...</li> <li>▪ Reporting...</li> <li>▪ Planning...</li> <li>▪ Analyzing...</li> <li>▪ Data mining...</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>o Relative to cost                             <ul style="list-style-type: none"> <li>▪ Reduced</li> <li>▪ No impact</li> <li>▪ No impact</li> <li>▪ No impact</li> <li>▪ Reduced</li> </ul> </li> </ul>	IT assets (mainly technology, human resources and the relationship between IS and users) deliver business value due to the impact they create on critical business processes such as systems development, business operations, and planning. The relationship between the above and their impacts on different organisational processes will ultimately define the effectiveness (and benefits or d is benefits) of IT assets under conditions of Economic Austerity.
Operations	Order processing	<ul style="list-style-type: none"> <li>✓ Inventory size...</li> <li>✓ Inventory costs...</li> </ul>	<ul style="list-style-type: none"> <li>✓ Minimized</li> <li>✓ Reduced</li> </ul>	Under conditions of EA, operations will affect the final output and performance of an Organization through: <ul style="list-style-type: none"> <li>✓ Reduced inventory size and thus reduced responsiveness to customers</li> <li>✓ Inability to finance new products and innovation production, and</li> <li>✓ Reduced reliability of operations</li> </ul>
	Efficiency of production processes	<ul style="list-style-type: none"> <li>o Labor costs...</li> <li>o Degree of utilization of resources...</li> <li>o Cycle times...</li> <li>o Responsiveness...</li> <li>o Reliability...</li> </ul>	<ul style="list-style-type: none"> <li>o Reduced</li> <li>o Unclear</li> <li>o Reduced</li> <li>o Reduced</li> <li>o Reduced</li> </ul>	
	Product innovation	<ul style="list-style-type: none"> <li>✓ Service innovation...</li> <li>✓ Product innovation...</li> </ul>	<ul style="list-style-type: none"> <li>✓ Unclear</li> <li>✓ Unclear</li> </ul>	
	Customer communication and interaction	<ul style="list-style-type: none"> <li>o Customer relations...</li> <li>o Use of web for CR</li> <li>o Promotion ability...</li> </ul>	<ul style="list-style-type: none"> <li>o Improved</li> <li>o Increased</li> <li>o Increased</li> </ul>	

(\*)With reference to Figures 1 and 2

g) Necessary conditions of success

In conditions of operation under an environment of economic austerity, the conditions that may enhance the achievement of positive IT business value are worth mentioning here based on work which this author has done in the past (Giannopoulos A.G., 2015) as well on the work of other authors<sup>12</sup>. In summary, they can be presented as follows:

- **Top management commitment:** Successful IT investments require the commitment of top management in order to be driven forward. This is important, since managers will be responsible on later stages to identify and act on the benefits that the investment will provide, in order to increase the efficiency and effectiveness of the Organisation.
- **End User Involvement:** Besides the commitment from top managers and executives, it is also important to ensure that the end users of IT (within the Organisation or outside it) will be thoroughly involved and informed. The aim is for end users to be supported and motivated by the technology leading them to the discovery of new and innovative ways of performing their business by using it, something that will further increase the potential business value that the Organisation will gain through the IT investment.
- **Re-engineering and re-organising of processes:** In most cases, in order for an IT investment to be labelled as successful and for an Organisation to realize the business value it can provide, a great deal of re-organisation and re-engineering of normal business processes has to be undertaken within the Organisation. The aim of such re-organisation is so that information technology will a) "fit" tightly with

<sup>12</sup> See for example, (Soh & Markus, 1995), (Mooney, Gurbaxani, & Kraemer, 1995), (Davenport, 1998), (Chivukula, 2003), (Sward, 2006), (Peppard, Ward, & Daniel, 2007).

the strategic purpose and other goals of the Organisation and b) enable the Organisation to understand the full potential of benefits and value of such technology.

- *Alignment (of the IT Investment) with strategic goals:* The business goals and expected outcomes from IT investment should be fully aligned with the strategies that an Organisation has devised for its future development especially when facing economic austerity and uncertainty. The technical and operational characteristics of the technology used should be carefully tuned to satisfy these goals.
- *Continuous monitoring and assessment:* Success will also depend on the degree to which the organisation will align its specific business goals with the achievement of specific measures of success and the establishment of a permanent system of assessment and monitoring of the business value achieved from a given IT investment. The measures of assessment of the business value will have to also take account of the competitive environment and the specific business context in which the Organisation operates.

## V. CONCLUSIONS

Defining "IT business value" is a complex task that involves a great deal of uncertainty. However, since considerable investments are necessary for Information systems (IS) acquisition, installation and operation, and in the complex and full of restrictions environment of economic austerity that certain countries face for many years now, such definition and measurement becomes an important factor in decision making and successful operation.

The core constructs of "IT" and "business value" can be conceptualized and interpreted by using a number of possible methodologies which have been proposed in the literature by various researchers. These methodologies differ each time, depending on the specific business and "industry" context in which the Organisation under question operates. They were presented in summary form in this paper under the names of: "macroeconomics method and paradigm", "industrial organisation theory", "organizational behavior approach", the "Variance" method, "Resource based" approaches, and the "process theory" approach. The interested reader is referred to the rich bibliography given at the end of this paper for further details on these methodologies.

Under conditions of economic austerity, the definition of "business value of IT" requires a more holistic and multidimensional approach in order to be able to take into account the influence of the complex "environment" (economic, business, social) under which the organisation operates. It is therefore evident that it

will not always be possible to use the above, "traditional", methodologies for measuring business value of IT investments under conditions of economic austerity. The paper, stipulated that under such conditions it is important to understand and take into account all possible impacts in a multidimensional sense including the non-economic ones. It then went on to propose (under a *process-based* methodology approach) a framework for analyzing IT business value under such conditions that is presented in Figures 1 and 2 and in Table 1 of the paper.

Under conditions of economic austerity the number of "external" factors that form the "environment" under which an organisation operates, take on an added importance and weight and have somehow to be clearly taken into consideration in defining the IT business value under these conditions. These factors – summarily called "environment factors" - refer to the surrounding legal, economic, social, and political space within which an organisation operates. The main complicating factor is that of "uncertainty" (meaning the sudden and unexpected changes in the rules and conditions under which an organisation operates). The three dimensions or levels of the "environment factors" are the following:

- Country characteristics – Macro Environment:* It includes the bank credit regimes that apply and availability of finance, the income and employment characteristics that apply, the taxation regimes, and the arbitration and mediation environment that operates i.e. the effectiveness of the judicial system. All these need to be taken into account as the "binding parameters" under which an organisation will create its IT business value.
- "Industry" characteristics – Meso environment:* These refer to the competitive characteristics of the specific industry to which the Organisation belongs, the level of demand for products and services, the production costs, the product characteristics and the characteristics of the market. Finally, the
- "Organisation" operating environment:* This includes all the internal influencing factors at the level of the firm. These include the management functions at all levels, the IT assets, the IT capabilities of the firm, and the various elements of operations (i.e. operating rules and conditions as presented in detail in Table 1).

Information technology has played a crucial role in assisting Organisations to identify and utilize new methods for conducting their business in a more efficient and effective way. This is primarily because IT provides an Organisation with tools and methodologies that allow it to do business more efficiently, access new resources previously unreachable and utilize them more effectively, and generally enable it to sustain these positive results. Unfortunately, many Organisations fail



to realize such impacts from IT investment, due to a variety of different reasons. A key number of “success factors” have therefore been identified and proposed. These include, top management commitment, end-user involvement, re-engineering and re-organisation of the organization’s processes, alignment with the organization’s strategic goals and performing a continuous monitoring and assessment function that will provide the necessary data for corrective actions.

As regards future work in this area, it is foreseen that the elements of the proposed framework will be further defined, primarily in terms of the metrics that can be used for their definition and measurement. Also, the elements of the process theory approach should be employed in a more operational way in order to produce the full operational model of “IT business value definition under conditions of economic austerity”.

### BIBLIOGRAPHY

1. Aral, S. P. Weill, (2007). IT assets, organizational capabilities, and firm performance. *Organization Science*, 18(5) 763-780.
2. Baker, J., Song, J., & Jones, D. (2008) Refining the IT Business Value Model: Evidence from a Longitudinal Investigation of Healthcare Firms. , ICIS 2008 Proceedings.
3. Barua, A., Kriebel, C., & Mukhopadhyay, T. (1991). An economic analysis of strategic information technology investments. *MIS Quarterly*, 15(3), 313–331.
4. Beath, C. M., W. J. Orlikowski, (1994). The contradictory structure of systems development methodologies: Deconstructing the IS user relationship in information engineering. *Information Systems Research*, 5(4) 350–377.
5. Belleflamme, P. (2001). Oligopolistic competition, IT use for product differentiation and the productivity paradox. *International Journal of Industrial Organization*, 19(1-2), 227–248. doi:10.1016/S0167-7187(99)00017-X
6. Bharadwaj, A. (2000). A resource-based perspective on information technology capability and firm performance: an empirical investigation. *MIS Quarterly*.
7. Brynjolfsson, E. (1993). The productivity paradox of information technology. *Communications of the ACM*, 36(12), 67–77.
8. Brynjolfsson, E. (1996). The Contribution of Information Technology to Consumer Welfare. *Information Systems Research*, 7(3), 281–300. doi:10.1287/isre.7.3.281
9. Brynjolfsson, E., & Hitt, L. (1996). Paradox lost? Firm-level evidence on the returns to information systems spending. *Management Science*, 42(4), 541–558.
10. Brynjolfsson, E., & Hitt, L. (2000). Beyond computation: Information technology, organizational transformation and business performance. *The Journal of Economic Perspectives*, 14(4), 23–48.
11. Brynjolfsson, E., & Hitt, L. (2003). Computing productivity: Firm-level evidence. *Review of Economics and Statistics*.
12. Burton-Jones A., McLean E. R., Monod E., (2015). Theoretical perspectives in IS research: from variance and process to conceptual latitude and conceptual fit. *European Journal of Information Systems*. Volume 24, Issue 6, November 2015, pp 664–679.
13. Chivukula, R. (2003). Business value of information technology an applied framework to assess the business value of IT and maximize the impact of IT strategy. MIT Sloan School of Management, 6-35.
14. Davenport, T. (1998). Putting the Enterprise into Enterprise Systems. *Harvard Business Review*, pp. 1-11.
15. Devaraj, S., & Kohli, R. (2000). Information technology payoff in the health-care industry: a longitudinal study. *Journal of Management Information Systems*.
16. Dewan, S., Michael, S., Min, C. (1998). Firm characteristics and investments in information technology: Scale and scope effects. *Information Systems*, (January 2014).
17. Giannopoulos, A. G., (2015). Critical success factors in ERP systems implementation: the case of medium and small sized enterprises. *Journal of Business Management and Applied Economics*, Vol IV / Issue 2, March 2015, 1-16.
18. Gurbaxani, V., & Whang, S. (1991). The impact of information systems on organizations and markets. *Communications of the ACM*.
19. Hitt, L., & Brynjolfsson, E. (1996). Productivity, business profitability, and consumer surplus: three different measures of information technology value. *MIS Quarterly*, 20(2), 121–142.
20. Illich, I. (1973). *Tools for Conviviality*. Harper and Row, New York.
21. Kling, R. (1987). Defining the boundaries of computing across complex organizations. Richard J. Boland Jr. and Rudy Hirschheim, eds. *Critical Issues in Information Systems Research*. John Wiley & Sons, New York, 307–362.
22. Kling, R., W. H. Dutton (1982). The computer package, dynamic complexity. J. N. Danziger, W. H. Dutton, R. Kling, and K. L. Kraemer, eds. *Computers and Politics: High Technology in American Local Governments*. Columbia University Press, New York, 22–50.
23. Kling, W., Scacchi. 1982. The web of computing: Computer technology as social organization. *Adv. Comput.* (21) 1–90.



24. Latour, B. (1987). *Science in Action*. Harvard University Press, Cambridge, MA.
25. Melville, N., Kraemer, K., & Gurbaxani, V. (2004). *Information Technology and Organisational Performance: An Integrative Model of IT Business Value*. Center for Research on Information Technology and Organizations, Graduate School of Management. California: University of California.
26. Mooney, J., Gurbaxani, V., & Kraemer, K. (1995). *A Process Oriented Framework for Assessing the Business Value of Information Technology*. International Conference on Information Systems (pp. 17-27). AIS Electronic Library.
27. Moore, G. C., Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research* 2(3) 192–222.
28. Mukhopadhyay, T., Kekre, S., & Kalathur, S. (1995). Business value of information technology: a study of electronic data interchange. *Mis Quarterly*.
29. Oh, W., & Pinsonneault, A. (2007, June). On the Assessment of the Strategic Value of Information Technologies: Conceptual and Analytical Approaches. *MIS Quarterly*, 31 (2), pp. 239-265.
30. Orlikowski, W. J., & Iacono, C. S. (2001). Research commentary: Desperately seeking the “IT” in IT research – a call to theorizing the IT artifact. *Information Systems Research*, June 2001, 12(2), 121-134.
31. Peppard, J., Ward, J., & Daniel, E. (2007). Managing the Realisation of Business Benefits from IT Investments. *MIS Quarterly Executive*.
32. Silvius, A. J. (2006). Does ROI Matter? Insights into the True Business Value of IT. *The Electronic Journal Information Systems Evaluation*, 9 (2), 93-104.
33. Soh, C., & Markus, M. (1995). How IT creates business value: a process theory synthesis. International Conference on Information Systems (pp. 29-41). AIS Electronic Library.
34. Sward, D. S. (2006). *Measuring the business value of Information Technology: Practical Strategies for IT and Business Managers*. Paperback, 282 pages, Published by International Press, 2006.
35. Wade, M. and Hulland, J. (2004). The Resource-Based View and Information Systems Research: Review, Extension, and Suggestions for Future Research. *MIS Quarterly*, 1, 107-142.

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# Factors Influencing the Performance of Small and Micro Enterprises (SMEs) in Somaliland a Case Study of Hargeisa City

By Moukhtar Houssein Robleh  
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**Abstract-** Governments worldwide have acknowledged the impact of Micro and Small Enterprises (MSEs) on job creation, improvement of people's standards of living and hence an overall impact on the economy. The important role played by the informal sector in most economies in less developed countries is now recognized by governments and international agencies. However, enterprises in the informal sector continue to encounter various barriers that prevent them from attaining their full potential. This study sought to establish the factors that influence the performance of MSEs in Hargeisa city.

## *Keywords*

*Legislative processes: acquisition of permits, tax procedures.*

*Slabs: is the space in the market or stage for business small and micro enterprises: these are enterprises with less than 20 employees.*

*Entrepreneurial success: entrepreneurial success will be measured based on profit from the business.*

*GJMBR-A Classification: JEL Code: N80*



FACTORS INFLUENCING THE PERFORMANCE OF SMALL AND MICRO ENTERPRISES (SMEs) IN SOMALILAND A CASE STUDY OF HARGEISA CITY

*Strictly as per the compliance and regulations of:*



# Factors Influencing the Performance of Small and Micro Enterprises (SMEs) in Somaliland a Case Study of Hargeisa City

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**Abstract-** Governments worldwide have acknowledged the impact of Micro and Small Enterprises (MSEs) on job creation, improvement of people's standards of living and hence an overall impact on the economy. The important role played by the informal sector in most economies in less developed countries is now recognized by governments and international agencies. However, enterprises in the informal sector continue to encounter various barriers that prevent them from attaining their full potential. This study sought to establish the factors that influence the performance of MSEs in Hargeisa city. It attempted to identify the extent to which the socio-cultural background of the entrepreneur influences the performance of an MSE and how performance of MSEs is associated with the characteristics of the business. It also examined the Government Policy and Legislative processes that influence the performance of the MSE sector.

A descriptive Survey employing the use of questionnaires, an interview and observation schedules were used to collect data from a sample size of 152 Micro and small enterprises picked from a population of 1500 operating within and around a 400 metre radius of Hargeisa City. They were selected using stratified sampling, and purposive sampling techniques. Data was analysed using descriptive statistics such as frequencies and percentages Chi Square tests were used to test the significance of associations between selected variables.

The findings were displayed in percentages, frequencies, figures and tables. This study revealed that certain characteristics of the enterprise and the socio-cultural background of the entrepreneur have an impact on MSE performance; thus given a conducive environment and adequate support, The MSE entrepreneurs in Hargeisa can realise their full potential and maximise their contribution to the country's economic development. The study also demonstrates that with the installation of basic infrastructure, and the elimination of both rigid regulations and the threat of demolition, the enterprises perform more efficiently. This highlights the need for urban planners to allocate land and provide basic infrastructure for the informal sector.

## Definition of Keywords

*Legislative processes:* acquisition of permits, tax procedures.

*Slabs:* is the space in the market or stage for business  
*small and micro enterprises:* these are enterprises with less than 20 employees.

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*Entrepreneurial success: entrepreneurial success will be measured based on profit from the business.*

## CHAPTER ONE

### I. INTRODUCTION

#### a) Background of the study

Small and Micro Enterprises (SMEs) play an important economic role in many countries of the world. Over the past 10 years, economic planners have realized the importance of the small enterprises in achieving economic development. Many governments and development organizations have focused on the promotion of SMEs as a way of encouraging broader participation in the private sector. Micro, small and medium-sized enterprises (SMEs) play a central role in the European economy. They are a major source of entrepreneurial skills, innovation and employment. In the enlarged European Union of 25 countries, some 23 million SMEs provide around 75 million jobs and represent 99% of all enterprises (European Commission, 2011). For instance in Britain; SMEs are the backbone of the British economy (Rowe, 2008). According to the Department for Business, Enterprise & Regulatory Reform (BERR)'s Enterprise Directorate Analytical Unit, the UK economy is 99% SMEs, employing 14.23m people, out of a working population of approximately 30 million. In terms of UK turnover and Gross Domestic Product (GDP), UK SMEs account for 1.48 trillion sterling (British Pounds). SMEs (with at least 1 employee) outperform the large UK Corporations in terms of productivity despite having minimal resources, little support is largely ignored. Large UK Corporations of 250 employees which account for 52% of employment but less than only 50.8% of UK turnover (ibid), thus the UK economy is supported by SME performance, and improving performance will have a substantially positive effect on the entire UK economy.

Small and medium-sized enterprises (SMEs) are the backbone of Singapore's economy, contributing 47% of the country's GDP and generating 62% of available jobs (Allison 1984). The promotion of SMEs and, especially, of those in the informal sector is viewed as a viable approach to sustainable development because it suits the resources in Africa. SMEs are the main source of employment in developed and

developing countries alike, comprising over 90% of African business operations and contributing to over 50% of African employment and GDP (Okafor2006).

However many SMEs remain outside the formal banking sectors yet they play a key role in the economy of many countries. As with many developing countries, there is limited research and scholarly studies about the SMEs sector in Somaliland particularly SMEs in Hargeisa town. According to National Baseline Survey. (1999), fifty six per cent of formal businesses are located in the Hargeisa region. On the other hand, informal sector enterprises are more widely distributed, with the majority found in the rural areas. This survey highlights the regional distribution of enterprises Somaliland.

Given the importance of SMEs to the Somaliland economy and the exposure to risks owing to their location, there is need to conduct this study to investigate the factors influencing the Success or failure of SMEs in Hargeisa City and to understand how they can be well.

#### b) *Statement of the Problem*

Small and medium enterprises are the major agents of economic growth and Employment. In Somaliland, over seventy percent of small businesses are estimated to fail each year(National Baseline Survey, 1999). Amoud (1998) observes that the health of the economy as a whole has a strong relationship with the health and nature of SMEs. However, despite government efforts in Somaliland to promote SMEs activity, less progress seems to have been achieved, judging by the performance of the informal sector. When the state of the macro economy is less favourable; by contrast, the opportunities for profitable employment expansion in SMEs are limited. Unfortunately, there is very little information on how the small business sector is structured. Because of their small size and the exposure to risks owing to their location, a simple management mistake is likely to lead to sure death of a small enterprise hence no opportunity to learn from its past mistakes.

This study seeks to investigate the factors that affect the performance of small businesses in order to develop an understanding of the dynamics of SMEs not only for the development of support programmes and growth strategies for SMEs, but also for the growth of the economy as a whole. Factors affecting the success or failure of SMEs in Hergiesia City will be explored to better understand why they fail or succeed and how they can be improved.

#### c) *Main Objective of the Study*

The main objective of this study was to investigate factors affecting the performance of SMEs in Hergiesia Somaliland.

#### i. *Specific Objectives of the Study*

Specifically, the following objectives shall be tackled.

- To investigate the socio-cultural background of entrepreneurs that influences the performance of their businesses.
- To examine the business related Government policies and how they influence the performance of SMEs in Hargeisa city.
- To identify the challenges facing SMEs in Hargeisa City and how these challenges influence their performance.
- To suggest ways of sustaining SMEs

#### d) *Significance of the Study*

It is hoped that the study results would be used by the Government through the Ministries of Culture and Youth Affairs (MOCYA), Gender and social services in developing policies for the disbursement of the Youth and Women funds to the small businesses. It is also hoped that Municipal Council of Hargeisa would use the findings of this study to develop the findings of the study to design appropriate policies and strategies that could guide the planning for and location of SMES within Hargeisa city and other urban areas in Somaliland. Non-Governmental Organizations (NGOs) and other Development Partners dealing with poverty eradication will also find the report useful. The results of this study would be disseminated in workshops, published and shared in libraries thus the study will contribute to the stock of knowledge from which societies and institutions depend for problem solving.

#### e) *Research Questions*

The study shall be guided by the following research questions:

1. What is the relationship between the characteristics of a business enterprise in Hergiesia City and its performance?
2. To what extent does the socio-cultural background of an entrepreneur affect the performance of the business enterprise in Hergiesia City?
3. How does Government Policy and legislative processes impact on the performance of SMEs in Hergiesia City?
4. What challenges do entrepreneurs operating SMEs in Hargeisa face?
5. What strategies are employed by small and micro-enterprises in countering the challenges that they face?
6. What do you think could be done to prevent these challenges

#### f) *The Scope of the Study*

The study focuses on SMEs operating in the context of Hargeisa as it has a collection of many SMES of different types. Hargeisa, which is the capital city of Soma liland is located 110km East of Borama, 150km West of Berbera. Various types of small businesses

were studied. The researcher took two weeks collecting data.

g) *Limitations of the Study*

The researcher faced a number of challenges at the time of data collection and they included the following:

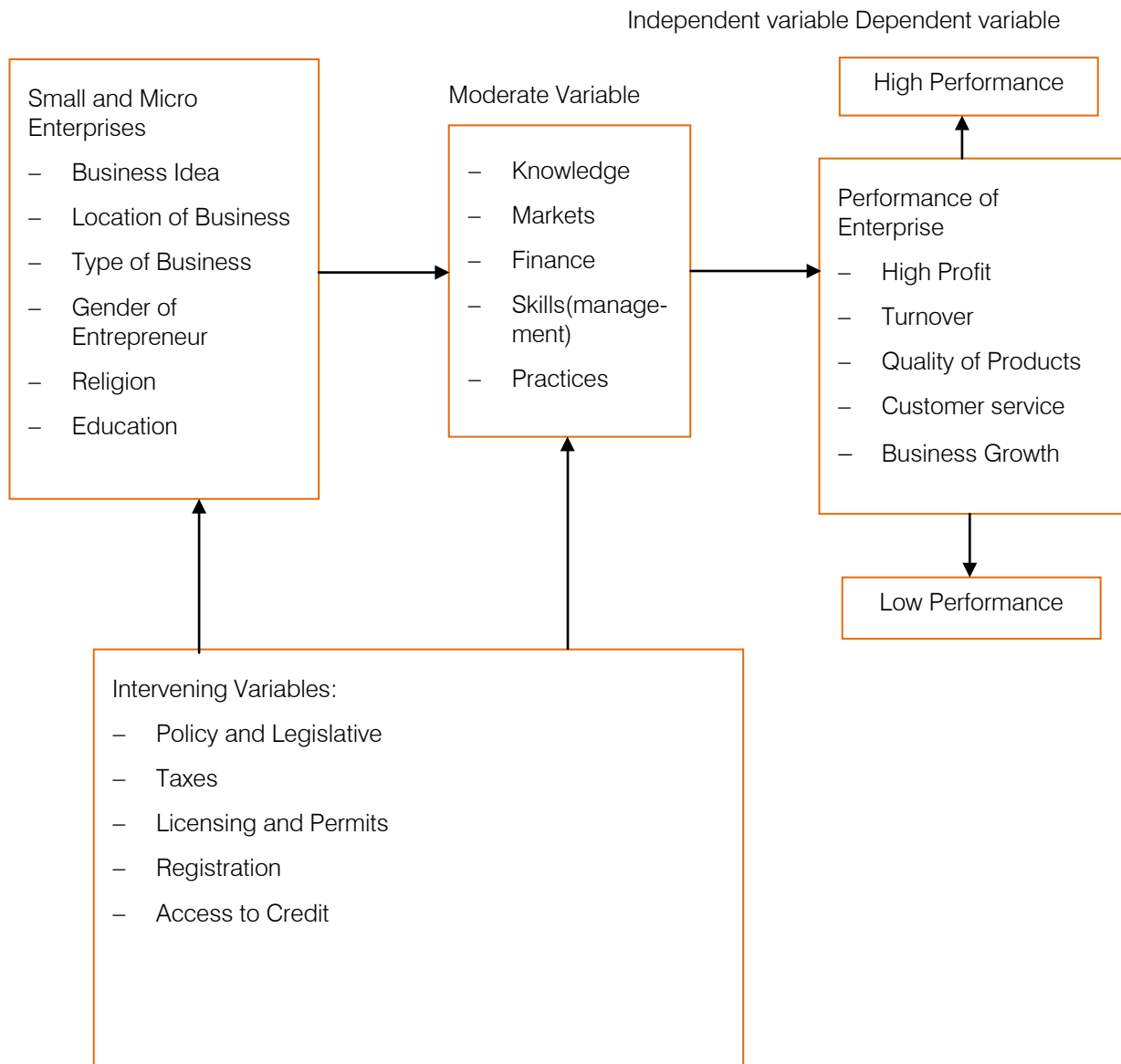
The researcher faced financial constraints as much money may be required to meet the cost of transportation and meals. This challenge was overcome by seeking financial support from financial institutions. The researcher also had limited time to cover all the small businesses in Hargeisa. In order to overcome this

problem, he concentrated on his selected sample of the SMEs in Hargeisa.

There was a challenge of haphazard and disorganized nature of the businesses operating within and around mini and super markets that may hamper the collection of data. The researcher addressed this challenge by getting more organised in terms of time management and presenting himself well at the area of stud

h) *Conceptual Framework*

This study was guided by the following conceptual framework:



Source: Developed by the researcher

Figure 2.1: The relationships between the variables



### Explanation

The independent variables in this frame work are small and micro enterprises with underlying success factors. These include factors that are inclined towards the business owner such as age, gender, education, training and experience. These coupled with characteristics of the business enterprise such as size, source of capital, number of employees can impact on the performance of the business (dependent variable).

The business owner or entrepreneur may possess certain inherent knowledge, skills and practices which may influence a business enterprise either negatively or positively as this study shall find out. These include knowledge of the markets, management, and the trends in the particular type of business. These factors moderate the performance of the enterprise. And thus, the moderating factors that may vary with characteristics in the business or business owner.

Performance of the business which reflects in terms of high profit turnover, quality of products, customer service and business growth are dependent on factors in business or it's owner. How the business owner uses the knowlege, skills, manage and what they practice in business will give them either high or low business performance.

However, government policies on the ground and legislative processes, taxes, licensing and permits, registration and access to credit also have a direct impact on the SMEs and moderating variables which in turn affect business performance.

This study seek to determine how all these factors interplay among themselves and how they affect the performance of the SMEs in Hargeisa.

## CHAPTER TWO

### II. LITERATURE REVIEW

#### a) Introduction

This chapter focuses on the evaluation of the existing literature. The research identifies gaps in what other researchers have written about the topic he is researching about. The researcher mainly takes the initiative to critic the secondary information by filling the gaps with new knowledge based on his own opinions.

#### b) Characteristics of SMEs

According to Perry and Pendleton (1983) many typical characteristics of SMEs are determined by factors like size of organization or independent ownership. This is supported by empirical findings by compiled by (Wagner1992) who found out that SMs in Japan are characterised by smaller numbers of employees that are more involved in retail. The same study reveals how Nigerian SMEs entail smaller ownership such as one-man business or in partnership while others were family business or private limited company.

It is important to mention that SMEs are operated by more women than men in many countries of the world, also backed by the (International Labour Organization, 1989) which reveals that the sector accounts for 41 percent of women-owned and 30 percent men owned enterprises around the world. This fact is not far from reality in Somaliland case.

Usually, SMEs are more operated by every person both the educated and non-educated ones but the latter are more in this business. As if this is not enough, SMEs require smaller amounts of capital to begin the business. This could probably be one of the reasons why many uneducated entrepreneurs Hargeisa city are involved in the sector.

#### c) SMEs Performance Management

Management and skills are needed to run micro and small enterprises. Research shows that majority of micro and small enterprises are not well equipped in terms of Management skills. Majority of those who run SMEs are the ordinary people whose management background is wanting. Hence they may not be well equipped to carry out managerial routines for their enterprises. King and McGrath (2002) suggest that those with more managerial skills and training are more likely to be successful in the SME sector. As such, for small businesses to do well, entrepreneurs need to be well informed in terms of technical skills and management to remain players in a competitive business economy.

However, (Holt, 1992) acknowledged that managerial skills play a subsidiary role in promoting entrepreneurship, because entrepreneurs are born. It is often articulated that the number of entrepreneurs will ultimately be increased more if awareness of the feasibility and desirability of starting a business is established at a young age.

#### d) Factors that determine success and failure of SMEs

Sutton (1997) noted that, most of the successful entrepreneurs in Sri Lanka have not gone through higher education or formal courses in entrepreneurship. Lack of formal education may not block their desire to operate SMEs. They could use indigenous knowledge and become more successful than those other entrepreneurs that went through formal system of education. In another study conducted by (Meng and Liang, 1996) regarding entrepreneurs in Singapore disclosed that successful entrepreneurs have higher managerial skills compared to that of unsuccessful entrepreneurs. Ninety percent of business failures are associated with "management inadequacy" according to(Perry and Pendleton, 1983).

One could also point out that experience may determine business success, especially when the new business is related to previous business knowledge and experiences. Entrepreneurs with vast experiences in managing business are more capable of finding ways to

open new business compared to those without any experience. The importance of experience for small-scale business success is also underscored by other experts like (Zimmerer and Scarborough, (1998) note that prominent reasons behind business failures are related with managerial and experiential capabilities.

e) *Sources of Finance for SMEs*

Support services to SMEs cover both financial and non-financial interventions provided enhance the development and sustainability of the sector. The Baseline Survey of 1999 estimated that 260 organizations (private and public, national and international) entrepreneurs had support programmes. In an attempt to understand the scope of these organizations, the 2009 MSE Survey enquired into the different types of assistance received by MSE operators who discovered that their operations depended on both formal and informal assistance as well as financial and non-financial assistance.

Wanjohi and Mugure (2008) acknowledges that 4 per cent of accessed credit was obtained from formal financial channels, such as NGOs, micro-finance schemes, commercial banks and Savings and Credit Cooperative Societies (SACCOS). In Somaliland's case, small scale entrepreneurs are supported by the Islamic financial institutions through borrowing and paying back after an agreed period of time but still others may be facilitated by support from relatives in diaspora who send them remittances.

f) *How SMEs Promote the Economy of the country*

According to (Hisrich, 2000.), Sub-Saharan African countries report a high number of SMEs contributing to economic growth in the economy. There is a large difference between regions and countries in regard to the number of SMEs. The variation between countries in the region of Sub Saharan Africa is large and data uncertainty is high. The number of SMEs is highly dependent on how you define them and whether or not you include the informal part of the economy. The reason behind this pattern is probably due to smaller economies of scale on the national level in smaller domestic markets.

According to Ayyagari (Weitzel, and Jonsson, 1989), SME sector's contribution to both employment and GDP shows a strong positive correlation with GDP per capita. Consequently, the wealthier a country is, the more important are the SMEs in the overall economy. More recently the Executive Vice president of the Development Bank of Southern Africa by the name of (Thapa., 2007), stated that "in most African countries SMEs in the formal sector contribute less than 20% to gross GDP Lucas (1978) show that shift towards services has been broad based, registering substantial growth in several service sectors in most countries in the region. This supports the perspective that SMEs play a pivotal role in the formation of a stronger service sector.

In this way, the role of SMEs in economic growth and development should not be underestimated.

g) *Age of the Firm on Business Performance*

According to many sources and daily observation, the age of an entrepreneur may affect firm survival and growth and/or organizational decline or death. What makes new SMEs face a greater risk of survival than older firms is that new firms do not have experience, access to resources, networking skills(see, Amyx, 2005). In some instances, age of an entrepreneur goes with trust. In some countries of East Africa, youths are more engaged in SMEs according to a previous conversations with a Ugandan professor. In Somaliland, old people are trusted with the exchange of goods and services than young people.

h) *Location of the Business on its Performance*

Geographic location has its implications on access to markets and other resources like finance, skilled labour, subcontractors, infrastructure, distribution and transport logistics and other facilities. SME success also depends on neighbourhood appearance and continued or maintained future business operations in that location. According to Orthodox regional development theory by (Row, 2008), urban areas have favourable supply-side conditions for firm development. SMEs located in urban areas typically have a relative ease of access to customers and the inputs required (i.e. finance, premises and technology) to produce goods or services. SMEs located in urban areas may benefit from "agglomeration economies" and spatial externalities such as specialized infrastructures, information, network of suppliers, specialized labour, specialized knowledge, concentration of existing exporters (Bonte, 2009).

Ronge and Nyangito (2002) found that firms in remote rural areas were less active in various dimensions of innovation. This may be influenced by the fact that most rural areas have less and reliable financial and business service sectors than urban areas. Further, limited awareness and usage of external business advice have been reported by firms located in rural areas (Keeble, 1997). This study seeks to find out whether the location of a business has any influence on the performance of the SMEs located at Hargeisa.

i) *Challenges Facing SMEs*

It is generally recognized that SMEs face unique challenges, which affect their growth and profitability and hence, diminish their ability to contribute effectively to sustainable development these include: lack of managerial training and experience, inadequate education and skills, lack of credit, National Policy and Regulatory Environment, technological change, poor infrastructure and scanty markets information (Hall, 1987).

## CHAPTER THREE

## III. METHODOLOGY

There are various other financial challenges that face small enterprises. They include the high cost of credit, lack of bank charges and fees. The scenario witnessed in Somaliland particularly during the climaxing period of the year 2012 testifies the need for credit among the common and low earning entrepreneurs. Numerous money lenders in the name of Pyramid schemes came up, promising hope among the 'little investors,' which they can make it to the financial freedom through soft borrowing. The rationale behind turning to these schemes among most African nations, Somaliland inclusive, the challenge of connecting indigenous small enterprises with foreign investors and speeding up technological upgrading still persists (McPherson, 1995). There is a digital divide between the rural and urban Somaliland. With no power supply in most of the rural areas, it is next to impossible to have internet connectivity and access to information and networks that are core in any enterprise. Thus technological change, though meant to bring about economic change does not appear to answer to the plight of the rural entrepreneurs except in the case of urban SMEs.

j) *Sustainability of SMEs*

According to (Evans 1987), maintaining social acceptance is crucial in doing business. Companies need to be perceived positively by stakeholders. Sustainability means maintaining strong relationships according to (Raman, 2004). Treating employees well increases their job satisfaction and makes them more likely to stay with the company as well as marketing it to attract more customers and profit. SMEs contribute significantly to economic growth, employment and national development. Their contribution is commensurate with the level of economic development and diversification of their respective countries. Business sustainability makes firms resilient so they are able to adapt to change and create long-term financial value. Sustainability and the legacy of the firm are part of SMEs' day-to-day activities (Weber 1930).

Sustainable SMEs aim at finding a balance between social-wellbeing, ecological quality and economic prosperity (Gakure 2006). Sustainable SMEs can get ahead of supply chain pressure and ever-stricter regulation (see, McClintock, 2009). Firms adopting sustainable practices early could avoid unnecessary costs. The reputation of an entrepreneur could build community connections to capture multiple benefits. For example, keeping customers informed about cost effective quality goods and services may make projects advance to a better position. Sustainable practices help companies meet legal requirements such as permits more quickly and this could guarantee their competitive advantage.

a) *Introduction*

This chapter articulates the research designs through which data was collected. The sampling frame was employed to focus on the procedure, size and techniques. The chapter presents research methods and instruments such as observation and its check list, key informant interview with its guide, questionnaires and their guides as well as focus group discussions. Ethical considerations were also discussed.

b) *Research Design*

Longenecker and Palich (2006) assert that research design refers to the master plan that will be used in the study in order to answer the research questions. Qualitative techniques shall dominate the data collection which was descriptive in nature and explanatory. Quantitative techniques were used in order to find out factors influencing the performance of SMEs in Hargeisa City.

c) *Target Population*

In this study, the target population included small scale business owners such as those operating the mini and super market in Hargeisa City due to their concentration of various SME types and can thus be representative of most enterprise sectors in Somaliland. The study also targeted the daily customers who buy the products and receive the services of the entrepreneurs. Lastly, some policy makers in the ministry of commerce who regulate SMEs were also involved in order to capture reliable and valid information.

d) *Sampling*i. *Sampling Procedure*

The researcher applied the Morgan Table to determine the sample size from the target population. This is because the Morgan table clearly illustrates various population sizes together with their proposed samples (Morgan and Krejcie, 1970).

ii. *Sample Size*

According to (Meng, 1996), survey is a method that studies large population by selecting and studying the samples from the population to discover the relative incidence, distribution and interrelations of sociological and psychological variables. In this respect the researcher had previously intended to interview 152 respondents as guided by the Morgan table. However, due to challenges encountered in the field indicated in chapter one above, he accessed only 120 respondents. This sample included SMEs, some members of the community who are the buyers of the products as well as some key policy makers in the ministry of commerce that regulate SMEs.

### iii. *Sampling Techniques*

Kothari (1990) recommends stratified sampling because it is accurate, easily accessible, divisible into relevant strata and it enhances better comparison; hence representation across strata. The respondents were selected from the Hargeisa communities which are divided into strata based on one or more attributes (see also Staw, 1991). The researcher gave each stratum an equal chance of being sampled to take part in the study.

Purposive sampling was used to select the key informants in the Ministry of Commerce because the researcher believes they have information regarding regulation of SMEs in Somaliland and Hargeisa city in particular. Ainebyona (2011) acknowledges that "people who have experience of particular issues can provide relevant information about them." People who are responsible for regulating business could be more knowledgeable in giving out information from their field of work.

The researcher also used random sampling technique to collect information from some of the community members who are also the daily customers of SMEs in their locality. These people shared their experiences about the small and medium businesses communities.

### e) *Data collection methods*

The study used questionnaires, key informant interviews, observation and document analysis as the main tools for collecting data.

#### i. *Questionnaires*

Hart and Paris (1956) explains that descriptive data are usually collected using questionnaires. Others like Cochran (1981) have also identified questionnaires and interviews as crucial instruments of data collection in descriptive research. The researcher adopted both the open ended and closed type of questionnaires because it saves time.

#### ii. *Interviews*

Key informant interviews shall also be conducted during data collection. Kothari (1990) points out that "interview method of collecting data involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses." Such kind of interaction with the SMEs and other participants helped the researcher to capture first-hand information regarding the study. The researcher meanwhile noted all the information in his notebook that enabled him present reliable information in his dissertation.

#### iii. *Observation*

Direct observation method was applied in this study to capture pertinent information regarding the location and organization of the market. This research tool was guided by a structured protocol to ensure gathering of pertinent information only. Scientific evidence emphasises that researchers shall conduct

focussed observations in order to understand the relationships between the entrepreneurs and the customers (see, Ainebyona, 2011). It could be a wise step for a researcher to capture nonverbal information regarding the size of the business, its location, type of products and type of business, customer care and the emotions of customers in relation to the quality of service. The researcher in this case used the data collected by use of naked eyes to supplement the data obtained by use of other tools and techniques.

### f) *Validity and Reliability of data*

Validity of research instruments ensure scientific usefulness of the findings arising thereof Becchetti, and Trovato, (2003). Validity is the extent to which the instruments will capture what they purport to measure (Allison, 1984) since it is critical in all forms of researches and acceptable level is largely dependent on logical reasoning, experience and professionalism of the researcher (Cortes, 1987). The reliability of a research instrument concerns the extent to which the instrument yields the same results on repeated trials. In order to come up with reliable data, the researcher discussed the contents of the questionnaires and interview guides with his supervisor before going to the field to avoid vague and unclear questions and responses.

### g) *Data Processing and Analysis*

Qualitative data which was gathered from the field, was summarised and interpreted to get meaning out of it. Quantitative findings were outlined and analysed using SPSS in chapter four below ensure accuracy.

### h) *Ethical Considerations*

According to Gene and Davis (1996), researchers conducting business research should be concerned about ethical issues ... because "unethical research can lead to poor quality data" and eventually affect the decisions at the later stages of implementation. The researcher obtained an introduction letter from his institution of learning in this case, School of Graduate Studies and Research of Gollis University. This helped him in identifying himself to the SMEs and other respondents that participated in the study.

Before interacting with the community members and entrepreneurs, the researcher sought informed consent from both the Municipal Council of Hargeisa to allow him permission to interact with the relevant research participants. It is important to note that "society has the right to expect that personal information gained through research will not be disclosed" (Gene and Davis. 1996). In this case, the researcher respected the confidentiality and anonymity of respondents in order to ensure their safety and privacy.



## CHAPTER FOUR

### IV. DATA PRESENTATION AND ANALYSIS

#### a) Introduction

This chapter presents the findings, analyses the responses the primary sources. The field experiences of the entrepreneurs operating businesses within the Hargeisa have been discussed and where possible gaps have been identified and filled combining them with secondary sources.

#### b) Research Area

Data were collected from Hargeisa city specifically among the sampled small and medium entrepreneurs finding them at their supermarkets. The Ministry of Commerce/ Finance and local government or municipal council was also involved in the study to capture related information from government officials responsible for tax regulation because it was expected that they knew how the SMEs operate and had good or bad experiences dealing with this responsibility. Customers in the community who were/are not part of the SMEs were visited from their communities. The latter were also important in the study because they interact with SMEs on daily basis.

#### c) Research findings

This section outlines the findings about small and medium enterprises.

- a) The study found out that rent in some of the supermarkets that were located in the city center was too expensive for most small and medium entrepreneurs.
- b) This research study found out that most of the SMEs operating in Hargeisa have very low or no education background.

- c) The study also found out that most of the entrepreneurs were not aware of the feelings of their customers towards their business making it difficult to convince them to buy their products.
- d) The study also discovered that most of the small and medium entrepreneurs lack customer care. So, they were most likely to lose customers every day.
- e) The study also found out that SME's create employment, enhance capacity building for manpower and skills development, promote growth, reduce poverty, and facilitate industrial development among other.
- f) Practical evidence from respondents revealed that the rise in creation of SMEs came with reduction in the cost of transportation of goods and services in Hargeisa and Somaliland in general.
- g) The study found that the majority of SME's are constrained by lack of financing because small micro enterprises typically have no access to commercial banks because they do not exist in this country. This implies that lack of credit facilities make it difficult for small and medium entrepreneurs facilitate their businesses.
- h) The study also found out that SME's are also lacking adequate marketing skills to operate the business perfectly well.

#### d) Quantitative findings

Quantitative data has been presentation tables below. After every table is an interpretation of statistical information to bring out the clarity of the report.

Table 1: Gender of the entrepreneurs

Gender	Frequency	Percentage %
Male	88	73%
female	32	27%
Total	120	100%

It is clear the number of males (73%) outweigh that of females represented by (27%) in the sampled wards. This implies that males in Hargeisa constitute of the highest number of small and medium entrepreneurs

than that of females. This could partly explain that women are have limited capacity to start small scale businesses.

Table 2: Marital Status

Marital status	Frequency	Table N %
Single	67	55.8%
Married	49	40.8%
Separated	2	1.7%
Widowed	1	0.8%
Missing	1	0.8%
Total	120	100.0%

SMEs are dominated by people who are not yet married according to table 2 above that represented 55.8% followed by those who were reported married. The latter were 49 people that equaled 40.8%. The study indicated that the separated and widowed were very few in the business activity. The widowed or the separated owning children may have more financial challenges

especially if they are women finding it difficult to get starting capital. This does not mean that men who have lost their wives or separated with them cannot be in this category.

On the other hand, married and single young men may find it easier to start up an SME on the basis of cooperating with each other to achieve common goals.

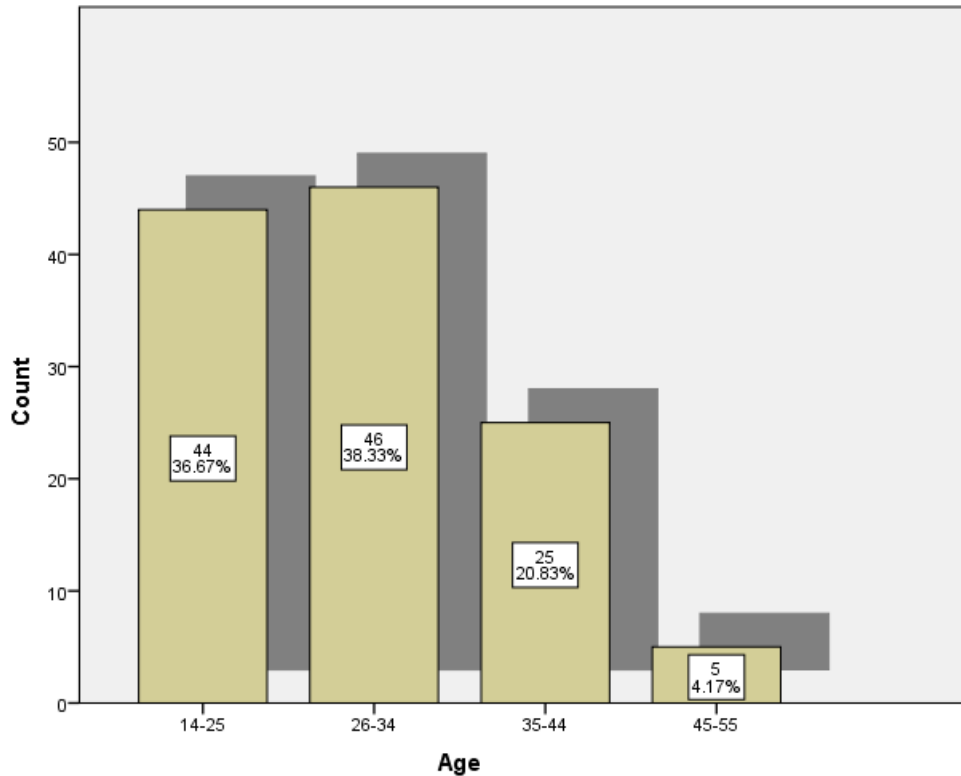


Figure 1: Age of Responde

The age of the respondents was sought in order to establish the level of awareness due to their age. The figure above shows that 36.67% of target population were between 14-25 years old while 38.33% were between 26-34 years. The respondents between 35-44 years old were represented by 25%. Lastly, 4.17% represented those who were between 45-55 years old

and were very few in SME operations in Hargeisa. SMEs are operated by citizens of relevant ages including teenagers and those who are older. Having teenagers in the business could mean that the level of school going children are more in business or other activities than education.

Table 3: Employed vs Sector

		Employment in other sector or not				Total	Percent
		Private	Civilservice	NGO	Others		
		Count	Count	Count	Count	Count	Percent
	Employed in other sector	76	7	9	9	101	84.1
	No	0	0	0	0	19	15.9
Total		76	7	9	9	120	100
		63.3	5.7	7.5			

Respondents were asked if they are employed in any other sector and the table above shows 101 (84%) of respondents are employed in other sectors while 19 (16%) are not as indicated in the table above. Operating two businesses a common feature among the

citizens of Somaliland. It may be perceived as prestigious to have formal and informal employment but could also mean that those who have such chances may have additional income to advance in line with entrepreneurship.



Table 4: Business Location Business location

SME location	Count	Table N %
Comfortable	107	89.2%
uncomfortable	13	10.8%
Total	120	100.0%

Respondents were asked if they are comfortable with the place where you are located and the table above shows (89.2%) of respondents are comfortable in their location while 10.8% of the respondents are not comfortable with their location.

Being comfortable with the business location could imply that the SME gets more customers every day or their businesses are doing very well and appreciate to be there despite the likelihood of high rent that may be required by the landlords.

Table 5: Type of Enterprises

Type of enterprise	Count	Table N %
Transport	8	6.7%
Grocery	4	3.3%
Boutiques/clothes shop/tailoring	17	14.2%
Supermarket	36	30.0%
Electronics	14	11.7%
Retail shop	27	22.5%
Service (shoeshine/barbershop/salon)	14	11.7%
NA	0	0.0%
Total	120	100.0%

The table above shows the common SME's in Hargeisa and this means that supermarkets are the common type of SME's. Like in any other city in Somaliland, SMEs sell a variety of products. Some small number of entrepreneurs may specialize such as those

in transport that represented 6.7%, electronics (14%). However, the majority of SMEs were boutiques, supermarkets or retail businesses with a mixture of different products.

Table 6: Time of Business being operating

Time of Business being operating	Count	Table N %
less than 1 year	13	10.8%
2-3 years	14	11.7%
4-7 years	41	34.2%
8-10 years	1	0.8%
over 10 years	51	42.5%
Total	120	100.0%

The table above revealed that those who had stayed in the area for below 1 years formed 10.8% of the total number of respondents. Those who had stayed in the area for between 2 years and 3 yrs formed 11.5% of the total number of respondents while the majority (42.5%) had been staying in the area for over 10 years. Overstaying in one business might mean that SMEs are successfully meeting their basic needs out of operating those business. It could also indicate that the majority of the respondents understood the needs of the community.

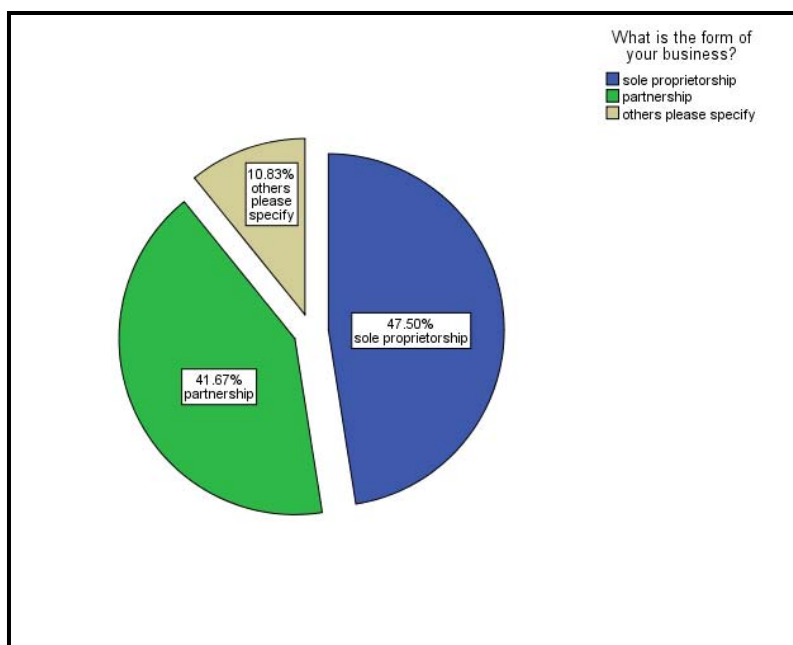


Figure 2: Form of Business

An overwhelming 47.50% of the respondents that they would have sole proprietorship while 41% had partnership and the rest 10% had other forms of business like family business. Sole proprietors were found to be the majority which implied that many people

prefer to be their own bosses. Partnerships are also very common as in the Somaliland's case. Family or non-family members are most likely to combine efforts and incomes as well as sharing costs and expenses to minimize any likely business shocks.

Table 7: Business Registration

Business Registration	Frequency	Percent
Registered	104	87%
Not registered	16	13%

An overwhelming majority of respondents that represented 87% disclosed that they had registered their business while 13% had not registered them. This shows that registered property rights are necessary to support investment, productivity and growth. Lack of registration could mean that the few SMEs experience financial challenges making it difficult to raise the taxes as well as paying other associated costs especially if they do not own the shop or business space.

to the director of inland revenue in the ministry of finance showed that is protect basic rights of SME's owners and building up Trade and Investment Capacity of SMEs Developing capacity building programs that include supply chain and cluster initiatives, which recognize the potential for developing tiers of suppliers to maximize trickle down effects, including to micro enterprises as lower tier suppliers.

ii. *SMEs Contribution to Economic Development*

"SME's are contributing value to country's economy by creating jobs, enhancing income, strengthen purchasing power, lowering costs and adding business convenience.

There is no doubt that small and medium scale enterprises are essential for rapid and sustained economic growth and development. They create employment, enhance capacity building for manpower and skills development, promote growth, reduce poverty, and facilitate industrial development among other" said by the director of commerce in Somaliland SME's contributes in economic development in the

e) *Qualitative Findings*

i. *Sustaining small and Medium Enterprises (SMEs)*

Director of commerce in the ministry of the finance when we asked how to sustain the small and medium enterprises of Somaliland was said "reduction in the number of foreign licenses, and enforcement of SME's regulations for registration property; establishing immediately a force to eliminate illegal business in Somaliland and a review of the assessments of the evidence of Taxes that SME's paid to government." Other important factors that also found during interview

country, also creates opportunities of employments, they participate 50% of the market employment, support regional supply and access to service delivery SME'S contribute the economy of the country to the market economy system, as known, relies on four pillars: private property, free price system, competition and entrepreneurial ability. Market economy is considered as the economy of free initiative and according to this free initiative is private property. The development of free enterprise combined with efforts to create an institutional market, with clear rules of the game for all, constitute a guarantee for the development of rapid and sustainable economic development. It is recognized, theoretically and practically, that sustainable economic growth also improves the social and political stability and in terms of the transition period which is Somaliland currently situated guarantees reform system. Sustainable growth is achieved when in the country is created a safe environment and sustainable private sector.

### iii. *Main Challenges of SMEs*

Most challenges that SME's face are more but I can tell you some of them which are Lack of financing because small micro enterprises typically have little to access to commercial banks or Islamic banks and also they face lack of creditor

SMEs are working in this Country and competitive environment as a result SMEs are affected by factors within their boundary. Organizational problems grouped into five areas which are human relations, accounting, marketing; internal management and external management. Although, they have generally concluded that the most prevalent areas in which SME have problems are sales or marketing, human resource management, and general management, they specifically reported promotion, marketing research and training as the most frequently encountered problems such as public relations and lack of adequate marketing skills that could be minimized through mass sanitization of SMEs using local and international media in form of local newspaper, radios, direct mails, among others.

## CHAPTER FIVE

### V. SUMMERIES, CONCLUSIONS AND RECOMMENDATIONS

#### a) *Introduction*

The chapter presents a summary, conclusions and recommendations on the specific Factors affecting the performance of Based on the findings in chapter four, the study gives a Summary, recommendations and suggestions for further research. The recommendations are based on the objective of the study.

#### b) *Summaries*

From the findings of the study discussed in chapter four above, the study established in some of the

supermarkets that were located in the city center was too expensive for most small and medium entrepreneurs. The study found out that most of the SMEs operating in Hargeisa a have very low or no education background. The study also found out that most of the entrepreneurs were not aware of the feelings of their customers towards their business making it difficult to convince them to buy their products. The study also discovered that most of the small and medium entrepreneurs lack customer care. So, they were most likely to lose customers every day. The study found that the majority of SME's are constrained by lack of financing because small micro enterprises typically have no access to commercial banks because they do not exist in this country. This implies that lack of credit facilities make it difficult for small and medium entrepreneurs facilitate their businesses.

The study also found out that SME's are also lacking adequate marketing skills to operate the business perfectly well

#### c) *Conclusions*

From the presentation of chapter four and summary above the study concludes that access to business location affected the performance of the business to a great extent. The study further concludes that accessibility to business location affected the performance of SMEs. The location of business was readily available to them to entrepreneurs hence were able to make timely and quality decision to propel their business operations forward.

If the location is available was relevant for their business as it informed them of the changes in the business environment and business registration requirements. The information available to the entrepreneurs in this market was necessary for their business growth.

The study further concludes that access to finance affected performance of SMEs. It affected performance to a great extent because it limited the entrepreneurs' ability to take advantage of opportunity as and when they arose. The sources of capital for SMEs differed ranging from own savings, bank loans, and donations from family and friends among other sources. The entrepreneurs in this market were found not to have enough capital to finance their business operations.

The study further concludes that education of manager of SME's affected the businesses to a very great extent by facilitating communication with both the supplier and customers, by easing the transportation of goods and by easing the marketing of our products. Technology provided payment options to entrepreneurs thereby expanding their payment options.

Finally the study concludes that most of the respondents measured the performance of the business the number of customers and that the government

policy and regulations affect the performance of the business to a very great extent through taxation, licenses, through creation of support funds and through liberalization of the economy.

The availability of managerial experience affected the performance of SMEs of SMEs to a great extent. The entrepreneurs were well prepared to face changes in the business environment and to plan appropriate changes in technology. Managerial skills were found to be the most important constraint faced the respondent. Managerial experience is important in any business because it determines the quality of decisions made and how they impact on the performance of an organization.

#### d) Recommendation

1. From the above presentations of summary and conclusion, the study makes the following recommendations on the specific factors affecting the performance of SMEs in Hargeisa. The study recommends that business location need to be made accessible to all business people in the market. Although the entrepreneurs accessed necessary business location, the location was limited and was only available to a limited number of entrepreneurs. This study therefore recommends that infrastructure be put in place to increase the location among entrepreneurs to promote the growth and performance of such enterprises.
2. On access to Finance, the study recommends that the Government of Somaliland works out modalities on how to finance SMEs. This has been promoted to some extent by the creation of several funds like the Youth Development Fund and Women Development Fund. This would promote accessibility to pre-requisite capital necessary for the growth and development of SMEs in Soma lil and.
3. It further recommends that technology be included in aspects of the business to facilitate communication with both the various stakeholders in business. By doing this, the SMEs will benefit from the ease of transportation of goods, marketing and pricing of their commodities.
4. Finally the study recommends that the government policy and regulations that affect the business should be looked into so that to ensure they do not affect the performance of the business in a negative way.

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## REFERENCES RÉFÉRENCES REFERENCIAS

1. Ainebyona, Gerald (2011) *The Reintegration of the Female Ex-Abductees of the Lord's Resistance Army: A Case of Gulu District*. Saarbrucken: Lap Lambert Academic Publishing.

2. Allison, P.D(1984)*Event History Analysis: Regression for Longitudinal Even Data*. Beverly Hills: Sage Publications.
3. Almus, Matthias and Nerlinger, Eric A. (2000)*Testing "Gibrat's Law" for Young Firms Empirical Results for West Germany*. *Small Business Economics* 15, 1–12.
4. Amyx, C. (2005) *Small Business Challenges – The Perception Problem: Size Doesn't Matter*. *Washington Business Journal*.
5. Becchetti, L. and Trovato,G (2002)*The Determinants of Growth for Small and Medium Sized Firms. TheRole of the Availability of External Finance*. *Small Business Economics* 19, 291–306.
6. Bonte, Worner et al(2009) *Economic Geography*. Vol. 85, number3,pp. 26-27Blakwell Publishing.
7. Cochran, A.B (1981)*Small Business Mortality Rates, A Review of the literature*. *Journal of Small Business Management*, 19(4), 50-59.
8. Cortes, M(1987) *Success in Small and Medium Scale Enterprises: The Evidence from Colombia*. New York: Oxford University Press.
9. European Commission (2011) *The New SME Definition*. User Guide.
10. Evans, D.S(1987b) *Tests of Alternative Theories of Firm Growth*. *Journal of Political Economy* 95 (4), 657–674.
11. Gakure, R. W(2006)*Factors Affecting WEs' Growth prospects in Kenya*. Prepared for the International Labour Organization (ILO), Geneva, November 2003.
12. Gene, Loren and Davis, Lillian, Gladys (1996) *Business Research for Decision Making*. London: Duxbury Press.
13. Hart, P.E and Paris, S.J(1956) *The Analysis of Business Concentration: A Statistical Approach*. *Journal of the Royal Statistical Society* 119 (2), 150–191.
14. Hall, B.H(1987) *The Relationship between Firm Size and Firm Growth in the US Manufacturing Sector*. *The Empirical Renaissance in Industrial Economics* 35 (4), 583– 606.
16. Hisrich, R. D (2000) *Entrepreneurial dimensions: The relationship of individual, venture, and environmental factors to success*. *Entrepreneurship Theory and Practice*, 24(4):79-80.
17. Holt, D. H. (1992) *Entrepreneurship: New venture creation*. New York: Prentice Hall.
18. International Labour Organization-ILO (1989)*A strategy for small enterprise development towards the year 2000*. Nairobi, Kenya.
19. Keeble, D (1997) *Small firms, innovation and regional development in Britain in the 1990s*. *Regional Studies*, Vol. 31 No.3, pp.281-93.
20. King, K. & McGrath, S (2002) *Globalisation, Enterprise and Knowledge: Educational Training and Development, International Review of Education*, Vol. 50(1), 74-76(3).
21. Kothari, C.R (1990) *Research methodology: Methods and Techniques*. New Delhi: New Age International (P) Limited, Publishers.
22. Krejcie, Robert, K and Morgan, Daryle, W (1970) *Determining the Sample Size for Research Activities*. *Educational and Psychological Measurement*, 30, 607-610.
23. Longenecker, J. G; Petty, C W, Moore, J. W. and Palich, L. E. (2006). *Small Business Management, An entrepreneurial emphasis*. London: Thomson South Western.
24. Lucas, R.E. Jr., 1978, 'On the Size Distribution of Business Firms', *The Bell Journal of Economics* 9 (2), 508–523.
25. McCormick, D.(2009). "Gender in small Enterprise in Kenya: an institutional Analysis." Lin p.c. Samanta
26. McPherson, M.A (1995) *The Hazards of Small Firms in Southern Africa*. *The Journal of Development Studies* 32 (1), 31–55.
27. Meng, L. A & Liang, T. W (1996) *Entrepreneurs, entrepreneurship and enterprising culture*. Paris: Addison-Wesley.
28. National Baseline Survey (1999) *National Micro and Small Enterprise Baseline Survey*. Hargeisa: ICEG and K-REP.
29. Okafore (2006) *Africa Unchained* [<http://africaunchained.blogspot.com/African>]. Perry, C and Pendleton, W (1983) *Successful Small Business Management*. Sydney: Pitman Publishing.
30. Raman, R (2004) *Motivating Factor of Educated Self Employed in Kerala: A Case Study of Mulanthuruthy Block Ernakulum*. Discussion Paper No. 90. Kerala Research Programme on Local Development Center for Development Studies.
31. Ronge E.; Ndirangu, L and Nyangito, H (2002) *Review of government policies for the promotion of Micro and small scale enterprises in Kenya*. KIPPRA Discussion paper.
32. Rowe, J (2008) *SMEin Britain. Published in Knowled at SMU*. [<http://knowledge@SMU.edu.sg/artice>].
33. Staw, B. M (1991) *Psychological dimensions of organizational behaviour*. Sydney: MacMillan. Sutton, J (1997)*Gibrat's Legacy*. *Journal of Economic Literature* 35 (1), 40–59.
34. Thapa, A (2007) *Micro-enterprises and House hold Income*. *The Journal of Nepalese Business Studies*, 4(1):110-118, Vol. 5, No. 1, pp 110-118.
35. Wanjohi, A.M and Mugure, A (2008) *Factors affecting the growth of MSEs in rural areas of Kenya: A case of ICT firms in Kiserian Township, Kajiado District of Kenya*. *Administrative Science Quarterly* 34 (March), 91-109.
36. Wagner, J(1992) *Firm Size, Firm Growth and Persistence of Chance: Testing Gibrat's Law with*



- Establishment Data for Lower Saxony, 1978–1989. Small Business Economics 4 (2), 125–131.
37. Weber M(1930) *The Protestant Ethic and the Spirit of Capitalism*. New York. Charles Scribner’s Sons.
38. Weitzel, W and Jonsson, E (1989) “Decline in Organizations: A Literature Integration” in Zimmerer, *entrepreneurship and small business management*. New York: Prentice Hall.

Appendix Imap of Somaliland



APPENDIX I

a) *Letter of Introduction of Researcher To Respondent*  
Dear Respondent,

My name is Moukhtar Houssein Robleh. I am a student at the Gollis University undertaking a degree in Masters of Business Administration. I am undertaking a research project entitled:

Factors influencing Performance of Micro and Small Enterprises (SMEs) in Hargesa city.

You have been selected to participate in this study to obtain your perceptions and views regarding various aspects of the SME sector. There are no good or wrong answers but your honest participation in answering the questions will assist in establishing the factors influencing performance of the small businesses in Hargeisa town. The information provided will be treated confidentially.

APPENDIX III

QUESTIONNAIRE: FOR THE ENTREPRENEURS

Part 1: Personal Details

The entrepreneur:	Female ( )	Male ( )		
Marital status:	Single( )	Married ( )	Separated ( )	Widowed ( )
What is your age?	14-25( )			
	26-34( )			
	35-44 ( )			
	45-55 ( )			

Are you employed?	Yes ( ) No ( )	
If yes in which sector?	Private ( ) Civil Service ( ) NGO ( ) Others ( )	
Have you or any one in your business received any business skills related training?	Yes ( ) No ( )	If yes which one ?

Part 2: Enterprise Details

Name of the enterprise and physical location		
Are you comfortable with the place where you are located? Yes ( ) No ( )		
Number of employees in the enterprise: Women _____ Men _____ Full time Part time Part time		
Type of enterprise and sector	Transport ( ) Grocery ( ) Boutiques/clothes shop/ tailoring / ( ) Supermarket ( ) Electronics ( ) Retail shop ( ) Service (shoeshine/barbershop/salon) ( )	
How long has your business been operating?	Less than 1 year ( ) 2 - 3 years ( ) 4- 7 years ( ) 8-10 years ( ) over 10 years ( )	
Have you had any other business prior to the current one? Yes ( ) No ( )		
For how long did you run the previous enterprise?	Less than 3 years ( ) 5 years ( ) Over 5 years ( )	
What is the form of your business?	Sole Proprietorship ( ) Partnership ( ) others Please specify ( )	
Is your business registered? Yes ( ) No ( )		
How much do you get per day? (dollar)	Below 10 ( ) 10-50 ( ) 50-100 ( ) 4= over 100 ( )	
What factors do you think contribute to this income?	1 _____ 2 _____ 3 _____	
Do you think you can improve on this income? Yes ( ) No ( )	Explain	
How much was your start-up capital and the source(s)?	Source starting capital	Amount

	Total	
What is the type or kind of assets (e.g stock, debtors etc)	Type of the Asset	Amount
		Total
What kind of liabilities (e.g creditors, loans etc)		
	Types of liabilities	Amount
What's the origin of your business?	Established ( )	
	Inherited ( )	
	Other specify _____	

*Part 3: Legislative Processes and Policy Framework*

Are there any rules set by the MC that govern how you run your business? Yes ( ) No ( )
If yes which ones?
How do these rules affect you?
Does your business experience any challenges? Yes ( ) No ( )
If yes. What would you say are the main challenges that your business faces? If no, why?
How have you handled the challenges you have mentioned?

Key Informant interview guide for policy makers or officials in Ministry of Commerce/ Finance



1. What is your position in the ministry of commerce/finance ?
2. What is your responsibility in this office?
3. What do you understand by Small Micro Enterprises?
4. How does your responsibility relate with business operations in Somaliland?
5. What types of businesses are common in Hargeisa?
6. How are SMEs contributing to the economic growth of this country?
7. What challenges do they face?
8. How do you think these challenges can be overcome?
9. How do you think SMEs can be sustainable in Hargeisa and Somaliland generally
10. How does the ministry of commerce/finance collect taxes from SMEs in Hargeisa?
11. What challenges do you face as you try to collect these taxes?
12. How does the Ministry of commerce/finance respond to these challenges?

*Interview Guide for customers*

1. What kinds of products or raw materials do you like to buy in the market?
2. What types of SMEs are common in Hargeisa city?
3. What challenges do you face when you are buying commodities or products
4. How do you respond to these challenges?
5. What do think can be done to improve your relationship with SMEs?



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# The Role of Intellectual Capital in Achieving a Competitive Advantage: A Field Study on Jordanian Private Universities in the Northern Region

By Dr. Hayel Falah Alserhan  
*Al-Bayt University*

**Abstract-** This study aims to determine the role of intellectual capital and its elements (human capital, relational capital, structural capital) and to achieve the competitive advantage and its dimensions (quality, efficiency, innovation, responsiveness) in the Jordanian private universities in the northern region (Jadara university, Irbid national university, Jarash university, Philadelphia university), where the study sample (90) person of the total study population (120), so questionnaire was designed to verify approaches in the theoretical frameworks of the intellectual capital independent variable, and its relation to the dependent variables, which is the competitive advantage. The hypotheses were tested based on statistical analysis programs, one of the most important results of the study is the existence of a relation of statistical significant between intellectual capital and its three dimensions and achieving competitive advantage, where the study showed that the dimensions of human and social capital are more available than structural capital, so both of them are contributing in the competitive advantage more than structural capital.

**Keywords:** *intellectual capital, competitive advantage, private universities, northern region, jordan.*

**GJMBR-A Classification:** *JEL Code: M10*



*Strictly as per the compliance and regulations of:*





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## I. INTRODUCTION

The increasing attention of organizations at all levels in the intellectual capital until it's become one of the most important assets and factors of its success if it can benefit from the expertise and skills well, and solve problems that help to form intellectual capital. Therefore, intellectual capital has become the main element in the processes of innovation, change and creativity, thus creating a competitive advantage for the organization. Accordingly, whenever the organization is able to assess the intellectual capital well, it will be able to achieve its goals and make decisions related to the re-engineering of its programs, which leads to be more efficient, profitable and competitive whether on the quality of the product or service or cost and price or any other excellence strategies.

The competition among universities has intensified sharply, and the effectiveness of the university is strongly related to its ability to compete, continue and survive through the development of its

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leaders and employees (Al-Hawary, 2010a; Al-Hawary, 2010, b), who constitute its intellectual capital, in addition to its external and internal relations and its system. This made it in constant search for what achieves progress and success in various field.

## II. PROBLEMS OF THE STUDY

Intellectual capital in the Jordanian economy is one of the main resources of business organizations, including universities which its progress and excellence have become linked to the good management and utilization of their mental resources.

Through the work of the researcher at the Jordanian private universities he noticed that there is still a weak interest in the intellectual capital and lack of awareness of the its impact and its importance in achieving the competitive advantage, and most of its attention was focused on the ways of applying its regulations and the instructions related to its physical assets, so the research aims to answer the following main question:

*What is the role of intellectual capital in achieving a competitive advantage?*

- Its divided into the following sub-questions:
- Is there a relation of statistical significant for human capital to the competitive advantage of the Jordanian private universities?
- Is there a relation of statistical significant for the relational capital to the competitive advantage of the Jordanian private universities?
- Is there a relation of statistical significant for the structural capital to the competitive advantage of the Jordanian private universities?

## III. AIMS OF THE STUDY

- Explain the importance of the intellectual capital as a tool to achieve competitive advantage.
- Explain how university administration is interested in the intellectual capital.
- Explain the methods used by universities in managing their capital.
- Explain the concept of competitive advantage.

- e. Explain how Jordanian universities benefit from the intellectual capital.

#### IV. IMPORTANCE OF THE STUDY

- a. Explain the importance of intellectual capital as a contribution to support the cognitive and organizational capacities of the employee that enable them to produce new products for the organization then to increase their marketing share and gaining a competitive advantage over others.
- b. Emphasis of the administration and employees of private Jordanian universities that the university cannot achieve its objectives efficiently without realizing the importance of the intellectual capital.
- c. The need to preserve the intellectual capital and means of investment that support the competitive advantages.
- d. The research is an academic attempt to shed light on the importance of intellectual capital in business organizations and the economic in general and how can be developed and maintained to achieve a competitive advantage.
- e. The importance of the field aspect , which shows the patterns of strengthening intellectual capital in Jordanian higher education institutions, and clarifying strengths and weaknesses point, and the ways to develop and maintain their intellectual capital.

#### V. HYPOTHESES OF THE STUDY

- a) *The first main hypothesis*

There is a statistical significance correlation at the level of significance (0.05) between the ability of the Jordanian private universities in the northern region to manage their intellectual capital and to achieve their competitive advantage.

It's divided into the following sub- hypotheses:

- a. There is a statistical significance correlation at the level of significance (0.05) between the ability of the Jordanian private universities in the northern region to manage their human capital and to achieve their competitive advantage.
- b. There is a statistical significance correlation at the level of significance (0.05) between the ability of the Jordanian private universities in the northern region to manage their structural capital and to achieve their competitive advantage.
- c. There is a statistical significance correlation at the level of significance (0.05) between the ability of the Jordanian private universities in the northern region to manage their relational capital and to achieve their competitive advantage.

#### VI. RESEARCH METHODOLOGY

The research relies on two methods; the first is theoretical study; by using descriptive analytical method

to describe the intellectual capital and its role in achieving the competitive advantages of privet Jordanian universities in the northern region and by relying on what is stated in the administrative literature on the subject of study in addition to what is on the internet. The second method is the field study; through the preparation of survey lists to collect data, in addition to rely on previous studies.

#### VII. RESEARCH PLAN

In order to achieve the research objectives, it has been divided as follows:

*First:* previous studies in the field of studies.

*Second:* the conceptual frame work of intellectual capital.

*Third:* the competitive advantage and its basic determinants.

*Fourth:* the field study.

#### VIII. FIRST: PREVIOUS STUDIES IN THE FIELD OF STUDIES

- Bisaria, 2013, india study

This study aims to know the reasons for using competitive advantages in the education sector, And to define the different types of competitive advantages in the education sector, which it consider as a very pure field, In addition to the impact and effectiveness of competitive advantage used by private colleges or universities.

- Greco and others study, 2013, Italy

This study presented an analysis within a University Spin-Off, based on interviews submitted to five key figures (the CEO, the scientific supervisor, a shareholder, an employee and a long-term customer). The analysis is aimed both at identifying which future investments should be made, and at identifying possible misalignments among the perceptions of the organization's stakeholders .The implementation of the framework creates a useful panel for the planning of investments in intellectual capital assets in order to create value. Moreover, it may emphasize possible discrepancies among interviewees about the importance of each intellectual capital asset.

- Makda and others study,2010, Jordan

This study aims to clarifying the role of marketing knowledge in determining the strategies for academic programs in (7Jordanian universities in Amman) and to explain how the competitive advantages are achieved. This study has been applied on two groups (administrations and the student of business).

- Mitchell, 2010 study:” a model for managing intellectual capital to generate wealth”. Massey University.

The objective of this study was to develop and test a model for managing of intellectual capital. Three sources of intellectual capital- human capital, internal capital, and external capital-contributes to the outcomes essential to differentiate the organization in the marketplace.

#### *Second: Conceptual framework of intellectual capital*

For many years, physical asset indicators were the main evidence of an organizations successful performance. However, the situation has changed after information technology revolution in the knowledge-based economy. Since 1980 business performance has not been limited only to physical assets instead intellectual capital are increasingly playing a major role in business performance.

#### *Intellectual capital concept*

Ralph Stayer was the first one who use the term intellectual capital in the early 1990s, when he pointed out that natural resources were the most important components of national wealth and most important assets of the organizations until the emergence of intellectual capital, which is the most important components of national wealth and highest assets of organizations (Harhoosh 2007).

As for (OECD,1999) was defined the intellectual capital as the knowledge, experience and technology of the organization in addition to its relationship with customers and the skills that help the organizations to gain competitive advantages.

(T.Stewart,1998,p11) was defined the intellectual capital as the skills available in an organization that has a wide knowledge make it capable of making the organization global by responding to customer requirements and the opportunities offered by technology.

There for, the researcher agrees with all the previous concepts that good knowledge, experience and skills can be used to achieve the objective of the organization with high efficiency and achieve a competitive advantage.

#### *Components of the intellectual capital*

Despite the differences between the researchers about the component of the intellectual capital, but most of the agreed that it consists of the following three dimensions:

##### 1. Human capital

The value that the employees of a business provide through the application of skills, and expertise. Human capital is an organization's combined human capability for solving business problems and exploiting its intellectual portray. Human capital is inherent in people and cannot be owned by an organization.

Therefore, human capital can leave an organization when people leave, and if management has failed to provide a setting where others can pick up their know-how. Human capital also encompasses how effectively an organization uses its people resources as measured by creativity and innovation(Al-Hawary, 2015; Al-Hawary & Shdefat, 2016; Al-Hawary & Alajmi, 2017; Al-Hawary, S.I.S. Nusair, 2017).

##### 2. Structural capital

It is owned by an organization and remains with an organization even people leave. It includes proprietary software, processes, patents, and trademarks, as well as the organization's image, and proprietary databases.

##### 3. Relational capital

It is a value of the relation between the organization and its customers which is focusing on the satisfaction of the customers by paying its attention to their customers and listens to their complaints and fined solution to them.

Therefore, the researcher believes that the interaction between these components helps to determine the value of the total intellectual capital of the organization. In other words, the organization who's members possess competencies, skills, creativity, and have the ability to learn ,in addition to possessing organizational structures, data base, policies and procedures, communication technology, and it has a good relations with its customers, it will contribute significantly to achieve its goals.

#### *The importance of measuring and evaluating intellectual capital*

The importance of the intellectual capital emerged at two levels: the first one is internal level which is related to management, the second level is external which is related to stakeholders.

#### *The importance of measuring intellectual capital at the internal level (management)*

- a) Formulation of the organization strategy. (kannan and aulbur 2004)
- b) Contributes in evaluating the implementation of the strategy.
- c) Contributes to the development of reward systems. (marr et al 2003)

#### *The importance of measuring intellectual capital at the external level (stakeholders)*

- a) Provide information about the future performance of the organization that can be utilized by investors, lenders and interested parties.
- b) Reduce the problem of the available information asymmetry between beneficiaries.
- c) Encouraging educational institutions and support their abilities to influence stock price.

*Third: competitive advantage*

The researcher differed about the definition of competitive advantage; some of them defined it as “a set of methods that make other organizations incapable to keep up with it currently or future (Kolter 1997). While (AL-Qairotiy and others, 2014; Al-Hawary & Hadad, 2016; Al-Nady et. Al, 2013; Al-Hawary & Ismael, 2010) defined it as" a set of characteristics owned by the organization during a given period of time, which superior it over their competitors and qualify it for more opportunities. As for (Stevenson, 2005, 4) asserts that competitive advantage is aimed to meet customer needs in order to attract the customer.

As for the concept of competitive advantage in university education, (Mustafa 2003 ) pointed out that : it includes two main elements; the first one is the ability to excel upon the competitor universities in the vital fields such as study programs libraries, halls, etc. the second one is the ability to attract students from domestic and overseas market.

Accordingly we can say that the competitive advantage is conditions that allow a company or country to produce a good or service at a lower price or in a more desirable fashion for customers. Matching core competencies to the opportunities.

*The main types of competitive advantage*

There are three main types of competitive advantage (Afaf Alsaed, 2012):

- a) Low cost: the ability of company to produce a good or service at a lower price or in a more desirable fashion for customers the quality: ability of company to produce a high quality good or service to meet customer needs.
- b) Just-in-time (JIT): is an inventory strategy companies employ to increase efficiency and decrease waste by receiving goods only as they are

needed in the production process, thereby reducing inventory costs.

*Source of competitive advantage:* (Aboud, 1999:9)

- a) Innovation; which is means the continuous improvement in products.
- b) Just-in-time (JIT) ; which is mean to increase efficiency and decrease waste by receiving goods only as they are needed in the production process, thereby reducing inventory costs.
- c) Knowledge; which is means the experiences of the employees of the organization.

*Competitive advantage strategies*

There are three main strategies of competitive advantage (Mustafa Rajab, 2011):

- a) Low coast: the ability of company to produce a good or service at a lower price or in a more desirable fashion for customers. These conditions allow the productive entity to generate more sales or superior margins than its competition
- b) Differentiation Strategy: A superiority gained by an organization when it can provide the same value as its competitors but at a lower price, or can charge higher prices by providing greater value through differentiation. Competitive advantage results from matching core competencies to the opportunities.
- c) Focus strategy: s the process of determining customer needs and wants in order to drive the working force behind the company's products or services.

**IX. FOURTH: FIELD OF STUDY**

*a) Research Population*

Includes 4 private Jordanian universities in the northern region incensed by the ministry of Higher education as shown in the following table:

*Table 1:* Names of universities

Serial	Name of Universities
1	Jadara university
2	Irbid national university
3	Philadelphia university
4	Jarash university

*b) Sample of the study*

The study sample was selected from the universities mentioned in table(1) which include administrative staff( deans of the faculties, heads of departments and directors of the administrative departments in the university, which were (120) ,then it has been selected randomly(90) person, after that questionnaires were distributed to them, (83) has been retrieved by (%92.42) . after counting, (7) questionnaires were excluded because they were not valid for analysis because ere not completed. thus, the number of questionnaires analyzed (76) by (%91). Tale (2) shows

the distributed, retrieved and valid questionnaires for analysis.



Table 2: The distributed, retrieved and valid questionnaires for analysis.

Serial	Names of Universities	Samples of the Study	Distributed Questionnaires	Retrieved Questionnaires		Valid Questionnaires	
				Number	%	Number	%
1	Jadara university	36	27	24	88.88	23	95.8
2	Irbid national university	30	22	20	90.90	17	0.85
3	Philadelphia university	28	20	18	0.90	18	100.00
4	Jarash university	26	21	21	100.0	18	85.7
1	total	120	90	83	92.42	76	0.91

Source: preparing by researcher based on the analysis results.

c) Tools of the study

The researcher relied on questionnaire as a data collection tool, where the tool was developed to measure the impact of intellectual capital in achieving a competitive advantage in private Jordanian universities in the north. Tool of study included the dimensions of

intellectual capital (human capital, relational capital, structural capital) and competitive advantage (quality, efficiency, innovation, responsiveness). The researcher asked a group of experts and academics to study the questionnaire and to give their comments and suggestions thereon.

Table 3: Cronbach's alpha coefficient for measuring tools of study

Variable	Number of Paragraphs	Coefficient of Stability (Cronbach's Alpha)
human capital	15	0.812
structural capital	15	0.886
relational capital	9	0.677
Competitive advantage	16	0.886
All axes	55	0.948

Source: preparing by researcher based on the analysis results.

The study tools divided into two parts:

The first: includes personal data and fictional data related to the personal characteristic of the study sample (gender, academic qualification and occupation).

The second: includes the data of intellectual capital and its elements as follow:

- a) Human capital includes fifteen paragraphs.
- b) Relational capital includes nine paragraphs.
- c) Relational capital includes fifteen paragraphs.
- d) Competitive advantage includes its elements (quality, efficiency, innovation, responsiveness).

d) Findings of the study

First: characteristics of the population research sample

Each paragraph has five choices according to fifth Likert scale starting from (1) strongly disagree until (5) totally agree. It has been used Cronbach's alpha Coefficient to determine the stability of research variables as shown in table (1). Where the study showed that the full scale e of the study tool has a high degree of stability amounted to (0.948), while the human capital scale has high degree of stability (0.812), and the structural capital has high degree of stability (0.886), while the relational capital has (0.577) which is acceptable. As for competitive advantage has a high degree of stability (0.886).

Table 4: Frequency and percentage of the characteristics of the population research sample

Variable		Frequency	%
Gender	Male	66	82.5
	Female	11	17.5
Qualification	Bachelor	3	38.3
	Master	5	51.7
	PHD	68	10
Occupation	Dean	28	10.8
	Head of Department	41	34.2
	Director of Department	8	55

Source: preparing by researcher based on the analysis results.



Table (4) shows findings of the characteristics of the population research sample, where it is noted that the majority of the study sample are male (%66). While the employee who holds PHD degree in the Jordanian

privet universities in the north (%68) that's because a dean must have obtained PHD. While the percentage of those who occupy the position of head of department is (34.2%).

e) *Analyzing the study questions*

**Table 5:** Average, standard deviation, relative weight and (T) value for each dimension of the intellectual capital

	Dimension	Average	Standard Deviation	(T) Value	Relative Weight	Significance Level
1	Human capital	3.6554	0.54707	12.748	73.162	0.000
2	Structural capital	3.5112	0.38901	11.109	70.118	0.000
3	Relational capital	3.7145	0.44490	11.650	73.29	0.000
	Total of intellectual capital	3.6276	0.4603	11.835	72.19	0.000

Source: preparing by researcher based on the analysis results.

T-Test value at significant level 0.05 and the freedom degree 74 is 1.63.

Table (5) shows that the average of all intellectual capital dimensions was (3.6276) and standard deviation (0.4603) while (T) value was (11.835) which is more than T-test value (1.63). The table also shows that the significant level was (0.000) which is less

than (0.05). Which means that Jordanian private universities that have been studied in this research have a high level of intellectual capital and it achieves the competitive advantage through the effective management of intellectual capital?

**Table 6:** Average and standard deviation of competitive advantage

Variables	Average	Standard Deviation	Level	(T) Value	Relative Weight	Level of Significance
Quality	84.102	17.214	high	0.60120	4.1332	0.000
Efficiency	66.346	3.613	high	0.74673	3.2155	0.000
Innovation	75.064	9.761	high	0.67823	3.6433	0.000
Responsiveness	75.32	11.246	high	0.60111	3.6712	0.000
Total Of Competitive Advantage	75.208	10.4585	high	0.65681	3.6658	0.000

Source: preparing by researcher based on the analysis results.

T-Test value at significant level 0.05 and the freedom degree 74 is 1.63.

Table(6) shows the average and standard deviation of competitive advantage dimensions; (quality, efficiency, innovation, responsiveness) in the Jordanian private universities in the northern region. As we notice that the level of competitive advantage is very high ,also, the quality dimension is in the first place (4.1332) with standard deviation (0.6012) and high level. This means that Jordanian private universities apply the competitive dimensions well. While the dimension of responsiveness came in the second place with average (4.1332) and standard deviation (0.6012). As for innovation it came in the third place with average was (3.643) and standard deviation (0.678). While the efficiency was in the fourth place with average (3.215) standard deviation (0.746). The table also shows that the average of all dimensions of the competitive advantage was (3.6658) and relative weight was (75.208), while (T) value was (10.458) which is more than T-test value (1.63). In addition the tale shows that the significant level was (0.000) which is less

than (0.05). Which means that Jordanian private universities that have been studied in this research have a high level of competitive advantage and it achieve the through the effective management of intellectual capital.

## X. TEST HYPOTHESES

a) *The first hypotheses test*

There is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their human capital and to achieve its competitive advantage.

Table (7): Results of simple regression analysis for the first hypothesis test

	(β) value	(T) value	(F) value	Significance level	(R2) value	(R) value	Results of hypothesis
			93.386	0.000	0.551	0.741	acceptable
Independent variable	0.649	2.006					
Human capital	0.840	9.554					

Source: preparing th researcher based on the analysis results.

T-Test value at significant level 0.05 and the freedom degree 74 is 1.63.

as we see in table (7) that (T) value = (9.554) at the level of significance (0.00) is less than (0.05) which is indicate that there is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their human capital and to achieve its competitive advantage. Also, the table mentioned that the coefficient of correlation (R) = (0.741) which is means that there is a strong relation between human capital and competitive advantage in the Jordanian privet universities that have been studied in this research. In addition we can notice that the coefficient of correlation (R2) = (0.551). this means that the variance in the competitive advantage variable is

due to the change in human capital while the rest variables is due to other factors, therefore we accept the first sup-hypothesis which states that there is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their human capital and to achieve its competitive advantage.

b) *The second hypotheses test*

There is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their relational capital and to achieve its competitive advantage.

Table 8: Results of simple regression analysis for the second hypothesis test

	(β) value	(T) value	(F) value	Significance level	(R2) value	(R) value	Results of hypothesis
			134.89	0.000	0.466	0.799	acceptable
Independent variable	0.910	3.699					
Relational capital	0.755	11.68					

Source: statistical analysis results.

as we see in table (8) that (T) value = (11.688) at the level of significance (0.00) is less than (0.05) which is indicate that there is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their relational capital and to achieve its competitive advantage. Also, the table mentioned that the coefficient of correlation (R) = (0.799) which is means that there is a strong relation between human capital and competitive advantage in the Jordanian privet universities that have been studied in this research. In

addition we can notice that the coefficient of correlation (R2) = (0.644). this means that the variance in the competitive advantage variable is due to the change in relational capital while the rest variables is due to other factors, therefore we accept the first sup-hypothesis which states that there is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their relational capital and to achieve its competitive advantage.

c) *The third hypotheses test*

Table 9: Results of simple regression analysis for the third hypothesis test

	(β) value	(T) value	(F) value	Significance level	(R2) value	(R) value	Results of hypothesis
			20.600	0.000	0.214	0.459	acceptable
Independent variable	1.665	3.619					
structural capital	0.600	4.540					

Source: statistical analysis results.

as we see in table (9) that (T) value = (4.540) at the level of significance (0.00) is less than (0.05) which is indicate that there is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their structural capital and to achieve its competitive advantage. Also, the table mentioned that the coefficient of correlation (R) = (0.459) which is means that there is a strong relation between structural capital and competitive advantage in the Jordanian privet universities that have been studied in this research. In addition we can notice that the coefficient of correlation (R2) = (0.214). this means that the variance in the competitive advantage variable is

due to the change in structural capital while the rest variables is due to other factors, therefore we accept the first sup-hypothesis which states that there is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their structural capital and to achieve its competitive advantage.

d) *Main hypothesis test*

There is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their intellectual capital and to achieve its competitive advantage.

Table (10): Results of simple regression analysis for the main hypothesis test

	(β) value	(T) value	(F) value	Significance level	(R2) value	(R) value	Results of hypothesis
			52.740	0.000	0.678	0.830	acceptable
Independent variable	0.439	1.352					
Intellectual capital	0.360	3.110					
Relational capital	0.540	5.414					
Structural capital	0.344	3.106					

Source: statistical analysis results.

as we see in table (9) that (T) value = (1.352) at the level of significance (0.00) is less than (0.05) which is indicate that there is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their intellectual capital and to achieve its competitive advantage. Also, the table mentioned that the coefficient of correlation (R) = (0.830) which is means that there is a strong relation between structural capital and competitive advantage in the Jordanian privet universities that have been studied in this research. In addition we can notice that the coefficient of correlation (R2) = (0.678). this means that the variance in the competitive advantage variable is due to the change in intellectual capital while the rest variables is due to other factors, therefore we accept the first sup-hypothesis which states that there is a relation with a statistical significance at the level of significance (0.05) between the ability of Jordanian private universities to manage their intellectual capital and to achieve its competitive advantage.

arranged according to their importance as follows: (relational, human and structural).

- b) There is a strong relation between the human capital management and enhancing the competitive advantage of Jordanian private universities, where the correlation coefficient was 0.741 and relative weight 73,162.
- c) There is a strong relation between the relational capital management and enhancing the competitive advantage of Jordanian private universities, where the correlation coefficient was 0.799 and relative weight 73, 29.
- d) There is an accepted relation between the structural capital management and enhancing the competitive advantage of Jordanian private universities, where the correlation coefficient was 0.459 and relative weight 70,118.
- e) The results showed that the Jordanian private universities applied the competitive advantage well, where the quality dimension is in the first place then it followed by responsiveness and finally came the efficiency.
- f) The study showed the majority of the employees in private universities are male who hold a hold PHD degree and works as head of department.

XI. FINDINGS

- a) The study showed the results of the first hypothesis test using correlation coefficient to determine the relation between the intellectual capitals and to achieve the competitive advantage. The study found that there is a with a statistical significance relation with a correlation coefficient (0.830) at the level of significance (0.05) between the ability of Jordanian private universities to manage their human capital and to achieve its competitive advantage in varying proportions, which is their dimensions can be

XII. RECOMMENDATIONS

- a) Jordanian private universities must realize the importance of intellectual capital in order to develop it by achieving the competitive element that contributes to universities success.

- b) Universities must recognize the importance of maintaining their qualified and experienced staff by improving their functional positions, which helps them materially and morally.
- c) Universities need to pay attention to the requirements of structural capital through the development of data system and new technologies and update the databases.
- d) Universities must to encourage the creativity and innovation by experimenting the innovative ideas presented by the employee and put them under execution.

## REFERENCES RÉFÉRENCES REFERENCIA

1. Adel, H. (2007). Intellectual capital and the methods of measure it and how to maintain it. *Arab organization for administrative development, Cairo, 14*.
2. Afaf A. B. (2012). Vision of intellectual capital and its role in achieving the competitive advantage, Al Azhar University, Commerce College.
3. Ahmad, S. M. (2003). The competitiveness of Arab university education in the 21<sup>st</sup> century, al-Arabiya journal, 144, National commission for education, culture and science, 128-129.
4. Al-Hawary, S.I.S (2015). Human Resource Management Practices as a Success Factor of Knowledge Management Implementation at Health Care Sector in Jordan. *International Journal of Business and Social Science. 6*(11), 83-98.
5. Al-Hawary, S.I.S, Ismael, M.A (2010). The Effect of Using Information Technology in Achieving Competitive Advantage Strategies: A Field Study on the Jordanian Pharmaceutical Companies. Al Manara for Research and Studies, Economy and Administrative Sciences, Volume 16, No.4,pp 196-2030.
6. Al-Hawary, S.I.S. & Hadad, T.F.S. (2016). The Effect of Strategic Thinking Styles on the Enhancement Competitive Capabilities of Commercial Banks in Jordan'. *International Journal of Business and Social Science. 7*(10), 133-144.
7. Al-Hawary, S.I.S. (2010a ).Factor underlying International Students Choice of Jordan Public Universities: Analytical Study Institutional Factors, Al Manara for Research and Studies, Economy and Administrative Sciences, Volume 16, No.1, pp 37-64.
8. Al-Hawary, S.I.S. (2010b).Marketing Public Higher Education: a Social Perspective, Al Manara for Research and Studies, Economy and Administrative Sciences, Volume 16 (4),pp 9-32.
9. Al-Hawary, S.I.S. Alajmi, H.M (2017). Organizational Commitment of the Employees of the Ports Security Affairs of the State of Kuwait: The Impact of Human Recourses Management Practices. *International Journal of Academic Research in Economics and Management Sciences, 6*(1), 52-78.
10. Al-Hawary, S.I.S. and Shdefat, F.A. (2016). Impact of Human Resources Management Practices on Employees' Satisfaction A Field Study on the Rajhi Cement Factory. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 6*(4), 274-286.
11. Al-Hawary, S.I.S. Nusair, W.K (2017). Impact of Human Resource Strategies on Perceived Organizational Support at Jordanian Public Universities. *Global Journal of Management and Business Research: A Administration and Management, 17*(1), 68-82.
12. Al-maqdme, A. I. A. (2013). The role of competencies in achieving competitive advantage, Islamic university in Gaza, Palestine, unpublished master thesis.
13. Al-Nady B.A. A., Al-Hawary, S.I.S., Alolayyan M. N. (2013). Strategic Management as a key for Superior Competitive advantage of Sanitary Ware Suppliers in Kingdom of Saudi Arabia. *International Journal of Management and Information Technology, 7*(2), 1042-1058.
14. Alqairuoti, M., Alkhawaldeh, R. Q., Mazan, A, & Mohamed, M. (2014). The role of social responsibility in achieving the competitive advantage in Zain telecommunication sciences. *University of Jordan, 41*(1), 55-37.
15. Annuaimy, S. A. (2007). *How organizations can achieve their competitive advantage?* Research presented in the second scientific conference of the University of Isra, Jordan.
16. Assaf, M. A. (2010). Proposed strategy to manage the creativity as an entry to achieve the competitive advantage. Unpublished research in the Jordanian ministry of higher education.
17. Bekhet, H. A., & Mugableh, M. I. (2012). Investigating equilibrium relationships between macroeconomic variables and Malaysian stock market index through bounds tests approach. *International Journal of Economics and Finance, 4*(10), 69-81.
18. Bekhet, H. A., & Mugableh, M. I. (2013). Examining the equilibrium relationships between foreign direct investment inflows and employment in manufacturing and services sectors: evidence from Malaysia. *Journal of Social and Development Sciences, 4*(1), 32-38.
19. Bekhet, H. A., & Mugableh, M. I. (2016). Blueprinting the equilibrium relationships between inward FDI and employment in the Malaysian economic sectors: time series models approach. *Global Business and Economics Review, 18*(2), 136-150.
20. Bisaria, G. (2013). Achieving Competitive Advantage By Private Management Colleges or Private

- University. *International Journal of Social Science & Interdisciplinary Research*, 2 (3).
21. Chiucchi, M. S. (2008). Exploring the benefits of measuring intellectual capital: The image case study. *Human Systems Management*, 27, 217.
  22. Evans, C. (2007). *Operation Management an Integrated Goods and services, Approach*, Thomson, South, western, U.S. A. international, student edition, www.swlearning.com.
  23. Farhati, L. (2015). *The role of intellectual capital in achieving the competitive advantage for the economic institutions*, ayen altotah cement company, unpublished BHD thesis, Mohamed khader university-faculty of economic sciences, Algeria.
  24. Greco, M. G., Michele S. L., & Schiraldi, M. M. (2013). The Sources of Competitive Advantage in University Spin-Offs: a Case Study. *Journals of Technology Management & Innovation*, 8(3)
  25. Kannan, G., & Aulbur, A. G. (2004). Intellectual capital: Measurement effectiveness. *Journal of Intellectual Capital*, 5(3), 389- 413.
  26. Low, S. F., and Praveen, B. N. (2010). Revisiting the Concept of Sustainable Competitive Advantage: Perceptions of Managers in Malaysian MNCs. *International Journal of Business and Accountancy*, 1(1), 63-78.
  27. Mark, W. M. (2003). *The New Knowledge Management*, Butterworth Heinemann, Amsterdam, p170.
  28. Marr, B., Gray, D., and A. Neely. (2003). Why do firms measure their intellectual capital? *Journal of Intellectual Capital*, 4(4), 441- 464.
  29. Mention, A. (2012). Intellectual Capital, Innovation and Performance: A Systematic Review of the Literature. *Business and Economic Research*, 2(1).
  30. Meqdadi , Y. A. S., khalid, M., & Mohamed, S. (2012). Market knowledge and its role in determining the competitive strategies of the academic programs in the Jordanian private universities in Amman. *Arabic Journal for quality assurance for university education*, 5.
  31. Mitchell, H. J. (2010). *A Model for Managing Intellectual Capital to Generate Wealth*. Doctor's thesis, Massey University, New Zealand.
  32. Mugableh, M. I. (2013). Analysing the CO<sub>2</sub> emissions function in Malaysia: Autoregressive distributed lag approach. *Procedia Economics and Finance*, 5, 571-580.
  33. Mugableh, M. I. (2015a). Time series analysis of inward foreign direct investment function in Malaysia. *Procedia – Social and Behavioral Sciences*, 172, 679-685.
  34. Mugableh, M. I. (2015b). Economic growth, CO<sub>2</sub> emissions, and financial development in Jordan: Equilibrium and dynamic causality analysis. *International Journal of Economics and Finance*, 7(7), 98-105.
  35. Mugableh, M. I. (2015c). *Equilibrium models of the Malaysian stock market and macro economy (1<sup>st</sup>ed)*, LAP LAMBERT Academic Publishing. Germany: Berlin.
  36. Mugableh, M. I. (2015d). Aggregate economic forces and Malaysian equity market: Equilibrium time-series approach. *4<sup>th</sup> International Conference on Management, Finance & Entrepreneurship*.
  37. Mugableh, M. I. (2017). Estimating elasticity function of Jordanian aggregate import demand. *Applied Economics and Finance*, 4(2), 33-37.
  38. Musa, A. (2014). The role of intellectual capital in achieving the competitive advantage in the Syrian telecommunications company. *Tishreen University journal of studies and research*, 63(6).
  39. Mustafa A. S. (2011). *The intellectual capital and its role in achieving the competitive advantage in the Palestine telecommunications company*, Islamic university in Gaza, unpublished master thesis, 66- 65.
  40. OECD (1999). *The Organization for Economic Co-operation and Development* measuring and Reporting Intellectual Capital: Experience, Issues and Prospect Program notes and background Technical Meeting and Policy and Strategy Forum, Paris.
  41. Thomas S. (1998). *Intellectual Capital: The Wealth of Organizations*, Doubleday, New York, p11.





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# The Impact of Intellectual Capital Dimensions on Organizational Performance of Public Hospitals in Jordan

By Riad Ahmad Mohammed Abazeed

*Al al-Bayt University*

**Abstract-** The purpose of this study was to explore the impact of intellectual capital (IC) dimensions on organizational performance (OP). IC, in this study, conceptualized as a variables comprises three main dimensions: human capital (HC), structural capital (SC), and relational capital (RC). The sample of the study consisted of 500 employees randomly selected from five public hospitals in the northern region of Jordan. Data were collected by a questionnaire developed base on the literature of intellectual capital and organizational performance. The number of questionnaires returned was 473 questionnaires. The questionnaire used in the study included 20 items, each of the variables was measured using 5 items anchored on five-point Likert scale. HC was measured by items related to employees' knowledge, skills, experiences, education, motivation, commitment, creativity and innovation. SC items concerned organizational efficiency and effectiveness, procedures, culture, product or service-oriented innovation, and intangibles such as patents, image and trade secrets.

**Keywords:** *intellectual capital, organizational performance.*

**GJMBR-A Classification:** *JEL Code: M19*



THE IMPACT OF INTELLECTUAL CAPITAL DIMENSIONS ON ORGANIZATIONAL PERFORMANCE OF PUBLIC HOSPITALS IN JORDAN

*Strictly as per the compliance and regulations of:*



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Riad Ahmad Mohammed Abazeed

**Abstract-** The purpose of this study was to explore the impact of intellectual capital (IC) dimensions on organizational performance (OP). IC, in this study, conceptualized as a variables comprises three main dimensions: human capital (HC), structural capital (SC), and relational capital (RC). The sample of the study consisted of 500 employees randomly selected from five public hospitals in the northern region of Jordan. Data were collected by a questionnaire developed base on the literature of intellectual capital and organizational performance. The number of questionnaires returned was 473 questionnaires. The questionnaire used in the study included 20 items, each of the variables was measured using 5 items anchored on five-point Likert scale. HC was measured by items related to employees' knowledge, skills, experiences, education, motivation, commitment, creativity and innovation. SC items concerned organizational efficiency and effectiveness, procedures, culture, product or service-oriented innovation, and intangibles such as patents, image and trade secrets. While, RC items included organizational relationships with stakeholders, agreements, customer contribution and satisfaction. Finally, OP was measured using indicators concerned customer, employee development, individual and job fit. IBM SPSS-V.23 was used to analyze the collected data. The results supported the three hypotheses suggested in the study. That is, HC, SC, and RC were significantly influence OP. In agreement with prior studies, this study found a significant impact of IC dimensions on OP. the difference is that the current study is conducted in healthcare sector, particularly, in public hospitals. public hospitals are recommended to invest in their intellectual capital in order to improve OP. Future studies is required in more public hospitals in the kingdom in order to ensure generalizability of the findings.

**Keywords:** *intellectual capital, organizational performance.*

## 1. INTRODUCTION

Going over organizations of different sizes, industries as well as countries with a clear-sighted view brings to light that the efficient and effective exploitation of tangible assets only is far from enough the endeavor capital needed to effectuate fine organizational performance. Variegated drivers were recommended in a vast bundle of organizational literature to ameliorate OP. However, many organizations are still shunning instead of running after those recommendations.

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Similar standpoints found in the literature signified the importance of both physical and intellectual assets for organizations to enhance OP (Wanjala, 2013). Even though the historical regard of the economic assets as a foremost measure of OP, new trends were emerged and justified using the intellectual assets as a complementary indicator of OP (Hudgins, 2014). Instances of these trends embody the remarkable gap between book value and market value of the organization (Chen et al., 2005 and Curado et al., 2014) in favor of market value (Smriti and Das, 2017), which signifies that the added value is devolved upon latent assets or, in other words, intangible or intellectual assets. Such intellectuals are more difficult to imitate than tangibles (Ghatak, 2013), on top of the nature of these intangibles as rare (Pucci et al., 2015) and hard to substitute assets (Amin et al., 2014).

Hence, one vein of the literature called organizations upon to pay more attention to intellectual capital as a well-established mean used to induce better levels of OP (Wang and Chang, 2005; Shiu, 2006; Bramhandkar et al., 2007; Cabrita and Bontis, 2008; Yang and Lin, 2009; Zéghal and Maaloul, 2010; Khalique et al., 2011a; Wu et al., 2012; Sumedrea, 2013; Al-Musali and Ismail, 2014; Nuryaman, 2015; Gogan et al., 2016 and Koc, 2017).

More than one view of IC were detected in the literature. One general view took it as invaluable knowledge generating value to the organization (Hashim et al., 2015). A more specific view rated IC as a multi-dimensional concept made up of accumulated capitals pertaining human, structural and relational assets that furnish the organization with essential competencies required to make its objectives real (Awan and Saeed, 2015 and Chein, 2013). A third view of the concept considered a combined perspective embraced the aforesaid views. It defined IC as a collection of knowledge sources that exist in the organization's people, structure and customers and can be processed into value (Wu and Sivalogathan, 2013; Noordin and Mohtar, 2013 and Joshi et al., 2013). It was acknowledged that IC covers abundant components related to these three bins of IC. Examples of these components are similar to organizational knowledge, culture, and innovation (Janosevic et al., 2013a), organizational technology, capabilities, and relationships (Badrabad and Akbarpour, 2013), organizational

strategies and organizational structure (Janosevic et al., 2013b).

Despite the absence of consensus on one clear-cut definition of IC (Ozkan et al., 2016 and Koc, 2017), the concept was operationalized with a common voice as a structure encompasses three principals: human capital, structural capital, and relational or customer capital (Stewart, 1997; Bontis et al., 2000; Sharabati et al., 2010; Khalique et al., 2011b; Mention, 2012; Al-Dujaili, 2012; Chang and Lee, 2012; Joshi et al., 2013; Ogbo et al., 2013; Saeed et al., 2013; Curado et al., 2014; Mumtaz and Abbas, 2014; Taie, 2014; Hermawan et al., 2015 and Lee et al., 2015). Other parts of IC were reported in the literature, i.e. renewal capital, trust capital and entrepreneurial capital (Kianto et al., 2014), innovation capital (Chen et al., 2004) and process capital (Lin, 2015). One study (Wang and Chang, 2005) divided structural capital into innovation and process capital.

IC has been figured up as a main source of the competitive advantage of organizations (Smriti and Das, 2017; Saeed et al., 2013; Ogbo et al., 2013 and Seleim et al., 2007) and sustainable organizational performance (Mondal and Ghosh, 2012). A well contribution of IC to OP in particular was cited in sundry empirical studies carried out in different industries and countries similar to information technology industry in Taiwan (Wang and Chang, 2005); software companies in Egypt (Seleim et al., 2007), pharmaceutical companies in USA (Bramhandkar et al., 2007), financial service sector in Portugal (Cabrita and Bontis, 2008); high-tech, traditional and service sectors in UK (Zéghal and Maaloul, 2010); electronics manufacturing sector in Pakistan (Khalique et al., 2011a); banks in Kuwait (Abdulsalam et al., 2011); banks in India (Mondal and Ghosh, 2012), banks in Nigeria (Ogbo et al., 2013), universities in Jordan and Pakistan (Sharabati et al., 2013 and Awan and Saeed, 2014), Oil and Gas companies in Pakistan (Kharal et al., 2014), banks in Saudi Arabia (Al-Musali and Ismail, 2014), insurance companies in USA (Hudgins, 2014); technology-based firms in Colombia (Aramburu et al., 2015); public manufacturing companies in Indonesia (Nuryaman, 2015); drinking water distribution companies in Romania (Gogan et al., 2016) and tourism and automobile industry in Turkey (Koc, 2017). In agreement with the above-listed research, the main aim of the present study is to explore the influence of IC on OP. However, the contribution of this study followed clearly from IC and OP operationalization, the sample and the model of the study, as well as the setting where the study took place.

The study is structured as follows. The following section contains a review of the related literature, from which study hypotheses were drawn. The same section presents examples of definitions of the study variables and dimensions of IC and sub-dimensions of human capital, structural capital, and relational capital. The third section shows the methodology used in the study. It comprises

sample of the study, measures used to assess the study variables, as well as data collection. Section four demonstrates data analysis and results. Section five sets forth discussion of the results and implications concluded. Finally, section six sets down limitations and future research directions provided by the study.

## II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### a) *Definition of intellectual capital*

IC has been defined from different perspectives as can be seen in Table 1. In 2008, The Organization for Economic Co-operation and Development (OECD) defined IC as an economic value proceeded from two types of intangibles which are organizational and human capitals. Wang and Chang (2005) indicated that IC is a key component engenders organization's value. Zéghal and Maaloul (2010) classified IC as the entire accessible knowledge can be utilized by the organization to create value. Conceptually, Wu et al. (2012) regarded IC as a set of organization-related abilities integrated with three types of capitals; human, structural and relational capital. Nuryaman (2015) defined IC as a main component of the organization market value since which composed of the economic capital plus the intellectual capital of the organization. According to the author, IC represents a difference between book value and replacement assets of an organization.

Pursuant to these definitions, IC was defined in this study as an integral part of the market value of an organization along with its economic capital, embodies all intangibles related to the organization itself such as management, procedures, trademarks, image, reputation, patents, culture, strategies, to the people of the organization such as knowledge, skills, experience, education, creativity, innovation, commitment, and engagement, and to the organizational relationship, either within the organization or with external stakeholders like customers and suppliers.

Table 1: Examples of IC definitions

Authors	Definitions
OECD (2000)	Economic value results for organizational and human capitals.
Wang and Chang (2005)	A key component of an organization's value.
Zéghal and Maaloul (2010)	The entire accessible knowledge used by an organization to create value.
Wu et al. (2012)	A set of organization-related abilities integrated with three types of capitals; human, structural and relational capital
Nuryaman (2015)	A major component of an organization's market value

b) Dimensions of intellectual capital

IC, in general, has been conceptualized in the literature as a construct comprised three main dimensions: human capital, structural (organizational) capital, and relational (customer or social) capital. Table 2 shows examples of authors' conceptualizations of IC. Following the general categorization of this variable (Cabrita and Bontis, 2008; Yang and Lin, 2009; Khalique et al., 2011a; Sumedrea, 2013; Nuryaman, 2015 and Gogan et al.,

2016), this study considered three dimensions of IC: human capital, structural capital and relational capital. In fact, other components of IC, such as innovation and process capital, was regarded by this study as tacit components of IC dimensions. For example innovation capital can be placed back to the human or structural parts of IC, while process capital can be reinstated in structural capital.

Table 2: Examples of IC dimensions

Authors	Dimensions
Wang and Chang (2005)	Human capital, customer capital, innovation capital, and process capital.
Cabrita and Bontis (2008)	Human capital, structural capital, and relational capital
Yang and Lin (2009) Wu and Sivalogathasan (2013)	Human capital, organizational (structural) capital, and relational (social) capital
Khalique et al. (2011a)	Human capital, structural capital, and customer capital
Sumedrea (2013) Wanjala (2013)	Human capital, structural capital, and customer (external) capital
Nuryaman (2015)	Human capital, structural capital, and customer capital
Gogan et al. (2016)	Human capital, structural capital, and relational capital

i. Sub-dimensions of human capital

Human capital(HC), as a key element of IC, has been defined as a collection of employee characteristics and abilities revealed in forms of knowledge, skills, experiences, education, creativity, commitment, innovation, life and business-related attitudes, and motivation, etc.

(Wang and Chang, 2005; Yang and Lin, 2009; Sumedrea, 2013; Wanjala, 2013; Nuryaman, 2015 and Koc, 2017). According to Wanjala (2013), HC is considered the major part of intellectual capital. Examples of these characteristics and abilities or sub-dimensions of HC are shown in Table 3.

Table 3: Examples of HC sub-dimensions

Authors	Sub-dimensions of HC
Wang and Chang (2005)	Employee education
Yang and Lin (2009)	Employee knowledge, skills and experience.
Sumedrea (2013)	Employee motivation and commitment
Nuryaman (2015)	Intellectual ability, creativity and innovation
Koc (2017)	Technical knowledge, job evaluation, creativity, team work, initiatives, problem-solving, analytical and conceptual thinking.

ii. Sub-dimensions of structural capital

Structural capital (SC) refers to organization-based intangible assets like efficiency, effectiveness, innovativeness, culture, knowledge, strategies, procedures, patents, trade secrets, information and network systems etc. (Cabrita and Bontis, 2008; Yang and Lin, 2009; Sumedrea, 2013; Nuryaman, 2015 and Koc, 2017). Lee et al. (2015) added problem-solving and value

creation as vital sub-dimensions of SC. Table 4 shows examples of HC sub-dimensions.

Table 4: Examples of HC sub-dimensions

Authors	Sub-dimensions of SC
Yang and Lin (2009)	Process effectiveness, knowledge integrating and sharing
Sumedrea (2013)	Databases, organizational procedures, trademarks, organizational strategies related infrastructure.
Lee et al. (2015)	Problem-solving and value creation procedures.
Nuryaman (2015)	Hardware and software infrastructure, products and services innovations.
Koc (2017)	Management philosophy, organizational culture, information and network systems, patents and copyrights, and trade secrets.

iii. *Sub-dimensions of RC*

Relational capital (RC), social or customer capital as called in some studies, incorporates all organizational relationships, either internal relationships between the management and employees or among employees themselves, or external relationships with stakeholders such as customers, suppliers (Nuryaman, 2015), research and development institutions as well as government

(Mumtaz and Abbas, 2014). Moreover, RC includes all relationship-based outcomes like customer satisfaction (Khaliq et al., 2011a), customer loyalty, organizational agreements (Koc, 2017), distribution channels, number of key customers (Wang and Chang, 2005). Mumtaz and Abbas (2014) attached other parts such as knowledge related to promotions and advertising practices (Table 5).

Table 5: Examples of RC sub-dimensions

Authors	Sub-dimensions of RC
Wang and Chang (2005)	Contribution of customers to growth in sales
Cabrita and Bontis (2008)	Relationships with stakeholders
Yang and Lin (2009)	Internal relationships among individuals within the organization and external relationships between the organization and other organizations.
Amiri et al. (2010) cited in Khaliq et al. (2011a)	Customer loyalty and satisfaction.
Nuryaman (2015)	Relationships with internal and external parties
Koc (2017)	Brands, business name, distribution channels, license and franchising agreements, customer loyalty.

c) *Definition of organizational performance*

The literature of OP is loaded with definitions with this construct. Definitions of OP reported by Awan and Saeed (2015) indicated that OP represents the result of employees' task-oriented activities. In their definition of OP, Badrabadi and Akbarpour (2013) described OP as a result of the organizational processes execution and organizational goals achievement that embodies all success-related concepts. Lee et al. (2015) defined OP as an indication of the organization's competency to achieve its strategic goals and compete.

d) *Dimensions of organizational performance*

Dimensions of OP in the literature can be divided into: financial and non-financial measures. Kaplan and Norton (1996) cited in Wu et al. (2012) called organizations to take financial and non-financial measures into their consideration to assess OP. Badrabadi and Akbarpour (2013) measured OP using financial performance and knowledge performance. Chang and Lee (2012); Lee et al. (2015) and Elfar et al. (2017) conceptualized OP using financial (return on equity and earnings per share) and non-financial measures (customers, internal processes, learning and growth).

i. *Prior studies on the influence of intellectual capital on organizational performance*

Research on the relationship between IC and OP can be categorized into two types: research investigated the influence of IC as a whole construct on OP (Zéghal and Maaloul, 2010; Wu et al., 2012; Badrabadi and Akbarpour, 2013; Amin et al., 2014 and Arifin, 2016), and research explored the influence of each of IC dimensions on OP. The main focus of the present study is the influence of IC dimensions on OP. Lin (2015) used market value to measure OP. In a study conducted by Pucci et al. (2015) to explore the relationship between IC and OP, OP was measured using return on investment, return on assets, return on sales, capital turnover, and return on equity. In a study of Egyptian firms (Seleim et al., 2007), OP was evaluated by export density of software companies.

e) *Human capital and OP*

Cabrita and Bontis (2008) used a sample consisted of 253 participants selected from 53 banks in order to collect the required data to examine interactions among IC dimensions and OP. The results found significant interactions between the dimensions of IC, human capital, structural capital, and relational capital. In a word, the study concluded that IC together significantly



impact OP. Particularly, human capital directly and indirectly affects OP. The same result was echoed in many prior studies (Yang and Lin, 2009; Ghatak, 2013; Awan and Saeed, 2014 and Gogan et al., 2016). Wang and Chang (2005) investigated the relationship between IC, measured by human capital, customer capital, innovation capital, and process capital and OP and found an indirect influence of human capital on OP. In contrast, the impact of human capital on OP found by Khalique et al. (2011a) and Hashim et al. (2015) was insignificant. Based on these studies, the study supposed that:

H1: human capital has a significant impact on organizational memory.

f) *Structural capital and OP*

Gogan et al. (2016) studies relationships among human capital, structural capital, relational capital and organizational performance and found a significant association between the structural capital of IC and OP. According to Yang and Lin (2009), Khalique et al. (2011a), Ghatak (2013) and Awan and Saeed (2015) structural capital has a significant influence on OP. On the other hand, Hashim et al. (2015) concluded a non-significant impact of structural capital on OP. Based on these results, the study hypothesized that:

H2: structural capital has a significant impact on organizational performance.

g) *Relational capital and OP*

It was revealed by many studies that relational capital has a significant impact on OP (Wang and Chang, 2005). The results of Yang and Lin (2009) showed that relational capital mediates the relationship between human resource practices and OP. That is, relational capital has an association with OP. Chen et al. (2014) studied the relationship between IC and new product development. Specifically, they estimated the effects of human capital and organizational capital on customer capital which in turn affect the performance in terms of new product development. Their results showed that customer (relational) capital mediates the relationship between human capital and organizational capital and new product performance. In fact, many studies confirmed the positive impact of relational capital on OP (Ghatak, 2013 and Awan and Saeed, 2015). Based on these results, the study suggested that:

H3: capital has a significant impact on organizational performance.

### III. METHODOLOGY

a) *Study tool, sample and data collection*

A questionnaire was developed based on the literature. IC dimensions were measured adopting items from previous studies (Wang and Chang, 2005; Cabrita and Bontis, 2008; Yang and Lin, 2009; Zéghal and Maaloul, 2010; Khalique et al., 2011a; Sumedrea, 2013; Ghatak, 2013; Mumtaz and Abbas, 2014; Lee et al., 2015; Awan and Saeed, 2015; Nuryaman, 2015; Hashim et al., 2015; Gogan et al., 2016 and Koc, 2017). OP was evaluated based on previous studies (Pett and wolf, 2007; Badrabadi and Akbarpour, 2013; Yidiz and Karakas, 2012; Abdullahi et al., 2015 and Elfar et al., 2017). It included 20 items, each of the variables (HC, SC, RC, and OP) was measured using 5 items. Items of HC covered employees' knowledge, skills, experiences, education, motivation, commitment, creativity and innovation. SC items referred to organizational efficiency and effectiveness, procedures, culture, product or service-oriented innovation, and intangibles such as patents, image and trade secrets. On the other hand, RC items included organizational relationships with stakeholders, agreements, customer contribution and satisfaction. Finally, OP was measured using indicators concerned customer, employee development, individual and job fit, and knowledge performance. All items were measured using a five-point Likert scale ranged from 1 (strongly disagree) to 5 (strongly agree). A total of 500 employees were randomly selected from public hospitals operating in the northern region of Jordan. Exactly, 473 questionnaires were returned and used for statistical analysis.

b) *Reliability and validity*

Reliability of the study tool was measured using Cronbach's alpha ( $\alpha$ ). The results of reliability illustrated in Table 6 showed that the alpha values of HC, SC, RC, and OP were above 0.7 (Hashim et al., 2015) to confirm the reliability of the questionnaire used in this study. The Average Variance Extracted (AVE) was used to evaluate the validity. The results of AVE confirmed that the items of each variable were correlates to the theoretical foundation of that variable. AVE values considered acceptable if these value is greater than 0.5 (Hair et al., 2011).

Table 6: Results of reliability and validity

Variables	Items	Mean (SD)	Alpha *	AVE **
Human capital (HC)	1-5	4.23 (0.587)	0.774	0.69
Structural capital (SC)	6-10	3.86 (0.780)	0.814	0.70
Relational capital (RC)	11-15	4.01 (1.010)	0.798	0.71
Organizational performance (OP)	16-20	3.97 (0.851)	0.836	0.68
* Acceptance level of alpha: alpha > 0.70				
** Acceptance value of AVE: AVE > 0.5				

c) Model of the study and statistical methods used

The model of the study is shown in Figure 1. It includes three main independent variables; human capital, structural capital, and relational capital.

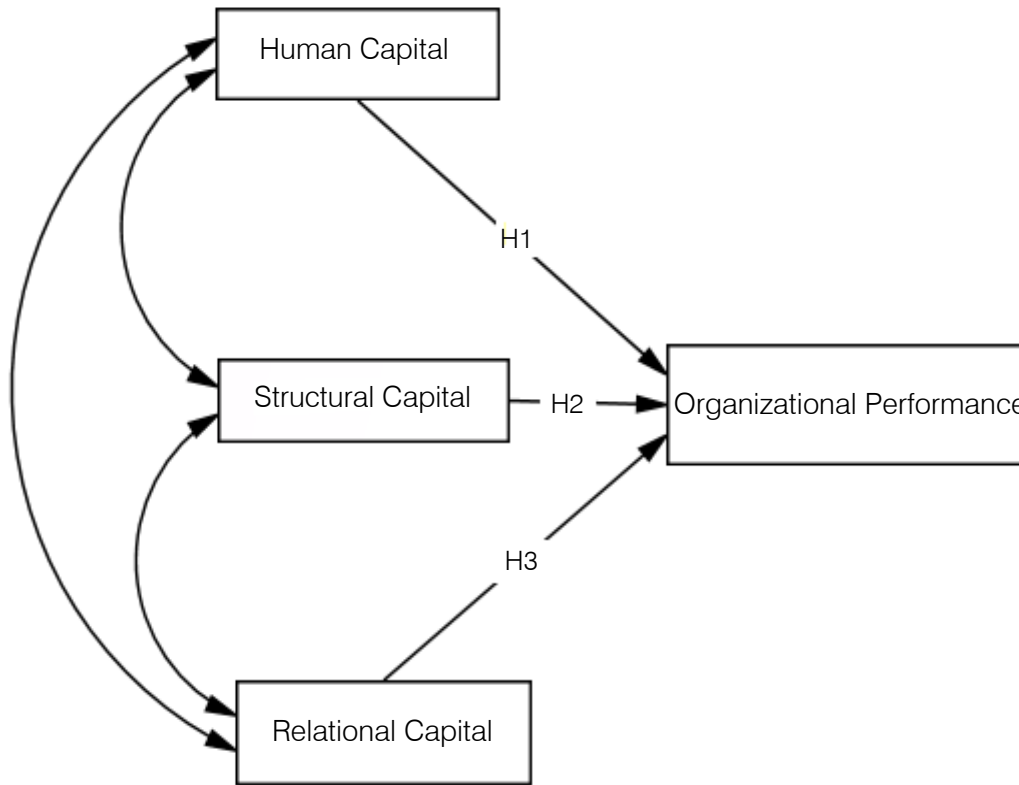


Figure 1: The conceptual model of the study

H1 concerned the relationship between human capital and organizational performance, H2 related to the relationship between structural capital and organizational performance, while H3 pertained the relationship between relational capital and organizational performance. IBM SPSS package-V23 was used to test the hypotheses; multiple regression analysis conducted to estimate the standardized coefficients. Correlations among independent variables and the dependent variable were identified by Pearson Coefficients.

IV. DATA ANALYSIS AND RESULTS

a) Correlation matrix

The results shown in Table 7 showed significant correlations among independent variables (HC, SC, and RC) and dependent variable (OP). HC is significantly correlates to SC and RC ( $r = 0.579, 0.668$ . Sig. = 0.001, respectively) and to OP ( $r = 0.496$ , Sig. = 0.000). SC is significantly related to both RC ( $r = 0.643$ , Sig. = 0.002) and OP ( $r = 0.428$ , Sig. = 0.000). Moreover, RC is significantly associated with OP ( $r = 0.399$ , Sig. = 0.001).

Table 7: Results of correlation analysis

Variables	HC	SC	RC	OP
Human capital (HC)	-			
Structural capital (SC)	0.579 **	-		
Relational capital (RC)	0.668 **	0.643 **	-	
Organizational performance (OP)	0.496 **	0.428 **	0.399 **	-

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

b) Regression prior assumption: Multicollinearity

Collinearity statistics, i.e., tolerance and variance inflation factor (VIF) were calculated to check the assumption of multicollinearity. The results (Table 8)

indicated that HC, SC, and RC have tolerance values greater than 0.1 and VIF value less than 10, which means that multicollinearity was not overreached (Hashim et al., 2015).

Table 8: Results of Collinearity coefficients

Model	Tolerance *	VIF **
Human capital (HC)	0.331	3.120
Structural capital (SC)	0.284	4.016
Relational capital (RC)	0.294	4.770

\* Tolerance is accepted at value > 0.1  
 \*\* VIF is accepted at value < 10

c) Multiple regression analysis

The results of the study, as shown in Table 9, indicated that all predictors of intellectual capital explained 76.1% of the variance in OP as expressed by R square ( $R^2 = 0.761$ ). Human capital has a significant impact on OP (Std. beta = 0.274,  $t = 11.314$ , Sig. value = 0.000) that is, hypothesis H1 was accepted. Furthermore, structural capital has a significant impact on OP (Std. beta = 0.287,  $t = 9.112$ , Sig. value = 0.000), this result means that H2 was supported. Finally, the results pointed out a significant impact of relational capital on OP (Std. beta = 0.239,  $t = 7.845$ , Sig. value = 0.000). The results showed that structural capital has the largest beta value (0.287), followed by human capital (0.274), in comparison with relational capital (0.239).

= 9.112, Sig. value = 0.000). this result means that H2 was supported. Finally, the results pointed out a significant impact of relational capital on OP (Std. beta = 0.239,  $t = 7.845$ , Sig. value = 0.000). The results showed that structural capital has the largest beta value (0.287), followed by human capital (0.274), in comparison with relational capital (0.239).

Table 9: Results of multiple regression analysis

Model	Standardized Coefficients - Beta	t	Sig.
Human capital	0.274	11.314	0.000
Structural capital	0.287	9.112	0.000
Relational capital	0.239	7.845	0.001

Dependent variable: organizational performance  
 $R^2: 0.761$   
 Df (total): 471  
 F: 63.59, Sig.: 0.000

The results shown in Table 9 is also depicted in Figure 2.

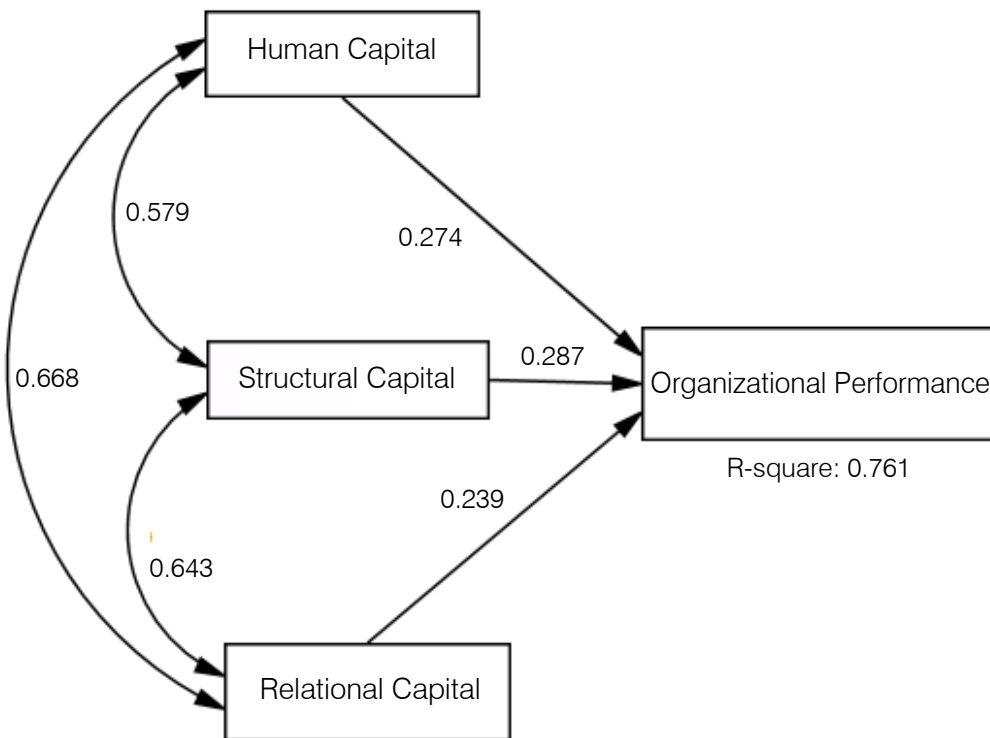


Figure 2: The final model of the study

## V. DISCUSSION

Exploring the extent to which each of IC dimensions significantly has an impact of organizational performance was the main purpose of this study. Expressly, this study sought to determine the impact of human capital, structural capital, and relational capital on organizational performance. The results obtained by the study confirmed that these three dimensions have significant influences on organizational performance. The significant impact of human capital on organizational performance was supported by the current data. Similar result was found by many prior studies. Yang and Lin (2009) found that human capital mediates the relationship between human resource management practices and organizational performance. According to Bontis and Fitz-enz (2002), human capital plays a critical role in the enhancement of organizations' profitability. Nuryaman (2015) indicated that human capital components such as individuals' capabilities and commitment enhance the organizational efficiency and productivity, which in turn affects the organization's ability to generate profit. The results of this study in relation to the impact of structural capital on OP were in line with results of numerous previous studies. The components of structural capital like organizational strategies, structure, and culture help the organization to achieve its organizational objectives (Nuryaman, 2015). In agreement with numerous studies, the results confirmed that relational capital significantly predicted organizational performance (Yang and Lin, 2009 and Wu et al., 2012). Inconsistent with Hashim et al. (2015), the present study found a significant influence of human capital and structural capital on organizational performance. In general, many positive outcomes of intellectual capital found in the literature in correlation to OP (Wu and Sivalogathan, 2013 and Wanjala, 2013). Smriti and Das (2017) concluded that IC is a predictor of organization's profitability not organization's productivity or market value.

## VI. CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

The results showed that intellectual capital dimensions, human capital, structural capital, and relational capital play a significant role in improving hospitals performance. That is, the intellectual capital is no less important than the economic capital. Based on these results, the study give advice to organizations in general, specially hospitals to pay more attention to their intellectual capital using their human resource practices like training and development programs, staffing, and motivation with a focus on people knowledge, skills, experiences, innovation, creativity, and job evaluation, individual and job fit, problem-solving, organizational structure, supporting infrastructure, and long-term effective relationships with customers, suppliers, and other stakeholders. However,

the results of this study were drawn based on cross-sectional data. Future research should conduct a longitudinal study to explore the influence of IC on OP in a given period of time. Additionally, the results were revealed base on a sample consisted of participants selected from hospitals. It is recommended to study the impact of IC as a whole construct, or its dimensions on OP using samples from different sectors.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Abdullahi, M., Abubakar, A., Aliyu, R. and Umar, M. (2015). Empirical review on the determinants influencing firm performance in developing countries. *International Journal of Scientific and Research Publications*, 5 (6), 1-10.
2. Al-Dujaili, M. (2012). Influence of intellectual capital in the organizational innovation. *International Journal on Innovation, Management and Technology*, 3 (2), 128-135.
3. Al-Musali, M. and Ismail, K. (2014). Intellectual capital and its effect on financial performance of banks: Evidence from Saudi Arabia. *Procedia-Social and Behavioral Sciences*, 164, 201-207.
4. Amin, S., Aslam, S. and Makki, M. (2014). Intellectual capital and financial performance of pharmaceutical firms in Pakistan. *Pakistan Journal of Social Sciences*, 34 (2), 433-450.
5. Aramburu, N., Saenz, J. and Blanco, C. (2015). Structural capital, innovation capability and company performance in technology-based Colombian firms. *Cuadernos de Gestion*, 15 (1), 39-60.
6. Awan, A. and Saeed, K. (2015). Intellectual capital and research performance of universities in southern Punjab-Pakistan. *European Journal of Business Innovation Research*, 2 (6), 21-39.
7. Badrabad, H. and Akbarpour, T. (2013). A study on the effect of intellectual capital and organizational learning process on organizational performance. *African Journal of Business Management*, 7 (16), 1470-1485.
8. Bontis, N. and Fitz-enz, J. (2002). Intellectual capital ROI: A casual map of human capital antecedents and consequents. *Journal of Intellectual Capital*, 3 (3), 223-247.
9. Bontis, N., Keow, W. and Richardson, S. (2000). Intellectual capital and the nature of business in Malaysia. *Journal of Intellectual Capital*, 1 (1), 85-100.
10. Bramhandkar, A., Erickson, S. and Applebee, I. (2007). Intellectual capital and organizational performance: An empirical study of the pharmaceutical industry. *The Electronic Journal of Knowledge Management*, 5 (4), 357-362.
11. Cabrita, M. and Bontis, N. (2008). Intellectual capital and business performance in the Portuguese banking industry. *Int. J. Technology Management*, 43 (1-3), 212-237.

12. Chang, C. and Lee, Y. (2012). Verification of the influence of intellectual capital upon organizational performance of Taiwan listed info-electronics companies with capital structure as a moderator. *The Journal of International Management Studies*, 7 (1), 80-92.
13. Chein, Y. (2013). The effect of organizational performance on the intellectual capital accumulation of Taiwan listed Biotechnology companies: Organizational citizen behavior as a moderator. *The Journal of Human Resource and Adult Learning*, 9 (1), 40-54.
14. Chen, C., Liu, T., Chu, M. and Hsiao, Y. (2014). Intellectual capital and new product development. *Journal of Engineering and Technology Management*, 33, 154-173.
15. Curado, C., Guedes, M. and Bontis, N. (2014). The financial crisis of banks (before, during, and after): An intellectual capital perspective. *Knowledge and Process Management*, 21 (2), 103-111.
16. Elfar, A., Elsaid, A. and Elsaid, E. (2017). How knowledge management implementation affects the performance of Egyptian construction companies. *The Journal of Applied Business Research*, 33 (3), 409-438.
17. Ghatak, A. (2013). Impact of intangibles on bank's performance. *Elixir Finance Management*, 59, 15274-15283.
18. Gogan, L., Artene, A., Sarca, I., Draghici, A. (2016). The impact of intellectual capital on organizational performance. *Procedia-Social and Behavioral Journal*, 221, 194-202.
19. Hair, J., Ringle, C. and Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19 (2), 139-152.
20. Hashim, M., Osman, I. and Alhabshi, S. (2015). Effect of intellectual capital on organizational performance. *Procedia-Social and Behavioural Journal*, 211, 207-214.
21. Hermawan, S., Hariyanto, W. and Sumartik (2015). Integration of intellectual capital and knowledge management and its impact on business performance pharmaceutical. *Jurnal Akuntansi Multiparadigma*, 6 (3), 385-398.
22. Hudgins, M. (2014). The impact of intellectual capital on the performance of U.S. property-casualty insurance companies. *Business and Economics Journal*, 5 (4), 1-6.
23. Janosevic, S., Dzenopoljac, V. and Bontis, N. (2013b). Intellectual capital and financial performance in Serbia. *Knowledge and Process Management*, 20 (1), 1-11.
24. Janosevic, S., Dzenopoljac, V. and Dimitrijevic, S. (2013a). Analysis of intellectual capital practices in Serbia. *Actual Problems of Economics*, 6 (144), 548-562.
25. Joshi, M., Daryll, C., Sidhu, J., and Kansal, M. (2013). Intellectual capital and financial performance: An evaluation of the Australian financial sector. *Journal of Intellectual Capital*, 14 (2), 264-285.
26. Khalique, M., Shaari, J., Isa, A. and Ageel, A. (2011b). relationship of intellectual capital with the organizational capital of pharmaceutical companies in Pakistan. *Australian Journal of Basic and Applied Sciences*, 5 (12), 1964-1969.
27. Khalique, M., Zia-ur-Rahman, M., Abrar, M., Khan, M. and Kharal, M. (2011a). Intellectual capital & financial performance: An empirical study on the Oil & gas sector of Pakistan. *International Journal of Accounting and Financial Reporting*, 4 (1), 238-261.
28. Kianto, A., Ritala, P., Spender, J. and Vanhala, M. (2014). The interaction of intellectual capital assets and knowledge management practices in organizational value creation. *Journal of Intellectual Capital*, 15 (3), 362-375.
29. Koc, H. (2017). Differentiation of leadership manager behavior between industries in terms of intellectual capital (Tourism and Automotive Sector Example). *Journal of Tourism and Gastronomy Studies*, 5 (1), 147-159.
30. Lee, Y., Wu, M. and Chao, C. (2015). The effects of the accumulation of intellectual capital on organizational performance: Using productivity as the moderator. *International Journal of Information Technology and Business Management*, 39 (1), 68-83.
31. Lin, Y. (2015). How does intellectual capital affect organizational performance? *International Journal of Business and Social Science*, 6 (7), 115-120.
32. Mention, A. (2012). Intellectual capital, innovation and performance: A systematic review of the literature. *Business and Economic Research*, 2 (1), 1-37.
33. Mondal, A. and Ghosh, S. (2012). Intellectual capital and financial performance of Indian banks. *Journal of Intellectual Capital*, 13 (4), 515-530.
34. Mumtaz, S. and Abbas, Q. (2014). An empirical investigation of intellectual capital affecting the performance: A case of private universities in Pakistan. *World Applied Sciences Journal*, 23 (7), 1460-1467.
35. Noordin, M. and Mohtar, S. (2013). An exploratory of the intangible assets: methods of measuring intellectual capital. *International Journal of Humanities, and Applied Sciences*, 2 (2), 36-40.
36. Nuryaman (2015). The influence of intellectual capital on the firm's value with the financial performance as intervening variable. *Procedia-Social and Behavioral Sciences*, 211, 292-298.
37. OECD (2008). Intellectual assets and value creation: Synthesis report, OECD, Paris.
38. Ogbo, A., Ezeobi, J. and Ituma, A. (2013). Impact of intellectual capital on organizational performance: Evidence from Nigeria Banking sector. *JORIND*, 11 (2), 249-254.
39. Ozkan, N., Cakan, S. and Kayacan, M. (2016). Intellectual capital and financial performance: A study



- of the Turkish banking sector. *Borsa Istanbul Review*, <http://dx.doi.org/10.1016/j.bir.2016.03.001>
40. Pett, T. and Wolf, J. (2007). SME performance: A case for internal consistency. *Journal of Small Business Strategy*, 18 (1), 1-16.
  41. Pucci, T., Simoni, C. and Zanni, L. (2015). Measuring the relationship between marketing assets, intellectual capital, and firm performance. *J. Manage. Gov.*, 19, 1-21.
  42. Saeed, R., Sami, A., Lodhi, R. and Iqbal, A. (2013). Intellectual capital and organizational performance: An empirical study in Telecom sector in Pakistan. *Middle-East Journal of Scientific Research*, 18 (4), 517-523.
  43. Seleim, A., Ashour, A, and Bontis, N. (2007). Human capital and organizational performance: A study of Egyptian Software companies. *Management Decision*, 45 (4), 789-801.
  44. Sharabati, A., Jawad, S. and Bontis, N. (2010). Intellectual capital and business performance in the pharmaceutical sector of Jordan. *Management Decision*, 48 (1), 105-131.
  45. Shiu, H. (2006). The application of the value added intellectual coefficient to measure corporate performance: evidence from technological firm. *International Journal of Management*, 23 (2), 356-65.
  46. Smriti, N. and Das, N. (2017). Impact of intellectual capital on business performance: Evidence from India pharmaceutical sector. *Polish Journal of Management Studies*, 15 (1), 232-243.
  47. Stewart, T. (1997). *Intellectual capital: The new wealth of organizations*. Doubleday New York, NY, U.S.A.
  48. Sumedrea, S. (2013). Intellectual capital and firm performance: A dynamic relationship in crisis time. *Procedia-Economic and Finance*, 6, 137-144.
  49. Taie, E. (2014). The effect of intellectual capital management on organizational competitive advantage in Egyptian hospitals. *International Journal of Business and Social Sciences*, 5 (2), 160-167.
  50. Wang, W. and Chang, C. (2005). Intellectual capital and performance in casual models: Evidence from the information technology industry in Taiwan. *Journal of Intellectual Capital*, 6 (2), 222-236.
  51. Wanjala, J. (2013). To assess the effect of intellectual capital on organizational performance in the manufacturing sector. *International Journal of Research in Commerce, IT & Management*, 3 (12), 113-118.
  52. Wu, M., Lee, Y. and Wang, G. (2012). To verify how intellectual capital affects organizational performance in listed Taiwan IC Design companies with considering the moderator of corporate governance. *The Journal of Global Business Management*, 8 (1), 20-32.
  53. Wu, X. and Sivalogathan, V. (2013). Innovation capability for better performance: Intellectual capital and organization performance of the Apparel industry in Sri Lanka. *Journal of Advanced Management Science*, 1 (3), 273-277.
  54. Yang, C. and Lin, C. (2009). Does intellectual capital mediate the relationship between HRM and organizational performance? Perspectives of a healthcare industry in Taiwan. *The International Journal of Human Resource management*, 20 (9), 1965-1984.
  55. Yidiz, S. and Karakas, A. (2012). Defining methods and criteria of measuring business performance: A comparative research between the literature in Turkey and foreign. *Procedia-Social and Behavioral Sciences*, 58, 1091-1102.
  56. Zéghal, D. and Maaloul, A. (2010). Analysing value added as an indicator of intellectual capital and its consequences on company performance. *Journal of Intellectual Capital*, 11 (1), 39-60.



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# Strategy Alignment in Service System: The Fit between the Strategies of Value Proposition and of the Service Supply Chain

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**Abstract-** The increase in competitiveness in the services sector means that organizations in this area are looking for a more efficient management. Thus, there is a lot of interest from managers and academics in understanding the effort that service organizations are making to align their strategies. The purpose of this paper is to reveal the alignment between the Value Proposition Model (corporate strategy) and the Supply Chain Strategy (functional strategy) in two services provided by a Brazilian Public Institution, using the Process-Chart Network Diagram (PCN Diagram). This study uses a qualitative and descriptive study, based on multiple incorporated cases studies. The results show that this alignment is a necessary condition for delivering the value proposition of the service. Moreover, it has been found that the PCN Diagram can be used as a tool to facilitate identification of this alignment.

**Keywords:** *strategy alignment, service supply chain strategy, value proposition, PCN diagram.*

**GJMBR-A Classification:** *JEL Code: M10*



*Strictly as per the compliance and regulations of:*



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Dr. Leila Scanfone<sup>α</sup> & Dr. Noel Torres Junior<sup>σ</sup>

**Abstract-** The increase in competitiveness in the services sector means that organizations in this area are looking for a more efficient management. Thus, there is a lot of interest from managers and academics in understanding the effort that service organizations are making to align their strategies. The purpose of this paper is to reveal the alignment between the Value Proposition Model (corporate strategy) and the Supply Chain Strategy (functional strategy) in two services provided by a Brazilian Public Institution, using the Process-Chart Network Diagram (PCN Diagram). This study uses a qualitative and descriptive study, based on multiple incorporated cases studies. The results show that this alignment is a necessary condition for delivering the value proposition of the service. Moreover, it has been found that the PCN Diagram can be used as a tool to facilitate identification of this alignment.

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## I. INTRODUCTION

The growth of the service sector in the global economy, observed in recent decades, has brought the need for a more efficient management of service organizations (Giannakis, 2011). Chopra & Meindl (2003) and Harland et al (1999) argue that supply chain strategy and corporate strategy must be aligned for a better performing of the organization. Therefore, the fit and agreement between the strategies of diverse hierarchical levels and functional areas has become one of the goals sought by current organizations.

This article uses the PCN Diagram to reveal the alignment between the Proposed Value Model in the Corporate Strategy and the Supply Chain Strategy of two services of the Military Police of Minas Gerais for the citizens.

Therefore, using a qualitative and descriptive study, based on multiple incorporated cases studies, this work seeks to answer the following question: What is the strategy of supply chain configuration adopted for the delivery of the value proposition offered by the service?

It is important to stress that the paper makes a greater elucidation of the various forms of delivering proposing value and strategies concerning setting supplies chain in services, highlighted in the management literature. Additionally, the study associates these two approaches using of the PCN Diagram.

This article begins by discussing the various ways of delivering proposing value to the customer. Subsequently, this text discusses the strategies of the Supply Chain for services and the parts that the PCN Diagram was composed. This paper shows then the methodological procedures used to achieve the objective of the present study. Finally, the search results are discussed and some limitations and suggestions for future research are offered.

## II. LITERATURE REVIEW

### a) Value Proposition Models

According to Christopher (2007, p. 12) "Of the many changes that have taken place in management thinking over the last 30 years or so perhaps the most significant has been the emphasis placed upon the search for strategies that will provide superior value in the eyes of the customer."

Complementing, Magretta (2012, p. 108) state that "the value proposition is the element of the strategy geared toward the outside of the Organization, and that means, to customers, to the demand side of the business."

Based on the value proposition, two models are presented and discussed: the creation of value and co-creation of value.

Co-creation is barely used in the context of public administration. However, public services are increasingly interactive and offering by inter-organizational collaboration. This reinforces the relevance and the potential of this approach to studies in this sector (Osborne et al, 2013; Osborne et al, 2016).

The model of Value Creation (Value Chain) Proposed by Porter in 1985, emphasizes that the value created is the result of activities carried out internally by the Organization and by the suppliers involved in the production chain. This model is based on the concept of value as "the amount that buyers are willing to pay for

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what the company provides to them" (Porter, 1998, p. 34).

In this classic model of value creation, the organization is seen as constituted by internal processes. This organization is part of a set of companies established in a linear configuration, with a unidirectional flow of products and that starts in the operations of the upstream suppliers and ends in the operations with the final customers.

The Model of Value Co-Creation (Value Constellation) The concept of value co-creation was developed through the contribution of several authors from various fields. Its main element is the reconfiguration of the relationship and the reconfiguration of the functions that exist among the actors that compose the "constellation" for service delivery (Normann & Ramírez, 1993).

The approach that subsidizes the perspective of co-creation of value is the Service-Dominant Logic (SDL) which argues that the organization solely is not able to create value. The organization can only offer a value proposition, which is accepted (or not) by the customer (Lusch et al, 2008).

Therefore, in this model, the customer is an active participant and the generation of value is the result of an experiment together (suppliers and customers), from an existing value proposition in a given context (Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004; Vargo et al, 2008).

From these considerations, Table 1 presents a summary of the main features of these two value proposition models.

Table 1: Summary of characteristics of value proposition models

Characteristics	Value Creation	Value Co-Creation
Customer Role	Passive (service receiver)	Active (information provider / value creator).
Customer participation in the service	None (service receiver)	participates in all stages of the process. Provides information.
Service production	Company-centric.	Customer-centric.
Communicative interaction	Informational. Nonexistent.	Dialogic. Discussion with customers.
Interaction with customers.	Nonexistent.	Regularly.
Transparency	Not transparent.	Transparent.
Knowledge	Not Shared.	Shared and applied.

Source: Prepared by the authors based on works of Ballantyne & Varey, (2006), Chathoth et al. (2013), Prahalad & Ramaswamy, 2004a, b).

Considering the information presented in Table 1, it can be inferred that these models are positioned between two extremes. In one side, the conception of value creation places the client as an exogenous variable of the process and presupposes the generation of value as a linear, sequential and unidirectional process. On another side, the conception of value creation as a process in which the customer is an active participant and the generation of value is the result of a conjoint experience (suppliers and customers).

b) Supply Chain Strategies

The operation of organizations under the logic of a supply chain is not new. However, a strategic perspective that considers this form of work is relatively recent. This point of view recognizes that it is a

coordinated and joint operation of organizations in the supply chain that provide superior results (Christopher, 2007).

It should be noted that the service delivery chains are critical mediators for the existing exchanges in the market. These networks are essential for delivering value to the customer. Moreover, these structures determine how end-users, intermediaries, and suppliers participate in the provision of services (Finne & Holmström, 2013).

Based on the above considerations, several classification schemes have been proposed in the literature to guide the choice of the supply chain strategy (Hilletoft, 2009). However, it is noted that an important part of studies on strategies in operations

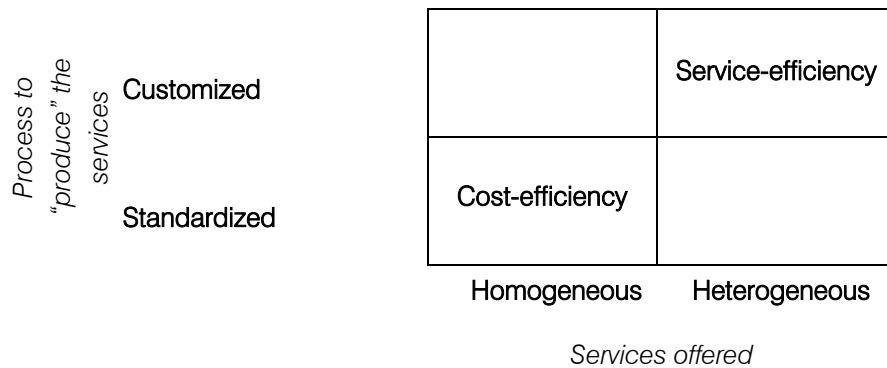
management and supply chain tries to understand the correspondence between the characteristics of the product and the supply chain processes (Morita et al, 2015). Besides, the existing approaches claim that there is no strategy that is suitable for any product. The choice of the appropriate strategy can significantly affect the competitiveness of the entire supply chain.

This paper follows the perspective proposed by Arlbjørn, Freytag and Hass who contextualize the various approaches to supply network strategies for the service sector.

The model proposed by Arlbjørn, Freytag, and Hass Arlbjørn et al (2011) based on the need to discuss the adequacy of lean thinking foundations to the context

of services created a model for choosing the strategy of the Service Delivery Supply Chain. This model includes two parameters: services offered and processes of "production" to deliver to "produce" the services.

The services offered can be homogeneous or heterogeneous. Homogeneous services provided similar products that are offered in the same way to many customers. Heterogeneous services offered products in a personalized way for the customer. As for the "production" processes necessary to deliver the service, they may be standardized or customized (Arlbjørn et al., 2011). These parameters can be combined in a matrix as shown in Figure 1.



Source: Arlbjørn et al. (2011, p. 283).

Fig. 1: Strategies for Service Delivery Supply Chain: Cost-efficiency vs service-efficiency service

Figure 1 above shows that in contexts where services are homogeneous and the processes for producing them are standardized, the appropriate strategy would be "Cost-Efficiency." On the other hand, when services are heterogeneous and require customized production processes, the most appropriate approach would be "Service-Efficiency" (Arlbjørn et al., 2011).

It is important to note that a two by two matrix does not cover all the complexity existing in the context of the service supply chain. However, this model provides a general classification for the different types of strategy of services supply chain (Arlbjørn et al., 2011).

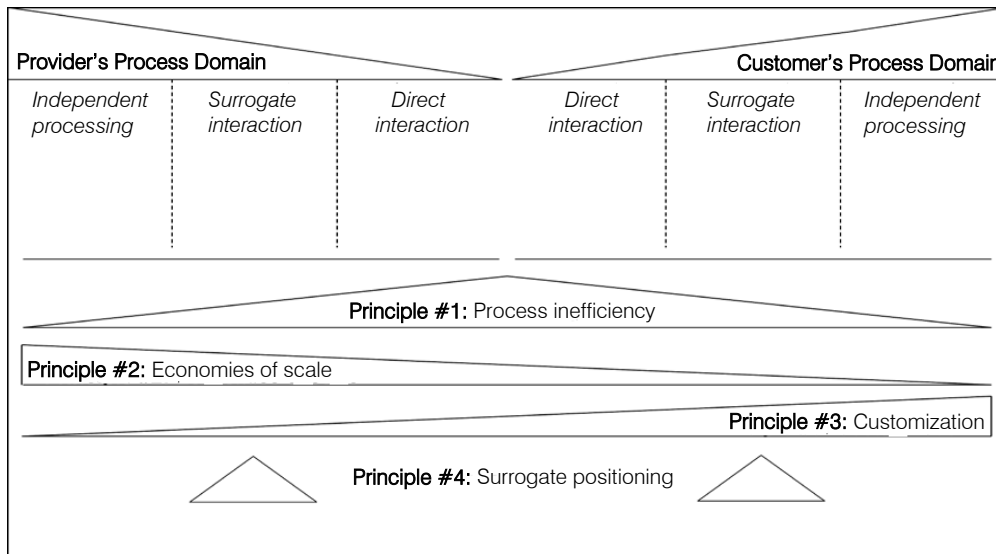
c) *Process-Chart-Network Diagram (PCN Diagram)*

The PCN Diagrams was built "on the strengths of other flowcharting techniques, while emphasizing the unique conditions and design opportunities for interactive service processes" (Sampson, 2014, p. 17).

According Sampson (2014, p. 19), this diagram provides the necessary "basis for analyzing service processes, networks, strategies, innovations, and other managerial issues" (Sampson, 2014, p. 19).

Figure 2 presents the main elements and principles involved in the elaboration of a PCN Diagram.





Source: Adapted from Sampson (2014).

Fig. 2: Elements that constitute the PCN Diagram

As shown in Figure 2, each entity involved in the process has an area containing a sequence of steps that is initiated, led, executed, or even controlled by this entity. This area is called the process domain (Sampson, 2012, 2014).

Each process domain has three regions. The region of direct interaction that encompasses steps that involve direct interaction between the people of the entities analyzed in the process. The surrogate region of the interaction encompasses the stages involving indirect interaction between entities. This interaction takes place through belongings, information or

technology from another entity of the process. In this region, there are no interactions between the people of the entities involved. The independent processing region comprises the steps that occur from resources that belong to and are controlled by an entity, without any interaction with other entities (Sampson, 2012, 2014; Sampson & Chase, 2010).

The positioning of the service process activities in these different regions of the PCN Diagram is based on four general principles. These principles can be seen in Table 2.

Table 2: Summary of the PCN Diagram principles

Principles	Enunciate
<b>Principle 1: Process Inefficiency</b>	Interactive processing are less efficient processes (from the service provider's perspective) than independent processing ones, with directly interactive processes being the least efficient.
<b>Principle 2: Economies of Scale</b>	The greater the number of activities in the region of independent processing in the process domain of the provider will allow more significant gains in scale and operational efficiency. Reducing customer participation reduces process variability.
<b>Principle 3: Customization</b>	Shifting the process steps towards the processing region independent of the customer domain favours the customization of the service.
<b>Principle 4: Surrogate Positioning</b>	There are other ways to achieve operational efficiency beyond reducing customer engagement in the service process. The option to position activities in indirect interaction regions provides improved customization (Principle 3) while minimizing costs (Principle 1) and therefore can be an opportunity to balance efficiency and effectiveness in services.

Source: Prepared by the authors based on the works of Sampson (2012, 2014) e Sampson & Chase (2010).

Sampson (2014) write that the optimal positioning of a process in the domain regions depends

on what the provider is trying to accomplish in a particular offer for a particular customer segment. This

positioning of the process is a strategic decision. This decision consists of defining the business of the organization regarding value proposition and competencies required for the provision of these services. When the process steps performed in the process region independent of the provider domain, the offer of value follows the value creation model. In this case, the provider offers the service as a "closed package" with a proposed value. In the region of direct interaction, the customer participates in the process supplying some input to the supplier, so there is some possibility that the offer of value follows the value co-creation model. When the provision of value occur in the process region independent of the client domain is performed by the co-creation model. In this situation, the client takes an active role in the process, realizing value for himself through unique experiences (Sampson, 2014).

### III. RESEARCH METHODS AND TECHNIQUES

Considering the purpose of this study, we chose a descriptive study with a qualitative approach. This was developed through a multiple incorporated cases studies (Salomon, 2001).

The qualitative approach was based on the case study research method. The knowledge generated from the case study is more concrete, more contextualized, and more oriented towards interpretation (Merriam, 1988). Yin (2005) argue that a case study can be either a single case (a unit of analysis) or multiple cases (several units of analysis) and holistic (a subunit analysis) or embedded (several analysis subunits). Thus, based on this classification, this study is characterized as multiple incorporated cases studies, since units of analysis and the entities that make up the network of these services as subunits of analysis were two services from the same company.

The choice of services to be studied was intentional. In this type of choice, if they contain the necessary characteristics to reach the proposed goal, services are selected, which according to Yin (2005) and Eisenhardt (1989) is recommended for this type of study.

Table 3 shows the process steps used to conduct the study.

Table 3: Process carried out in the study

Step	Activity
Getting Started	Definition of the research problem. Theoretical Review of the Problem.
Selecting cases	Definition of the population of interest (Services). Theoretical sampling (Services with different levels of customer participation).
Crafting Instruments and Protocols	Qualitative data. Multiple methods of data collection (interviews, field observation, and document examination).
Entering in the Field	Joint collection and analysis of data, including the taking of notes during the conduct of field research. Opportunistic and flexible data collection methods.
Analyzing Data	Intra-case analysis. Pattern search among cases, using divergent techniques.
Enfolding Literature	Comparison of the findings with the literature.
Reaching Closure	Theoretical saturation.

Source: Prepared by the authors based on the work of Eisenhardt (1989).

Four research protocols were used which were developed from the literature review. They sought to gather information about the client's participation in the

service process and other information necessary for the description of the services.

The purpose of each protocol can be seen in Table 4.

*Table 4:* Purpose of each research protocol

Document for data collection	Purpose
Description of services	To understand the way the service is delivered.
Research protocol for service provider	To understand how the service is offered, which entities are involved in the process, and how the customer participates in the service process.
Research protocol for the civil and military employees involved in the execution of the service	To understand how the service process is executed by each one involved in the service offer and how the customer participates in the service process.
Research protocol for the interviewees of the local entity required in performing the service	To understand how customer participation is perceived by the representative of the local authority and to identify the role and level of assistance in the performance of the service.

*Source: Prepared by the authors.*

The interviews took place in two periods. The first period occurred between February and June 2015, in which 15 interviews were conducted. Five people from each service studied were surveyed. Each interview lasted on average one hour. The general rule used to end the interview was to stop when no new information emerged. According to Eisenhardt (1989), this indicates the saturation point of the data. In all cases, the interviews involved people with different functions within the service and coming from different hierarchical levels. Depending on the availability of participants, interviews were conducted by phone or a person-to-person. Also, the general managers of the companies were given the right to review the transcripts to assure anonymity to the level they desired.

The second period of interviews took place between November 2015 and March 2016. It involved a second interview with the military responsible for the services and with employees of a local entity assisted by the Police. In this interview the case studies were presented, doubts were answered, and some additional information was requested. Each interview lasted on average of two hours.

Following Eisenhardt (1989) directions, the interview scripts contained unstructured questions and structured questions. Finally, the research used documentary analysis and direct observation. The documents consulted were the operational manuals and the institutional presentations of the Police. Also, after each interview, the participant was requested to provide documents that reinforced the points discussed during the interview. The additional documentation collected at this stage of the research consisted of material for disseminating the services, community primer books

with safety instructions and application forms for the service offered by the Police.

Field observations occurred during the months of April and May of 2015. During this period, the researchers followed the performance of the services analyzed in the study. Besides, in March 2016 a meeting between a local unit and representatives of the Police was observed. These observations helped to understand how each entity participates in the process. These observations also contributed to verify the reliability of the information collected from interviews and documentation. Multiple sources of data utilized in the research made possible to perform data triangulation (Yin, 2005).

The triangulation of data made it possible to verify the internal validity of the data through confrontations between them. Flick (2009) and Yin (2005) asserts that this procedure as fundamental for the validation of the research.

As suggested by Eisenhardt (1989) and Miles and Huberman (1994), data analysis occurred concurrently with its collection. This process consisted of two steps. In the first stage, we sought to identify the value-added strategy adopted by the service. Therefore, it was verified how the process of value provision was realized in each service, considering the characteristics pointed out in the literature. In the second stage, the strategy of the supply chain adopted in each service was identified. For this, the features of the activities performed throughout the service process were observed. In both steps, the PCN Diagram helped to determine the necessary data. In this sense, the study was inductive in looking for evidence that showed how the characteristics pointed out in the literature on the

models of value provision were presented in each service.

The internal analysis of each case considered the data collected through interviews, documents, and observations. As a result, individual detailed cases were elaborated. Subsequently, these cases were presented to the key person responsible for the service for verification, clarification, and modification if necessary.

After the analysis of each case, the inter-case studies were performed. The objective of the inter-case analysis was to identify similarities and differences in the cases.

The final product of the analysis process, as recommended by Eisenhardt (1989), was the elaboration of a theoretical descriptive / explanatory framework of the phenomenon studied.

#### IV. ANALYSIS AND DISCUSSION OF RESULTS

##### a) *Intra-Case Analysis and Discussion of Results*

The services analyzed reflect the evolution of the Police's performance in meeting the demands and social transformations that exist in society. Given this, before discussing each service, it is necessary to make clear this evolution.

The Military Police of Minas Gerais is a Brazilian public institution with more than 200 years of existence. During its history and in the face of pressure exerted by society from different and growing demands for public security, it has modified its mission and its way of acting. The Military Police of Minas Gerais attempted to adapt its policing form by offering new services that would enable it to meet the needs of each period.

The changes that occurred in the Brazilian political and social scene during the 1980s and 1990s brought the need to redefine the institution's mission. Therefore, there was a transition from the role of the "police control" institution to the "citizen police" (Minas Gerais, 2010). That is, the traditional policing model has been replaced by community policing.

Traditional policing has the following characteristics: vertical hierarchical structure, a high degree of division of labor, a high level of centralization of power and authority, a high degree of standardization of activities and a great number of rules of conduct (Cruz, 2005; Marinho, 2002). All these characteristics corroborate to the control, coordination, and predictability in the accomplishment of its activities (Marinho, 2002).

In contrast, community policing depends on a decentralized organizational structure, since police activities are less predictable, demanding more discretion (Freitas, 2003; Marinho, 2002). Therefore, lower standardization and greater decision-making power are required and the norms serve as a reference for action and not as a rule of conduct to be followed (Marinho, 2002). Also, there is some demand for greater

autonomy of the police units and the need for decentralization of policing activities (Freitas, 2003).

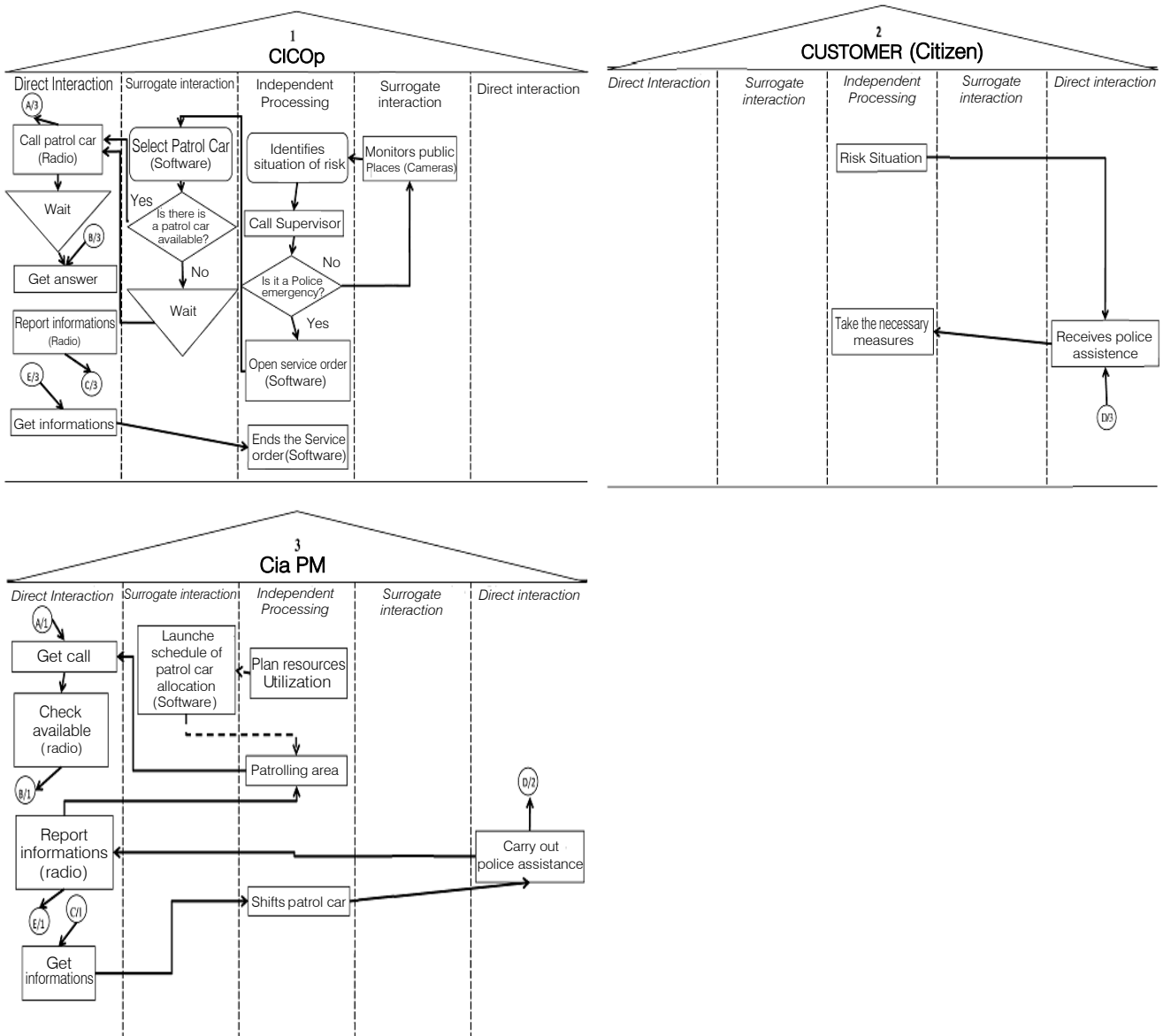
Considering what has been presented, it can be concluded that the quest for efficiency and effectiveness becomes fundamental for the Military Police of Minas Gerais. This search encourages the exploration of new ways of creating value and providing its services. According to Minas Gerais (2010), new services development is achieved through the aggregation of new values and concepts that meet local needs in a "customized" way (Minas Gerais, 2010, p. 75).

In summary, it has been observed that several actions have been carried out by the Military Police of Minas Gerais to adapt its way of acting to become more effective. These movements involve the redefinition of the function of the Military Police of Minas Gerais in the fight against crime and consequent adequacy of its policing strategy. These actions culminated in the offer of new services that meet the new social demands involving the community itself in its implementation. Currently, public security is one of the services most demanded by Brazilian society (Confederação Nacional da Indústria, 2015).

Therefore, the services that were the object of research of this work were: The surveillance camera - "Eye Alive BH" and the Neighbourhood Watch - "Protected Neighbourhood Network". The surveillance camera service - "Eye Alive BH". The surveillance camera service known as "Eye Alive BH" was regulated by State Law 15,435 of January 12, 2005. It aims to promote support for the actions and operations of the Military Police of Minas Gerais, as well as other organizations of the Defence System Civil, in the prevention and combat of crime in the hyper centre of the city of Belo Horizonte (Carvalho, 2008; Milani & Jesus, 2012). It consists of continual monitoring through cameras of public places previously chosen due to the intensity of crime.

The unit responsible for coordinating and monitoring the service is the 1st Unit of the Military Police which is part of the Integrated Centre for Operational Communications (CICOp).

The following PCN Diagram of the "Eye Alive BH" service was elaborated using the collected data (Figure 3).



Source: Developed by the authors based on study data.

Fig. 3: PCN diagram of the service "Eye Alive BH"

According to Figure 3, the process steps are performed mainly in the provider process domain regions. In this process, the operator monitors in real time dozens of people. When he perceives a situation of risk, he calls the supervisor and the supervisor alerts the police patrol in the region to this fact. The employee is qualified to identify which details and attitudes are to be observed. This process utilizes productive resources that replace direct customer interaction. In this way, the whole process is conducted by specialized employees who control the current inputs. This process works on Principle 2 of the PCN Diagram - Economies of scale.

The service is also more efficient because there is greater control over the information that starts the process. Information is provided by trained employees without the need for customer interaction. Therefore the

process steps are positioned in the process domain regions of the provider. In this region, the provider has greater control over the process due to the reduction in the variability resulting from the decrease of the customer interference in the process. That is consistent with Principle 1 of the PCN Diagram discussed by Sampson (2014) and Sampson e Chase (2010).

As suggested by Sampson (2014), the option of positioning steps in the surrogate region of interaction provides the balance between efficiency and effectiveness. In this case, the greater efficiency is obtained due to the increased use of available resources (e.g., the operator does not need the client's request to perform the monitoring, and the execution of the service does not depend on information sent by the customer). Effectiveness is achieved through increased



service agility since the service is monitored in real time. It should also be considered the preventive aspect of the service since actions that depart from suspicious behaviour avoid the occurrence of the crime before the occurrence of the act itself.

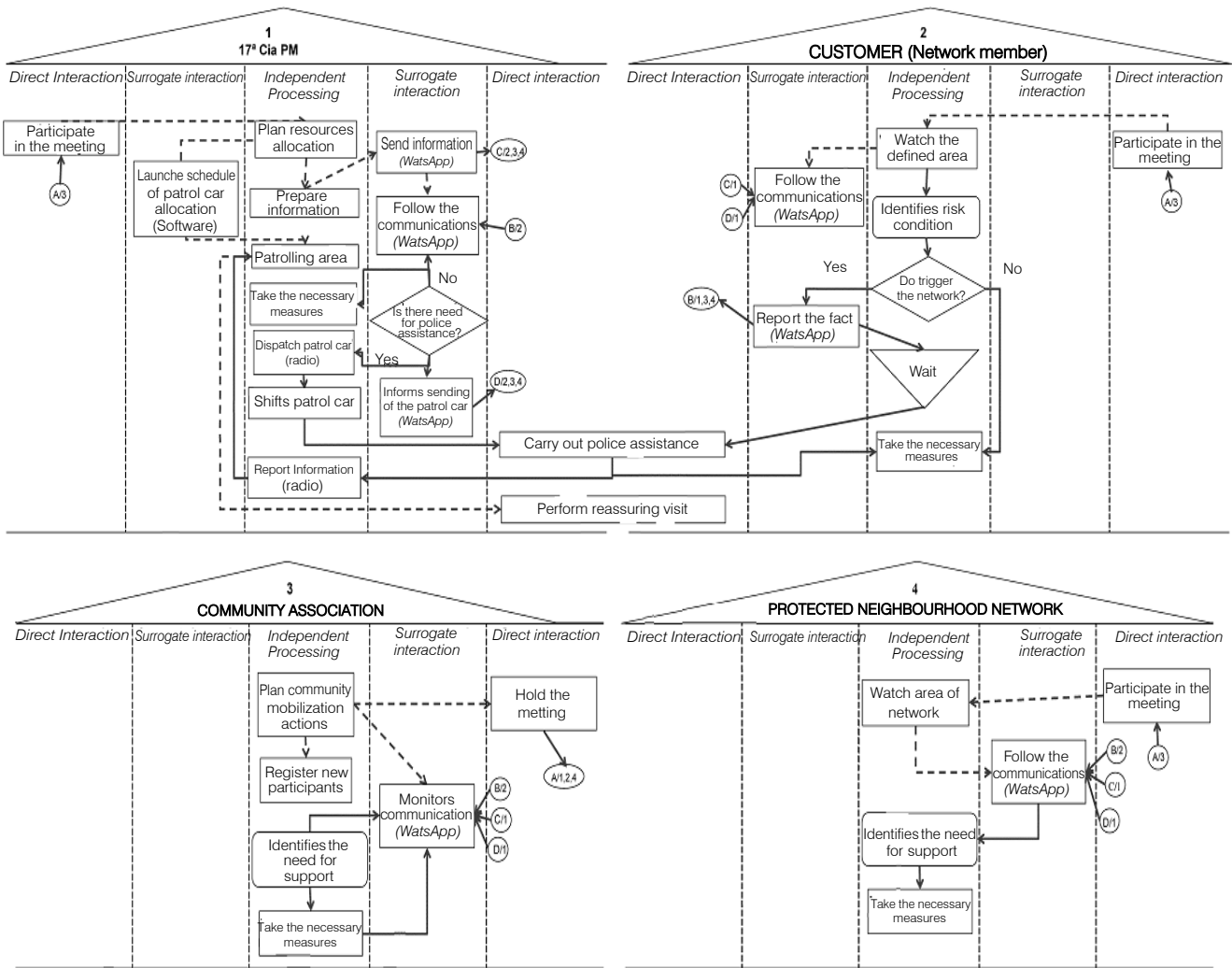
It can be stated that considering the service value proposition the provider seeks to deliver a final service package to the customer with a defined value proposal since a substantial part of the activities take place in the independent processing and surrogate interaction regions. Moreover, the client has a passive role. He acts as a single receiver of the service. The service takes place centrally and without customer interaction. These characteristics reinforce the perception about the way value is created in this service.

The Neighbourhood Watch service - "Protected Neighbourhood Network" The Neighbourhood Watch service known as "Protected Neighbourhood Network"

was formed in 2004, but it was regulated in 2011. It is a type of community policing practice. It has the proposal to strengthen the community that is going to act in a stricter and organized way. It consists in the formation of networks of neighbours bound in a territorial base that implements practices for self-protection. These networks holds periodic meetings with the objective of deepening the knowledge about the actions implemented (Minas Gerais, 2011).

The research was carried out in one of the first network of neighbours installed in Belo Horizonte. According to the military interviewed, it is considered one of the largest and most successful network of this type in Minas Gerais.

The following PCN Diagram of the Protected Neighbourhood Network service was elaborated using the collected data (Figure 4).



Source: Developed by the authors based on study data.

Fig. 4: PCN diagram of the Protected Neighbourhood Network service

Figure 4 above shows that the steps of the process are performed in the independent processing and the surrogate region of interaction. According to Principle 1 of the PCN Diagram, this positioning provides greater efficiency, since the company can limit and control the inputs provided by the customer. Customers perform a large part of the actions related to this service, thus reducing the processing load on the company (Sampson, 2014; Sampson & Chase, 2010). The steps positioned in the independent processing region occur through the use of the clients (network members) as observers of people passing through the area. These observers monitored the region by identifying the occurrence of risk conditions and became multipliers of safety information for the site.

Members of the network need to be adequately prepared to perform these functions. Network participants receive information about security procedures through periodic meetings, brochures, messages via WhatsApp, patrol rounds, among other actions. This corroborates with the considerations proposed by the authors Sampson (2014) and Torres Junior & Miyake (2011) who report the importance of preparing the client for their effective participation in the service process.

As a result of the stages being allocated in the provider's domain regions, the service can make better use of available resources. For example, the police patrol car can park in areas with the highest number of incidents reported by network members.

Effectiveness is achieved by increasing the opportunity to customize the service (Principle 3) is due to the greater involvement of the customers (citizens of the neighbourhood) in the processes of the service. They provide information and also participate in planning the actions to be implemented by the provider. Accordingly, resource allocations and projects are defined based on the discussions of the network members established in the periodic meetings.

Considering value proposition, the model offered by the Protected Neighbourhood Network service represents a value co-creation. The customer assumes an active role throughout the service process. Also, the service favours greater interaction between the Police and the citizens and between the citizens themselves. That enables better sharing of information among all its members. As a result, there is value creation involving all service participants.

*b) Inter-Case Analysis and Discussion of Results*

The use of the PCN Diagram revealed that the services have different characteristics regarding the positioning of the process steps in the different interaction regions. Each service configuration in the PCN Diagram enabled the identification of the strategy related to the configuration of the supply chain and the model of value creation. Table 5 presents a comparative summary of the services concerning these aspects.

*Table 5: Comparative summary of the services*

	Eye Alive BH	Protected Neighbourhood Network
<b>Level of customer participation</b>	Low <ul style="list-style-type: none"> <li>Passive role - receiver of the service.</li> </ul>	High <ul style="list-style-type: none"> <li>Active role - provides information and service.</li> <li>Provides information before, during and after the service is performed. Participates in the planning and execution of the service.</li> </ul>
<b>The Principles of the PCN Diagram as drivers of the service design</b>	Principle 2 - Economics of Scale and Principle 4 - Surrogate Positioning <ul style="list-style-type: none"> <li>Process steps positioned in the independent processing regions and placed in the surrogate region of interaction.</li> </ul>	Principle 3 – Customization and Principle 4 Surrogate Positioning <ul style="list-style-type: none"> <li>Process steps positioned in the independent processing and surrogate region.</li> </ul>
<b>Models of value proposition</b>	Value creation <ul style="list-style-type: none"> <li>Activities are positioned in the regions of the provider process domain.</li> <li>Passive role of the customer as the receiver of the service.</li> <li>Interaction and communication only at the end of the process.</li> <li>Information and knowledge are not shared.</li> </ul>	Value Co-Creation <ul style="list-style-type: none"> <li>Activities positioned in the client process domain regions.</li> <li>The active role of the customer during the service.</li> <li>Frequent interactions and communication.</li> <li>Information is shared.</li> </ul>

*Source: Developed by the authors based on study data.*

Considering the principles of the PCN diagram and the ideas proposed by the authors Arlbjørn et al (2011) regarding the strategies for the service supply chain, it was verified that the "Eye Alive BH" service adopts the strategy called Cost-efficiency. This service mainly seeks economies of scale (Principle 2 of the PCN Diagram). It uses standardized processes and offers the service in a alike way. On the other hand, the Protected Neighbourhood Network adopts the strategy called Service-efficiency. It uses customized service processes and offers the service in a various way (Principle 3 of the PCN diagram - customization).

Finally, it should be noted that the "Eye Alive BH" service reflects the police's performance in the traditional model of policing. A service based on control, coordination, and predictability in the accomplishment of activities. That reinforces the homogeneity of the service provided and the standardization of activities. However, the Protected Neighbourhood Network service reflects the community policing model. Service with less predictable activities and working with a greater autonomy of the police units. Therefore, the services are more heterogeneous and carried out by the client's needs. All considerations are consistent with the principles set out in the PCN diagram and the strategy of the service supply chain highlighted for each case.

## V. CONCLUSION

This study aimed to reveal the alignment between the Value Proposition Model (Corporate Strategy) and the Supply Chain Strategy (functional strategy) adopted by the services analyzed with the aid of the PCN Diagram.

The results showed that each service has adopted a different value proposition strategy and that each value supply model demands a specific strategy for the supply chain. Therefore, the study confirms the need for alignment between the strategy of the value proposition and the strategy for the supply chain in the cases analyzed.

The "Eye Alive BH" service adopted the value creation model and presented the cost-efficiency supply chain strategy. This service does not depend on customer participation and aims to deliver a "closed package" of services to all customers (uniform services). Besides, the current activities are positioned in the provider's process domain area and the independent processing region. This positioning of the activities favours the achievement of a greater predictability in the execution of the tasks. Thus, The process is characterized by the renowned standardization of services and the control of activities by the provider.

The Protected Neighbourhood Network adopted the value co-creation model and the service-efficiency supply chain strategy. This service depends on the participation of the customer and seeks to deliver

a customized service (different services). Its activities focused on the area of the process of the customer's domain and the independent processing region. This positioning of the activities reinforces the low predictability in the execution of the tasks and the little control of the provider on the accomplishment of the service.

Concluding, this study indicates that the Military Police of Minas Gerais adopts different strategies in its service supply chain to support the diversification of its strategies of the value proposition to its customers (citizens). Moreover, the PCN Diagram showed to be a tool with a large potential for the explanation of this alignment.

Due to the number of cases studied and the fact that the services were chosen deliberately, the study does not allow the generalization of the results found.

Although the focus of the work is in the alignment of the strategies of value propositions with the strategy of the service supply chain, it is recognized that there are several challenges to be overcome in the use of these approaches in the context of Public Administration that were not addressed in this text.

Finally, aiming at the continuity of the discussion and considering the relevance of this topic to the service and operations marketing area, it is suggested that future research seeks to approach other value propositions models to understand the functional strategy adopted by the supply chain for these services.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Arlbjørn, J. S., Freytag, P. V., & Haas, H. de. (2011). Service supply chain management. *International Journal of Physical Distribution & Logistics Management*, 41(3), 277–295. <https://doi.org/10.1108/09600031111123796>.
2. Ballantyne, D., & Varey, R. J. (2006). Creating value-in-use through marketing interaction: the exchange logic of relating, communicating and knowing. *Marketing Theory*, 6(3), 335–348. <https://doi.org/10.1177/1470593106066795>.
3. Carvalho, E. de A. (2008). Projeto Olho Vivo: "A Iris dos Olhos da Segurança Pública" Uma análise Geográfica. *Caderno De Geografia*, 19(31), 28-43.
4. Chathoth, P., Altinay, L., Harrington, R. J., Okumus, F., & Chan, E. S. W. (2013). Co-production versus co-creation: a process based continuum in the hotel service context. *International Journal of Hospitality Management*, 32(1), 11–20. <https://doi.org/10.1016/j.ijhm.2012.03.009>.
5. Chopra, S., & Meindl, P. (2003). *Gerenciamento da cadeia de suprimentos: estratégia, gerenciamento e operação*. São Paulo: Prentice Hall.
6. Christopher, M. (2007). *Logística e gerenciamento da cadeia de suprimentos – criando redes que agregam valor*. (2nd ed.). São Paulo: Thomson Learning.

7. Confederação Nacional da Indústria. (2015). Retratos da Sociedade Brasileira: problemas e prioridades. Indicadores CNI, 22(5).
8. Cruz, M. V. G. da. (2005). Para administrar a ordem pública e a aplicação da lei: formas de policiamento em uma perspectiva comparada Brasil – Estados Unidos – uma análise das experiências de Belo Horizonte, MG e Washington, D.C. Tese [Doutorado em Administração]. Universidade Federal de Minas Gerais / Faculdade de Ciência Econômicas, Belo Horizonte.
9. Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/AMR.1989.4308385>.
10. Finne, M., & Holmström, J. (2013). A manufacturer moving upstream: triadic collaboration for service delivery. *Supply Chain Management: An International Journal*, 18(1), 21–33. <https://doi.org/10.1108/13598541311293159>.
11. Flick, U. (2009). *Introdução à pesquisa qualitativa* (3rd ed.). Porto Alegre: Artmed.
12. Freitas, L. S. de. (2003). Um estudo do planejamento de novos serviços preventivos de segurança pública na Polícia Militar de Minas Gerais. Dissertação [Mestrado em Engenharia de Produção]. Universidade Federal de Minas Gerais / Departamento de Engenharia de Produção, Belo Horizonte.
13. Giannakis, M. (2011). Conceptualizing and managing service supply chains. *The Service Industries Journal*, 31(11), 1809–1823. <https://doi.org/10.1080/02642069.2010.503879>.
14. Harland, C. M., Lamming, R. C., & Cousins, P. D. (1999). Developing the concept of supply strategy. *International Journal of Operations & Production Management*, 19(7), 650–674. <https://doi.org/10.1108/01443579910278910>.
15. Hilletoft, P. (2009). How to develop a differentiated supply chain strategy. *Industrial Management & Data Systems*, 109(1), 16–33. <https://doi.org/10.1108/02635570910926573>.
16. Lusch, R. F., Vargo, S. L., & Wessels, G. (2008). Toward a conceptual foundation for service science: contributions from service-dominant logic. *IBM Systems Journal*, 47(1), 5–14. <https://doi.org/10.1147/sj.471.0005>.
17. Magretta, J. (2012). Entendendo Michael Porter: o guia essencial da competição estratégica. São Paulo: HSM Editora.
18. Marinho, K. R. L. (2002). Mudanças organizacionais na implementação do policiamento comunitário. Dissertação [Mestrado em sociologia]. Universidade Federal de Minas Gerais / Faculdade de Filosofia e Ciências Humanas, Belo Horizonte.
19. Merriam, S. B. (1988). Case study research in education: a qualitative approach. San Francisco: Jossey-Bass.
20. Milani, W., & Jesus, E. de. (2012). Projeto “Olho Vivo”: dispositivo de vigilância no espaço urbano de Belo Horizonte. *Iniciacom*, 4(1).
21. Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: an expanded sourcebook* (2nd ed.). Thousand Oaks: Sage.
22. Minas Gerais. Polícia Militar. Comando Geral (2010). Diretriz para produção de serviços de segurança pública no 3.01.01/2010 - regula o emprego operacional da Polícia Militar de Minas Gerais. Belo Horizonte: Comando-Geral, 3a Seção do Estado Maior da PMMG.
23. Minas Gerais. Polícia Militar. Comando Geral (2011). Instrução no 3.03.11/201 - organiza e disciplina a implantação das redes de vizinhos protegidos no Estado de Minas Gerais pela PMMG. Belo Horizonte: PMMG - Comando-Geral.
24. Morita, M., Machuca, J. A. D., Flynn, E. J., & Pérez de los Ríos, J. L. (2015). Aligning product characteristics and the supply chain process – a normative perspective. *International Journal of Production Economics*, 161, 228–241. <https://doi.org/10.1016/j.ijpe.2014.09.024>.
25. Norman, R., & Ramírez, R. (1993). From value chain to value constellation: designing interactive strategy. *Harvard Business Review*, 71(4), 65–77.
26. Osborne, S. P., Radnor, Z., & Nasi, G. (2013). A New Theory for Public Service Management? Toward a (Public) Service-Dominant Approach. *The American Review of Public Administration*, 43(2), 135–158. <https://doi.org/10.1177/0275074012466935>.
27. Osborne, S. P., Radnor, Z., & Strokosch, K. (2016). Co-production and the co-creation of value in public services: a suitable case for treatment? *Public Management Review*, 18(5), 639–653. <https://doi.org/http://dx.doi.org/10.1080/14719037.2015.1111927>.
28. Porter, M. E. (1998). Como as forças competitivas moldam a estratégia. In M. MONTEGOMERY, C. A., PORTER (Ed.), *Estratégia: a busca da vantagem competitiva*. (pp. 11–27). Rio de Janeiro: Campus.
29. Prahalad, C. K., & Ramaswamy, V. (2004a). Co-creation experiences: the next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14. <https://doi.org/10.1002/dir.20015>.
30. Prahalad, C. K., & Ramaswamy, V. (2004b). *The future of competition: co-creating unique value with customers*. Boston: Harvard Business School Press.
31. Salomon, D. V. (2001). *Como fazer uma monografia* (10th ed.). São Paulo: Martins Fontes.

32. Sampson, S. E. (2012). Visualizing service operations. *Journal of Service Research*, 15(2), 182–198. <https://doi.org/10.1177/1094670511435541>.
33. Sampson, S. E. (2014). *Essentials of service design* (3rd ed.). Utah: Brigham Young University.
34. Sampson, S. E., & Chase, R. B. (2010). *The service innovation toolkit*. unpublished. Brigham Young University, US.
35. Torres Junior, N., & Miiake, D. I. (2011). Melhoria de desempenho em serviços: alternativas para lidar com o trade-off entre eficiência e eficácia. *Produção Online*, 11(1), 162–193.
36. Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1–17. <https://doi.org/10.1509/jmkg.68.1.1.24036>.
37. Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145–152. <https://doi.org/10.1016/j.emj.2008.04.003>
38. Yin, R. K. (2005). *Estudo de Caso: planejamento e métodos* (3rd ed.). Porto Alegre: Bookman.





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## Administration Reading and Draw Conclusions for Listed Investment Funds in Amman Stock Exchange

By Dr. Mohammad Abdumajeed Saho

*Abstract-* The profitability is the basic objective of all the institutions, and it is necessary for its survival, continuity which achieved this goal through two important decisions: the investment decision, and the decision of funding, therefore it is expected that moving the facility characterized by high profitability rate, the opportunity to capture profits rely on a lesser extent on borrowed money, but a greater degree of ownership and retained earnings.

*Keywords:* profitability, investment funds, stock exchange.

*GJMBR-A Classification:* JEL Code: M20



*Strictly as per the compliance and regulations of:*



# Administration Reading and Draw Conclusions for Listed Investment Funds in Amman Stock Exchange

Dr. Mohammad Abdumajeed Saho

**Abstract-** The profitability is the basic objective of all the institutions, and it is necessary for its survival, continuity which achieved this goal through two important decisions: the investment decision, and the decision of funding, therefore it is expected that moving the facility characterized by high profitability rate, the opportunity to capture profits rely on a lesser extent on borrowed money, but a greater degree of ownership and retained earnings.

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## I. INTRODUCTION

The financial sector has met during the past two decades rapid developments on the structures level, legislation, technology, financial services, creating more vibrant and connected global financial environment, but they are more volatile and turbulent. In the context of these changes the financial markets linked to each other, also to emancipation of capital. Thus it emerged the utmost importance for the development of this sector, strategic professionally, administratively and financially, even keep pace with the aspirations of the times, that will be able the provision of financial services, according to the latest technical means of sophisticated mechanism, also will be able locally, regional and global competition on the other. The profitability is the basic objective of all the institutions, and it is necessary for its survival, continuity which achieved this goal through two important decisions: the investment decision, and the decision of funding, therefore it is expected that moving the facility characterized by high profitability rate, the opportunity to capture profits rely on a lesser extent on borrowed money, but a greater degree of ownership and retained earnings.

*The problem of the study and questions:* It has been relying on the problem of the study of the status quo, which is witnessing the financial sector in general and the Amman Financial Market, in particular in the measurement of parameters which affected the profitability of listed securities investment funds in the Amman Stock Exchange. The study determined the problem in answering the following questions:

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1. Is there an impact on the size of the capital on the profitability of listed investment funds in Amman financial market?
2. Is there an impact on the size of the investment on the profitability of listed investment funds in Amman financial market?
3. Is there a trace of the trading volume on the profitability of listed investment funds in Amman financial market?

*The importance of studying:* This study is an extension of the range of previous studies regarding the determinants of profitability of this study and the advantage of being focused on the size of the capital, the size of investment, trading volume. The importance of this study, it highlights the importance of the role of capital adequacy in the stability of the banking sector and what is the impact on investment funds, which in turn is reflected on the profitability of the sector which is one of the most important indicators of success, it is important to increase the confidence of many investors, customers and shareholders, which is reflected factors positively on the national economy as a whole.

## II. OBJECTIVES OF THE STUDY

The primary objective of the study is to identify the determinants of profitability in listed investment funds in Amman financial market during the period 2000- 2013, through

1. Knowledge of the impact of the amount of capital on the profitability of listed investment funds in Amman financial market.
2. Is there an impact on the size of the investment on the profitability of listed investment funds in Amman financial market.
3. Is there a trace of the trading volume on the profitability of listed investment funds in Amman financial market.

*The study variables*

*Independent variable*

- The amount of capital.
- The volume of investment.
- Volume.

*The dependent variable-* The profitability of listed investment funds in Amman financial market.

*Objective limits:* will be to clarify the determinants of profitability in listed investment funds in Amman financial market.

*Temporal limits:* relating to the period between the years 2000-2013.

*Previous studies:* Study (Bataineh 0.2012) entitled "Determinants of profitability in the industrial and service companies listed on the Amman Stock Exchange for the period 2000-2010." This study aimed to investigate the main determinants of the profitability of industrial and service companies listed on the Amman Stock Exchange for the period from 2000 to 2009, the study sample consisted of 92 Industrial companies accounted for 57 of them company where service companies amounted to 35 companies. To achieve the objectives of the study and then use many methods such as time series CT data analysis method (Panel Data) to estimate the regression equation using a fixed effect method (Fixed Effect Model) and the effect of random (Random Effect Model), where the results indicated the presence of a statistically significant positive relationship between Size tangible and productive assets on the one hand and profitability on the other hand, the results indicated also that the business risk, the proportion of debt and age negatively affect the profitability relationship statistically significant, and dividing the study sample to industrial companies and service to investigate the impact of the factors that affect the profitability, the study found that the profitability of industrial companies affected by the same variables that affected the sectors together, while the study found that business risk and debt ratio affect significantly and negatively on the profitability of service companies are also affected profitability in a positive and statistically significant productivity while not affecting intangible assets, age and size. Study (Amahgan 0.2012), entitled "The relationship between the privacy of liquidity, profitability and previous debt and the funding mix in industrial companies listed on the Kuwait Stock Exchange analysis".

This study aimed at the relationship between the privacy of liquidity, profitability and previous debt and the funding mix in industrial companies listed on the Kuwait Stock Exchange analysis. To achieve the objectives of the study were the financial statements of the companies under study and for the years 2009-2010 analysis, 2011. In light of this was the data collection, analysis and test hypotheses using the Statistical Package for Social Sciences, SPSS was used several statistical methods to achieve the objectives of the study, which averages and deviations and t-test for two samples and regression analysis multiple. The study found that there is an inverse relationship between the funding mix components and the proportion of debt in industrial companies listed on the Kuwait Stock Exchange, and there is a positive relationship between

the funding mix and the degree of industrial components liquidity and listed on the Kuwait Stock Exchange. The study recommended that the companies under study, not to change its behavior Lease financing property-sufficiency, but also to rely on borrowed funds to take advantage of the tax savings offered by this type of financing. And encouraging industrial companies under study in the use of retained earnings whenever it became possible and as stipulated in the sequence theory in the use of funding sources, and reduces reliance on borrowing.

Study (Tayeb, and Shahatit, 2011) entitled "Standard analysis of the application of capital adequacy on the profitability of commercial banks: the case of Jordan."

This study aimed to measure the effects of the application of the commercial banks in Jordan to standard capital adequacy (capital adequacy) on profitability. As the commercial banks operating in Jordan in the perilous environment, it may be necessary that these banks strengthen their financial position through the application of financial and banking safety standards, and is the capital adequacy standard global standard represents minimum safety and financial security requirements. The study attempts to answer the following question: Is it to raise the head of the commercial banks in Jordan's capital impact on profitability? The researchers used time-series CT analysis of panel data for the twelve indicator of profitability, and to all commercial banks and the number 15, for the period 2000-2007, the study found that the application of capital adequacy standard had no impact statistically significant, the profitability of commercial banks in Jordan or was a negative impact, and there was a positive impact to raise capital only on three ratios of profitability. Study (Rashdan, 2009) entitled "Factors affecting the profitability of the Jordanian Islamic banks: the case of the Islamic Bank".

This study aimed to identify the factors affecting the Jordan Islamic Bank for Finance and Investment performance as measured by the rate of profitability during the period (1980- 2008), the study of the nature of the relationship between these factors and the profitability of the bank, also aimed at reaching models factors show with the greatest profitability IDB impact Jordan, in order to achieve the objectives of the study and testing of hypotheses, the use of statistical methods depending on the multiple linear regression analysis and analysis of variance unidirectional, data were collected from the reality of the annual financial reports issued by the Bank under study, and have been relying on companies issued by the Amman Stock Exchange guide , the study has been reached on the existence of a significant positive relationship between bank size as measured by total assets and profitability of the bank, and that all of the proportion of total deposits to total assets, the ratio of total expenses to total assets have a

negative effect on the profitability of the bank, while the findings to the lack of relevant statistically significant differences between the percentage of total loans Allarboah to total assets and the bank's profitability, measured different standards. In light of the previous findings, the study concluded that many of the recommendations including the need for the continuation of Jordan Islamic Bank in the investment of its deposits with the biggest economic feasibility of projects.

Study (Judges, 2008) entitled "The impact of capital structure on the profitability of the Jordanian Public Shareholding industrial companies."

This study aimed to identify the extent of the relationship between the performance of the Jordanian Public Shareholding industrial companies measured by the number of profitability ratios and some of the structural indicators for the capital of the company such as company size and ownership structure and the rate of indebtedness and liquidity ratio and the degree of maturity. Society has included the study of all listed on the Amman Stock Exchange companies for the period (2000- 2006) has reached the number of (72), were excluded (5) companies, including being suspended from trading, becoming a sample of the study (67) company, including 40 companies listed on the first market and 27 companies listed in the second market.

The study results indicated that the company's profitability depends on the rate of its capital structure. And that there is a statistically significant positive relationship between the rate of profitability and size of the company, and that there is a statistically significant positive relationship between the rate of profitability and size of the company, and that there is a statistically significant positive relationship between the rate of the profitability and the degree of maturity of the company, and that the company's profitability rate in the current year depends on the rate profitability for the previous year, which may reflect a relatively stable profitability in the public shareholding Jordanian industrial companies in general, the study Jordanian public Shareholding industrial companies and recommended disclosure of financial and accounting information is accurate, and that it comply investment in key targets licensed for.

*Foreign Studies:* Study (Bejaoui, 2014 & Bouzgarrou) entitled "Determinants of Tunisian Bank Profitability". This study aims to test the continuity of banking profits and the impact of determinants in the profitability of the Tunisian Bank. To calculate the stability and the continuation of profit, we have implemented a tablet dynamic model, methods of circular intraday system users for 16 of the Tunisian commercial banks, has been divided into 11 bank deposit and 5 development banks during the period between 1999-2010. It has been estimated that the proof of the continued stability of the profit was positive and has a significance for both

deposits from banks and development banks during the 2005-2010 period, and in any case for us it has been shown that the bank deposits of more competitive development banks. That has continued and proven profit for the Tunisian banks, but banks are developmental regulatory protection than banks deposits, we also found a positive relationship between capital and profitability. This implies that the big market is not perfect and complete in the Tunisian banking sector. Liquidity risk management in the Tunisian banks have shown that excessive use deposits to finance loans are likely to affect the profitability of banks. Finally, we've found that credit risk management is linked with negative profitability of banks and deposit banks and development banks suffer from the poor quality of their loans and also suffer from the lack of provisions during the period 1999-2010.

*Study (Obamuyi, 2013) entitled: Determinants of Banks Profitability in A Developing Economy Evidence From Nigeria "*

This study examined and discussed the implications of the bank's capital, the size of the bank, and management expenses, interest income and economic situation on the profitability of banks in Nigeria. Where he was employed in the decline of fixed effects panel data that has been obtained from the financial statements of 20 banks during the period between 2006 to 2012 model. The results showed that both of the capital of the bank and the enhanced dividend interest in addition to the active management of expenses favorable economic situation all contribute to the high performance of banks and growth in Nigeria. Thus the government policies in the banking sector should encourage banks to increase their capital on a regular basis and provide the environment that will accelerate economic growth in the country. It also must be on bank management to efficiently manage their investment portfolios to protect the interest rates on long-term loans.

*Study (Ahmad, et. Al, 2012) entitled: Determinants of Profitability of Profitability of Pakistani Banks: Panel Data Evidence for the Period 2001-2010.* This study concerned the local Pakistani commercial banks to discuss some of the internal factors of banks that are considered delimiters profitability of banks. The rate of return on assets as the dependent variable was considered, while the cost is considered a cost-to-income ratio, and LIO asset liquidity to finance the short-term, and EQAS any loss reserves for loans to total gross loans and EQAS any capital ratio as a percentage of total assets Alajamalih- variables considered independent variables. After applying Hausman test data, the application of random effects regression data for more than ten years and ranging from 2001- 2010 from local banks, which was founded in Pakistan to see experimental results. The results indicate both the Cost,



EQAS, LOSRES statistically significant independent variables which is related to a negative return on assets and the results of these variables consensus forecast of signs is also a variable fourth a LIQ a relationship anticipated brand is associated negatively with the yield on the assets, but does not have a statistically significant and reported statistics F to this model 33.63, which means that the model appropriately.

*Study (Nunes, et. Al, 2012) entitled: "Are the Determinants of Young Sme Profitability?".* The study indicated that using the method steps, namely the step slopes likelihood, step vital estimates or dynamic, and based on two samples subgroups of small and medium enterprises in Portugal: 495 young small and medium-sized or emerging and 1350 of the old SME projects, the present study has the aim of checking if age was an important factor in relations between the determinants of profitability. Where he was both the age and size, liquidity and long-term debt with a relatively greater importance in increasing profitability, while it was more important to reduce the profitability of small and medium enterprises young compared with the case of a large age small and medium enterprises dangerous. And spending on research and development is one of the things necessary to increase the profitability of large age small and medium enterprises in addition to the large age have a profitable small and medium enterprises continuing more than small and medium-sized start-ups.

*Study (Alber, & Anbar, 2011) entitled: "Bank Specific and Macroeconomic Determinants of Commercial Bank Profitability: Empirical Evidence From Turkey".* The study aimed to examine the bank's own limitations and those of macroeconomic profitability of commercial banks in Turkey during the period 2002 to 2010. The profitability of banks' return on assets measure (ROA) and return on equity (ROE) as a function of the banking of the determinants of specific and those related to the overall

c) *The study sample*

economy. Through the use of a set of balanced panel data, the results showed that each of the assets and incomes with no positive benefits and significant impact on profitability. However, the size of the credit portfolio and loans under follow-up and a big negative on banks' profitability impact. Regarding the macroeconomic variables, we find that the real interest rate affect the banks' performance in a positive way, so these results indicate that banks can improve their profitability by increasing the size of the bank and get no benefits, and reduce the credit / asset ratio. In addition, it can result in higher interest rates truth to the high profitability of banks.

The relationship between the privacy of liquidity, profitability and debt and the funding mix, such as study (Amahgan 0.2012).

a) *Hypotheses*

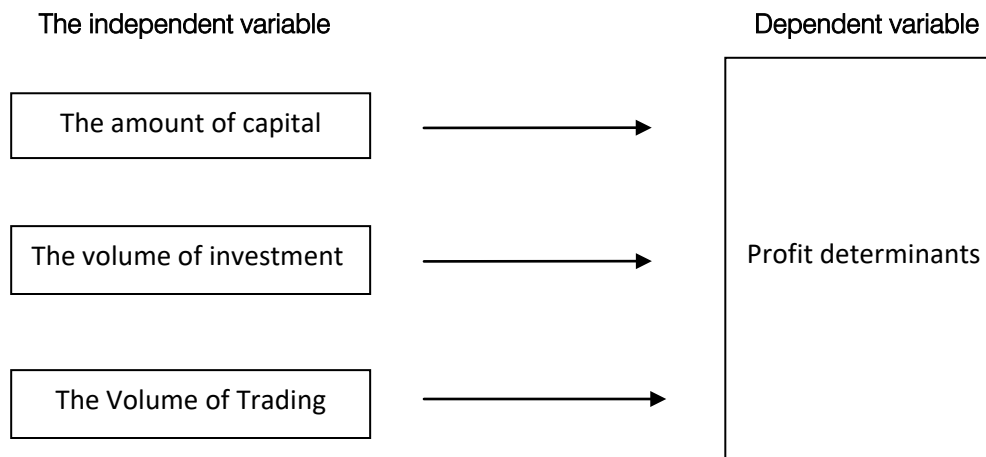
*First hypothesis:* There is a statistically significant effect of the trading volume on the profitability of listed investment funds in Amman financial market.

*The second hypothesis:* There is a statistically significant impact on the size of the investment on the profitability of listed investment funds in Amman financial market.

*The third hypothesis:* There is a statistical impact on the size of the capital on the profitability of listed investment funds indication in Amman financial market.

b) *The Study Methodology*

It will depend researcher in this study based on two approaches descriptive and analytical measurement, display and analyze data and evaluate and interpret, to get to know the profitability determinants in listed investment funds in Amman financial market, and will rely mainly Amman Stock Exchange and the Central Bank of Jordan and the Jordanian Ministry of Finance for the period from 2000 to 2013.



*The study population:* The study population consisted of all investment funds listed consists in Amman financial market.

*The study sample:* The study sample financial statements of the determinants of profitability and volume and the size of the investment and the size of Rasim money in investment funds listed on the Amman Stock Exchange for the period (2000- 2013 AD).

### III. STATISTICAL ANALYSIS AND DATA PROCESSING

We will use the following statistical treatments:

1. Descriptive statistics.
2. Correlation coefficients.
3. Multiple regression analysis.
4. procedural definitions

*Investment Funds:* as a bowl to collect the financial savings of individuals and invested in securities through a related experience in managing securities portfolios. It is one of modern methods of money management, according to the wishes of investors and the needs of the service and the degree of acceptance of risk. The funds invest here, a collective investment methods associated with the stock market completely. (Matar, Mohammed, 2005).

*Profitability:* is the relationship between the profits of the enterprise and investments that contributed to the realization "of assets or project owners' equity value" (al-Shammari 0.2010, p. 58).

*Percentage of profitability:* Represents the end result of a number of policies and decisions taken by the facility and provide the percentage profitability information indicating the effectiveness of the policies of an

**Table 1:** Results of multiple regression analysis (Multiple Regression) of the relationship between the determinants of profitability and volume

The result of hypothesis	Statistical significance of f	The value of f	The value of R <sup>2</sup>	The value of R	The value of Beta	Statistical significance of t	The value of t	Independent variable
Acceptance	0.00	41.540	.484	.696	.762	0.000	12.590	Net profit
					-.112	.056	-1.924	Per share dividend
					-.035	.603	-.521	Return on total assets
					.034	.506	.506	Return on shareholders' equity

*The dependent variable:* Volume of trading The table shows (1) the existence of statistically significant relationship between profitability determinants of b (net profit, earnings per share, return on total assets, return on equity) and the volume of trading in mutual funds in the Amman Stock Exchange during the time period (2000-2013) , as the value of (f) (41.540) statistically and

enterprise's operations, showing the combined effects of the aspects of liquidity, assets and debt on the operating result of the business (Andrew, 2008.403). *Investment Portfolio:* is a technical term that refers to the total financial assets owned by individual stocks, bonds and other securities that are investment thereto. (Matar, Mohammed, 2005).

### IV. RESULTS OF THE STUDY AND TEST HYPOTHESES

The following is a detailed statistical analysis and financial results of the study, which aims to identify the profitability determinants in investment funds in the Amman Stock Exchange during the time period (2000-2013), and will display the results based on the assumptions of the study, has included the study sample financial statements of the determinants of profitability and size the trading volume of investment and the size of Rasim money in investment funds listed on the Amman Stock Exchange for the period (2000-2013 AD).

*First hypothesis:* There is a statistically significant relationship between the determinants of profitability and the volume of trading in mutual funds in the Amman Stock Exchange during the time period (2000-2013). To test this hypothesis, the use of multiple regression analysis (Multiple Regression) to reveal the relationship between profitability determinants of b (net profit, earnings per share, return on total assets, return on equity) and the volume of trading in mutual funds in the Amman Stock Exchange during the ( 14) years, including the time period (2000-2013), and table 1 illustrates this.

in terms of (0.00). Totaled (R), which represents the total correlation model (0.696), and value (R<sup>2</sup>), which represents the impact strength of the independent variable (the determinants of profitability) on the (trading) volume (0.484); and thus accept the first premise of the study.

The second hypothesis: There is a statistically significant relationship between profitability and the determinants of the size of investment in mutual funds in the Amman Stock Exchange during the time period (2000-2013). To test this hypothesis, the use of multiple regression analysis (Multiple Regression) to reveal the relationship

between profitability determinants of b (net profit, earnings per share, return on total assets, return on equity) and the size of investment, represented by (the number of shares subscribed) in investment funds in the Amman Stock Exchange during the time period (2000-2013), and table 2 illustrates this.

Table 2: The results of multiple regression analysis (Multiple Regression) of the relationship between the determinants of profitability and size of investment

The result of hypothesis	Statistical significance of f	The value of f	The value of R <sup>2</sup>	The value of R	The value of Beta	Statistical significance of t	The value of t	Independent variable
Acceptance	0.00	185.528	.807	.899	.934	0.000	26.508	Net profit
					-.376	0.000	-10.614	Per share dividend
					.028	.492	.689	Return on total assets
					-.104	.011	-2.563	Return on shareholders' equity

The dependent variable: the volume of investment The table shows (2) the presence of statistically significant relationship between the determinants of profitability and of b (net profit, earnings per share, return on total assets, return on equity) and the size of investment, represented by (the number of shares subscribed) in investment funds in the Amman Stock Exchange during the time period (2000 to 2013), as the value of (f) (185.528) statistically and in terms of (0.00). Totalled (R), which represents the total correlation model (0.899), and value (R<sup>2</sup>), which represents the impact strength of the independent variable (the determinants of profitability) on the (investment) (0.807); and thus accept the second hypothesis of the study.

The third hypothesis: There is a statistically significant relationship between the determinants of profitability and capital in investment funds in the Amman Stock Exchange during the time period (2000-2013). To test this hypothesis, the use of multiple regression analysis (Multiple Regression) to reveal the relationship between profitability determinants of b (net profit, earnings per share, return on total assets, return on equity) capital and represented by (total assets) in investment funds in the Amman Stock Exchange during the time period (2000-2013), and table 3 illustrates this.

Table 3: The results of multiple regression analysis (Multiple Regression) of the relationship between the determinants of profitability and capital

The result of hypothesis	Statistical significance of f	The value of f	The value of R <sup>2</sup>	The value of R	The value of Beta	Statistical significance of t	The value of t	Independent variable
Acceptance	0.00	669.318	.938	.968	.917	0.000	45.911	Net profit
					.152	0.000	7.566	Per share dividend
					-.085	0.000	-3.399	Return on total assets
					-.051	0.028	-2.212	Return on shareholders' equity

The dependent variable: The table shows (1) the existence of statistically significant relationship between profitability determinants of b (net profit, earnings per share, return on total assets, return on equity) capital

and represented by (total assets) in investment funds in the Amman Stock Exchange during the period time (2000-2013), as the value of (f) (669.318) and is statistically significant (0.00). Totalled (R), which

represents the total correlation model (0.968), and value (R2), which represents the impact strength of the independent variable (the determinants of profitability) on the (capital) (0.938); and thus accept the third hypothesis of the study.

## V. A SUMMARY OF FINDINGS AND RECOMMENDATIONS

*Summary of results:* By examining the previous hypotheses and the results of statistical analysis, the researcher suggested the following results:- The existence of the effect statistically significant between profitability determinants (net profit, earnings per share, return on total assets, return on equity) and the volume of trading in mutual funds in the Amman Stock Exchange during the time period (2000-2013), as the value of (f) (41.540) and statistical terms (0.00). Totaled (R), which represents the total correlation model (0.696), and value (R2), which represents the impact strength of the independent variable (the determinants of profitability) on the (Volume) (0.484)- The existence of the effect statistically significant between profitability determinants (net profit, earnings per share, return on total assets, return on shareholders' rights) and the size of the investment (the number of shares subscribed) in investment funds in the Amman Stock Exchange during the time period (2000-2013), as the value of (f) (185.528) and is statistically significant (0.00). Totaled (R), which represents the total correlation model (0.899), and value (R2), which represents the impact strength of the independent variable (the determinants of profitability) on the (investment) (0.807).- The existence of the effect statistically significant between profitability determinants (net profit, earnings per share, return on total assets, return on equity) and capital (total assets) in investment funds in the Amman Stock Exchange during the time period (2000-2013), reaching value (f) (669.318) and is statistically significant (0.00). Totaled (R), which represents the total correlation model (0.968), and value (R2), which represents the impact strength of the independent variable (the determinants of profitability) on the (capital) (0.938).

## VI. RECOMMENDATIONS

*Based on previous results can put the following recommendations:*

- Interest in investment funds because of its great importance in the development of the local economy, and to maximize investment opportunities in Jordan.
- To ensure the participation of appropriate economic feasibility of projects, and to encourage investors to maintain shareholders' equity.
- The need for the development of assets or return on assets through the financial savings ratio to ensure

the strengthening of investment funds, and check continuity, and encourages investors to contribute to it.

## ARABIC REFERENCES

1. Andrew, Atef. (2008). "Finance and financial management of the institutions," Dar university thought, Egypt.
2. Bataineh, what Mohammed Hindawi. (2012). "Determinants of profitability in the industrial and service companies listed on the Amman Stock Exchange for the period 2000- 2010," Master, Yarmouk University, Jordan.
3. Rashdan Maha Abdel-Rahman. (2009). "Factors affecting the profitability of the Jordanian Islamic banks: the case of the Islamic Bank," Master, Yarmouk University, Jordan.
4. Al-Zubaidi, Mahmoud Hamza. (2000). "Bank management and the strategy to mobilize deposits and provide credit, Warraq Foundation, Amman, Jordan.
5. Tayeb, Saud al-Moussa, and Shahatit Mohammad Issa. (2011). "Standard analysis of the application of capital adequacy on the profitability of commercial banks: the case of Jordan," Mutah University, Administrative Sciences Studies, Volume 38, Issue 2.
6. Abdullah, Abdul Qadir, friend Babacar. (2002). "Determinants of industrial financing structure of public shareholding companies in Saudi Arabia", Journal of Public Administration, Vol. 42, No. 4, pp. 723-745.
7. Aladasi, Ahmed Mohamed. (2011). "Financial Analysis of the financial statements according to international accounting standards," the Arab community for publishing and distribution library, Amman, Jordan, the first edition.
8. Judges, Mustafa Abdullah Ahmed. (2008). "The impact of capital structure on the profitability of the Jordanian Public Shareholding industrial companies," Master, Yarmouk University, Jordan.
9. Amahgan, Fahd Mohammed Saad al. (2012). "The relationship between the privacy of liquidity, profitability and previous debt and the funding mix in industrial companies listed on the Kuwait Stock Exchange analysis", Master Thesis, University of the Middle East, Jordan.
10. Ibrahim Munir Hoda (2008), funds investing in junior and senior savers service, distribution facility knowledge, Alexandria.
11. Abdul Ghaffar Hanafi (2009), the stock exchange, the new university publishing house -alexanderah-Egypt.

## FOREIGN REFERENCES

1. Ahmad, Salman, & Nafees, Bilal, & Khan, Zeeshan Ahmad. (2012). "Determinants of Profitability of Pakistani Banks: Panel Data Evidence for the Period 2001- 2010", *Journal of Business Studies Quarterly*, Vol. 4, No. 1, P: 149- 165.
2. Alper, Deger, & Anbar, Adem. (2011). "Bank Specific and Macroeconomic Determinants of Commercial Bank Profitability: Empirical Evidence from Turkey", *Business and Economics Research Journal*, Vol. 2, No. 2, P: 139-152
3. Bejaoui, Raoudha, & Bouzgarrou, Houssam. (2014). "Determinants of Tunisian Bank Profitability", *the International Journal of Business and Finance Research*, Vol. 8, No. 4.
4. Mikdashi, C. (2002): *Les Banques a l'ere de la Mondialisation*, Economica. Paris.
5. Nunes, Paulo Macas, & Viveiros, Ana, & Serrasqueiro, Zelia. (2012). "Are the Determinants OF Young Sme Profitability Different? Empirical Evidence Using Dynamic Estimators", *Journal of Business Economics and Management*, Vol. 12 (2): 443-470.
6. Obamuyi, Tomola Marshal. (2013). "Determinants of Banks Profitability in a Developing Economy: Evidence From Nigeria", *Organizations and Markets in Emerging Economies*, Vol. 4, No. 2 (8).





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# Impact of Human Resources Strategies on the Total Quality Management in Jordanian Private Hospitals

By Dr. Hayel F Meqdad Alserhan

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**Keywords:** *human resources strategies, total quality management.*

**GJMBR-A Classification:** *JEL Code: M10*



IMPACT OF HUMAN RESOURCES STRATEGIES ON THE TOTAL QUALITY MANAGEMENT IN JORDANIAN PRIVATE HOSPITALS

*Strictly as per the compliance and regulations of:*



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**Abstract-** The aims of this study is to investigate the dimensions of human resources strategies (selection and appointment, training, incentives and performance evaluation) and its impact on the total quality management (customer focus, continuous improvement, commitment of senior management and decision making based on facts and employee participation) in the Jordanian private hospitals. The study samples was (10) hospitals out of (59) hospital, so questionnaire was designed to investigate the theoretical framework of the independent variable which is (human resources) and its relation with the dependant variable which is (the management of total quality). It has been distributed (15) questionnaires to each hospital of the study samples, were (130) recovered, while (10) were excluded because they were not valid. Where the number of study samples became (120). The hypotheses were tested based on the statistical analysis program. The study shows that there is a statistical significant relation between the human resources strategies and the implementation of the total quality in the Jordanian private hospital. In addition the study shows that the incentives strategy is the most influential human resources strategies on the total quality management.

**Keywords:** human resources strategies, total quality management.

## I. INTRODUCTION

Companies are trying to exploit all their strategies to achieve competitive advantage that enables them to continue in the labor market. Human element is one of the most important resources because it is the basis to achieve its goals and the success of its plans and thus achieve the competitive advantage. Therefore the organizations are seeking to take care of them, train them and evaluate their performance. Hospitals are one of those organizations.

In this study we are going to shed the light on the Jordanian private hospitals as one of the organization that depends on human resources as a key to its success and development. Therefore it was necessary to provide it by a high qualified and trained human resources, especially after Jordan became one of the health destinations for patients from different countries in the world. so it focus on how to develop its intellectual capital through the adoption of human resources strategies in order to achieve competitive advantage

over its competitors whether it is at the level of quality of health services or creativity and innovation and other strategies that achieve the standards of total quality.

### a) *Problems of the study*

Despite the importance of human resources and their role in planning, and implementing and achieving the objectives of the organization, there is still some shortcoming in applying the strategies of total quality. Therefore this research has been prepared to answer the following main question:

What is the impact of human resources strategies on the total quality management in Jordanian private hospitals?

*This question is divided into the following sub-questions:*

What is the extent of applying the human resources strategies in the Jordanian private hospitals?

What is the extent of applying the total quality management in the Jordanian private hospitals?

### b) *Importance of the study*

- The necessity of integration between human resources strategies and the total quality of management.
- The total quality management cannot be applied unless qualified human resources are available
- Adopt the strategies of the total quality management as a way to achieve the competitive advantage.
- The awareness of senior management of the Jordanian private hospitals the importance of the total quality of management role.
- Focus on the importance of human resources in every organization seeking for achieving the total quality management.

### c) *Aims of the study*

The aims of this research are to study the impact of human resources strategies and the total quality management and the relation between them to achieve the following objectives:

1. Explain the importance of the role of human resources in demonstrating the skills and efficiency of the private hospitals staff to be more adaptable.
2. Explain the extent to which hospitals administrations apply the principles of the total quality management
3. Identify human resources strategies that applied in private hospitals

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4. Analyzing and evaluating the policies of human resources management in the Jordanian private hospitals in order to support and develop it.

d) *Hypothesis of the study*

Based on the study questions and problem, the researcher was able to formulate the following hypotheses:

*The main hypotheses:* "There is a statistical significant impact of human resources strategies (selection and appointment, training, incentives and performance evaluation on the total quality management (customer focus, continuous improvement, commitment of senior management and make decision based on facts and employee participation) in the Jordanian private hospitals at the level ( $\alpha \leq 0.05$ )". it's divided into the following hypothesis :

1. There is a statistical significant effect at the level ( $\alpha \leq 0.05$ ) of the human resources strategies on customer focus as one of the total quality management principles.
2. There is a statistical significant effect at the level ( $\alpha \leq 0.05$ ) of the human resources strategies on continuous improvement as one of the total quality management principles.
3. There is a statistical significant effect at the level ( $\alpha \leq 0.05$ ) of the human resources strategies on commitment of senior management as one of the total quality management principles.
4. There is a statistical significant effect at the level ( $\alpha \leq 0.05$ ) of the human resources strategies on decision making based on facts as one of the total quality management principles.
5. There is a statistical significant effect at the level ( $\alpha \leq 0.05$ ) of the human resources strategies on employee participation as one of the total quality management principles.

## II. METHODOLOGY OF THE STUDY

The research relies on two methods; the first is theoretical study; by using descriptive analytical method to describe and evaluate the impact of human resources strategies on the total quality management practices in the Jordanian private hospitals by relying on what is stated in the administrative literature on the subject of study in addition to what is on the internet. The second method is the field study; through the preparation of survey lists to collect data, in addition to rely on previous studies.

*First:* previous studies in the field of studies.

*Rana Alkhateb, 2003 study*

This study aims to investigate the impact of quality constants in enhancing the requirements of the total quality management. The study was conducted on the main cement company in Iraq. Where the information was obtained by distributing a

questionnaires to 100 employees in the company. the study conclude a set of conclusions such as ; there is an effect of the constant of quality in applying the requirements of the total quality management in the main cement company in Iraq.

*Ayedh, 2013 study*

This study aims to investigate the relation between the role of the management in Jordan university of science and technology hospital in supporting the implementation of the total quality management and the level of applying total quality management , in addition the study shows that there is a difference of statistical significance in the employees' answers about the level of the management in Jordan university of science and technology hospital in applying the total quality management attributed to the personal and functional variables. the population of the study consist of Jordan university of science and technology hospital staff. the study relies on descriptive analytical method, where the information was obtained by distributing a questionnaires on the employees in Jordan university of science and technology hospital. the study conclude that there is a strong relation between the role of the management in Jordan university of science and technology hospital in supporting the implementation of the total quality management and the level of applying total quality management in the hospital.

*Bani Mustafa, 2012 study*

This study aims to investigate the impact of total quality management on the efficient academic performance in Saudi universities by applying the principles of the total quality management in Majmaah University, where questionnaires were distributed to (100) employees. The study concludes a set of conclusions:

- there is a positive effect of applying the principles of the total quality management on the efficient academic performance in Saudi universities
- there is a positive effect of applying the requirements of the total quality management on the efficient academic performance in Saudi universities
- There is a positive effect on following up the educational process on the efficient academic performance in Saudi universities.
- Albasheer 2012 study

This study aims to investigate the role of human resources management in achieving the production in the sugar sector in Sudan, in addition to its impact on the employee's efficiency. The study concludes a set of conclusions:

- Job satisfaction of employees leads to increased productivity.
- The institutions that seeking for success must focus on human resources development.

- Human resources management has become a key element in the organizations.

*Al-Otaibi, 2010 study*

This study aims to investigate the impact of applying the total quality management on the performance of human resources management in the Kuwait National Guard based on age and grade. The study samples consisted of (75) employees in human resources management in the National Guard. The study concludes a set of conclusions:

- The level of applying the leadership standard and the employee's efficiency in the human resources management in the Kuwait National Guard was high.
- While the level standard of applying of beneficiary satisfaction and improve service quality in the human resources management in the Kuwait National Guard was within the average.

*Second:* conceptual framework for human resources strategy. Concept of human resources strategies Strategy concept.

A detailed description of the organization's internal environment that determines its functional performance and organizational structure. (Kadem, 2011).

It's as (Al- Nadawi, 2009) said it's a set of methods used by the organization in order to achieve its goals.

#### *Human resources management strategies*

It is a set of policies and practices that work to optimize the use of human resources, consistent with institutions strategies (Mania', 2015; Al-Hawary, 2010; Al-Hawary, 2015; Al-Hawary & Shdefat, 2016; Al-Hawary & Alajmi, 2017; Al-Hawary & Nusair, 2017 ).

Or as (Armstrong ,2009,115) defined it as the company department charged with finding and training job applicants, as well as administering employee-benefit programs. As companies reorganize to gain competitive edge. Human resources play a key role in helping companies deal with a fast-changing environment and the greater demand for quality employees.

#### Characteristics of human resources management

1. Diversity is one of the most important elements of the human resources management.
2. It is an integrated and coherent system that contains group of related and interrelated activities.
3. Introducing outputs based on the objective analysis of the standards and requirements of performance.
4. Dealing with customers as the basis of human capital.
5. plays a key role in helping companies deal with a fast-changing environment and demand for quality employees.

*Third:* concept of the total quality management (TQM) Quality is no longer limited to the product, but rather includes employees and beneficiaries. So what do mean by quality?

(Al-azzawi, 2005, 13) and (Russel & Taylor 2009:57; Al-Hawary et.al, 2010; Al-Hawary, & AL-SMERAN, 2016; Al-Hawary & HUSSIEN, 2016; Alshurideh et. Al, 2017) defines quality as "group of features of a product or services that meets customers needs and requirements"

While (Render & Heizer, 2014, 198; Al-Hawary, 2012; Al-Hawary & Metabis, 2012; Al-Hawary & Metabis, 2013; Al-Hawary, 2013a; Al-Hawary, 2013b; Abbad & Al-Hawary, 2014; Al-Hawary and Al-Menhaly, 2016;) defines the total quality management as" to manage the organization in order to achieve excellence in all aspects of the business by providing the customer with the necessary services and goods.

Based on the previous concepts of quality; the researcher defines the total quality as: the ability of the organization to adapt with its environment whether internally or externally, and to try to meet the satisfaction of its customers without mistakes by using and developing the quality supporter systems.

*Practices of total quality:* Although researchers agreed on the concept of total quality, but they did not agree on its principles. So in this research we will discuss the main principles:

1. Continuous improvement

It is an ongoing effort to improve products, services, or internal and external processes. These efforts can seek "incremental" improvement over time. (Psychotics, 2007;46)

2. Customer focus

The orientation of an organization toward serving its clients' needs. Having a customer focus is usually a strong contributor to the overall success of a business and involves ensuring that all aspects of the company put its customers' satisfaction first. Also, having a customer focus usually includes maintaining an effective customer relations and service program. (Muhsen & Al-najar, 2012, 564).

3. Commitment of senior management

Direct participation by the senior management is important aspect in the organization for many reasons for example: (2) Formulating and establishing quality policies and objectives, (3) providing resources and training, (4) overseeing implementation at all levels of the organization, and (5) evaluating and revising the policy in light of results achieved. (Al-sa'ati & Masari, 2015).

4. Employee participation

Employee participation is the process whereby employees are involved in decision making processes, rather than simply acting on orders. Employee

participation is part of a process of empowerment in the workplace (Stevenson, 2009; Al-Hawary et.al, 2013).

5. Decision making based on facts

Relies on the resources that can provide the employees about the facts and information that can be helped to communicate to all parties.

Fourth: field study

III. RESEARCH POPULATION

Study population consist of all Jordanian private hospitals.

a) Sample of the study

The study was conducted on (10) hospitals based on bed count as it shoes in table (1) by using the

(SPSS) statistics, it has been distributed (15) questionnaires for each hospital thus, the study sample consisted of (150) individuals, while (130) were retrieved or (%86,7) this ratio is considered good after counting, (10)questionnaires were excluded because they were not valid for analysis because were not completed. Thus, the number of questionnaires analyzed (120) by (%80). Table (1) shows the distributed, retrieved and valid questionnaires for analysis compared to the distributed questionnaires.

Table 1: Distributed, retrieved and valid questionnaires for analysis

Number	Hospital's name	Governorate	Bed count	Distributed Questionnaires	Retrieved Questionnaires		Valid Questionnaires	
					Number	%	Number	%
1	Jordan	Amman	247	15	12	80%	11	91,7%
2	Islamic	Amman	272	15	13	86,6%	11	84,6%
3	specialty	Amman	200	15	11	73,3%	11	100%
4	Istiklal	Amman	200	15	14	93,3%	12	85,7%
5	Ibn Al Haitham	Amman	200	15	14	93,3%	14	100%
6	Ib Al Nafis	Irbid	103	15	12	80%	10	83,3%
7	Irbid specialized	Irbid	108	15	15	100%	13	86,7%
8	Al Rahbat Wardiah	Irbid	87	15	13	86,6%	12	92,3%
9	Jabal Al zaitoon	AL-zarqa'	123	15	12	80%	12	100%
10	Al Rashid	Al-Balqa'	120	15	14	93,3%	13	92,9%
total	10		1660	150	130			

Source: preparing the by researcher based on the annual statistical report of the Jordanian ministry of health.

b) Tools of the study

The researcher relied on questionnaire as a data collection tool, where the tool was developed to measure the impact of human resources strategies (selection and appointment, training, incentives and performance evaluation) on the total quality management (customer focus, continuous

improvement, commitment of senior management and decision making based on facts and employee participation) in the Jordanian private hospitals.

The researcher asked a group of experts and academics to study the questionnaire and to give their comments and suggestions thereon.

Table 2: Cronbach's alpha coefficient for measuring tools of study

Variable	Number of Paragraphs	Coefficient of Stability Cronbach's Alpha
Strategies of Human Resources Management	20	0.907
Selection and Appointment	5	0.912
Training	5	0.915
Incentives	5	0.910



Performance Evaluation	5	0.914
Total Quality Management	25	0.917
Employee Participation	5	0.918
Customer Focus	5	0.925
Continuous Improvement	5	0.930
Commitment of Senior Management	5	0.930
Decision Making Based on Facts	5	0.927
Total	45	0.923

Source: preparing the by researcher based on the analysis results.

The study tools divided into three parts|: the first: includes personal data such as ((gender, academic qualification and occupation). the second: includes strategies of human resources management; selection and appointment strategy from (1-5) incentives strategy from (6-10) training strategy from (11-15) performance evaluation from (16-20). third : includes the total quality management practices; employee participation from (21-25) customer focus from (26-30) continuous improvement (31-35) commitment of senior management (36-40) decision making based on facts (41-45). Each paragraph has five choices according to fifth likert scale starting from (1) strongly disagree until (5) totally agree. It has been used Cronbach's alpha Coefficient to determine the stability of research variables as shown in table (2).

Where the study showed that the full scale e of the study tool has a high degree of stability amounted to (0.923), while the management of human resources strategies scale have high degree of stability (0.907), and the selection and appointment strategy (0.912), while incentives strategy (0.915). training strategy (0.910). performance evaluation strategy (0.914) has high degree of stability. While the total quality scale also has a high degree of stability (0.917), where the principles of the total quality were as follows: employee participation (0.918), continuous improvement (0.930), decision making based on facts (0.927) as is showed that all of them has a high degree of stability.

c) Findings of the study

First: characteristics of the population research sample

Table 3: Frequency and percentage of the characteristics of the population research sample

Variable		Frequency	%
Gender	Male	70	%58.3
	Female	50	%41.6
Age	20-29	12	%10
	30-39	29	%24.1
	40-49	41	%34.1
	More than 50	38	%31.6
Experience	Less than 5 years	11	%9.1
	6-11	19	%15.8
	12-17	55	%45.8
	More than 18	35	%29.1
Career statuses	Director	10	%8.3
	Department head	51	%42.5
	Head of the department	59	%49.1

Source: preparing the by researcher based on the analysis results.

Table (3) shows the findings of the research sample, where it is noted that the majority of the study sample are male(%58,3). While the employee in the Jordanian privet hospitals aged between (40-more than 50) or (%34.1-%31.6) that's because privet hospitals chose those who have completed retirement in the government hospitals. as for years of experience, we can note that the employee in Jordanian private

hospitals are aged between (12 years and more than 18 years) or (%45.8- %29.1). while the career statuses where it is noted that the majority of the study sample are whom they occupy the position of head department (%42.5) the it followed by whom occupy Department head ((%42.5). while who occupy the director position was (%8.3).

IV. ANALYZING THE STUDY QUESTIONS

a) What is the extant of applying the human resources strategies in the Jordanian private hospitals?

Table 4: Average and standard deviation of the human resources strategies

Variable	Average	Standard Deviation	The Level
Selection and Appointment Strategy	3.79	0.61	High
Incentives Strategy	3.77	0.57	High
Training Strategy	3.89	0.83	High
Performance Evaluation	3.68	0.89	High
Total of Human Resources Strategies	3.78	0.27	High

Source: preparing the by researcher based on the analysis results.

- Table (4) shows that the average of the main independent variable of human resources management was (3.78) which is more than default average which was (3) and standard deviation (0.72) and high level. Which indicates the availability of the strategies of the human resources management in the Jordanian private hospitals.
- As for Training strategy has achieved the highest average which was (3.89) with standard deviation was (0.83) and high level which means that the Jordanian private hospitals are applying the total quality principles.
- While the average of selection and appointment strategy was (3.79) with standard deviation was (0.61) and high level which indicates that the hospital are interested in the strategy of selection and appointment.
- The average of incentives strategy was (3.77) and standard deviation was (0.57) and high level which indicates that the hospital interest in the incentives strategy.
- The average of performance evaluation strategy was (3.68) standard deviation was (0.89) and high level which means that the Jordanian private hospitals are interested in performance evaluation strategy thus; applying the total quality principles.

b) What is the extent of applying the total quality management in the Jordanian private hospitals?

Table 5: Average and standard deviation of the total quality management

Variable	Average	Standard Deviation	The Level
Customer Focus	3.96	0.97	High
Continuous Improvement	3.84	0.73	High
Decision Making Based on Facts	3.78	0.88	High
Commitment of Senior Management	3.72	0.58	High
Employee Participation	3.66	0.81	High
Total of quality	3.69	0.82	High

Source: preparing the by researcher based on the analysis results.

- Table (5) shows that the average of the main independent variable of the total quality was (3.69) which is more than default average which was (3) and standard deviation (0.82) and high level. Which indicates that the Jordanian private hospitals are applying the principles of total quality.
- As for customer focus principle has achieved the highest average which was (3.96) with standard deviation was (0.97) and high level which means that the Jordanian private hospitals are applying the customer focus principles.
- While the average of continuous improvement was (3.84) with standard deviation was (0.73) and high level which indicates that the hospital are interested in developing is services continuously.
- The average of decision making based on facts was (3.78) and standard deviation was (0.88) and high level which indicates that the hospital focusing on making decisions based on correct data.
- The average of performance evaluation strategy was (3.68) and standard deviation was (0.89) and high level which means that the Jordanian private

- hospitals are interested in performance evaluation strategy thus; applying the total quality principles.
6. While the average of commitment of senior management (3.72), and standard deviation was (0.58) and high level.
  7. The average of employee participation was (3.66) and standard deviation was (0.81) and high level.

appointment, training, incentives and performance evaluation) on the total quality management (customer focus, continuous improvement, commitment of senior management and decision making based on facts and employee participation) in the Jordanian private hospitals at the level of significance ( $0.05 \geq \alpha$ )".

Third: Test hypotheses

The main hypothesis: " there is a statistically significant impact of the human recourses strategies (selection and

Table 6: Results of simple regression analysis of human recourses strategies and total quality management

Human Recourses Strategies	Total Quality			
	(B) Value	(B) Value	(T) Value	Significance Level
Selection and Appointment	0.043	0.124	3.149	*0.001
Incentives	0.223	1.228	2.016	*0.003
Training	0.299	0.565	2.905	*0.004
Performance Evaluation	0.463	0813	2.63	*0.000
(R2) Value	0.611			
(F) Value	50.092			
Significance Level	*0.000			

\* significance level ( $0.05 \geq \alpha$ )

Source: statistical analysis results.

Table (6) shows the results of simple regression analysis of human recourses strategies as an independent variable and its impact on the total quality principles as a dependent variable. As we notice that (F) value=(50.092) at the significance level (0.05) this means that there is a statistically significant impact of applying the human recourses strategies on the total quality the table also shows that selection and appointment is the most effective strategy in applying the total quality where it was ( $\beta=0.124$  &  $T=2.63$ ), as for the strategy of training was ( $\beta=0.565$  &  $T=2.905$ ),

while performance evaluation strategy ( $\beta=0813$  &  $T=2.63$ ), and incentives strategy ( $\beta=1.228$  &  $T=2.016$ ) at the significance level (0.05). accordingly, the first main hypothesis is accepted " there is a statistically significant impact on the human recourses strategies (selection and appointment, training, incentives and performance evaluation) on the total quality principals (customer focus, continuous improvement, commitment of senior management and decision making based on facts and employee participation) in the Jordanian private hospitals at the level of significance ( $0.05 \geq \alpha$ )"

- a) The first sup-hypothesis "there is a significance level at the level( $0.05 \geq \alpha$ ) for applying the human recourses strategies as for customer focus principle"

Table 7: Results of simple regression analysis of applying the human recourses strategies on the customer focus principle

(T) Value	Significance Level	(B) Value	(F) Value	Significance Level	(R2) Value	Result of Hypothesis
6.066	*0.000	1.005	65.176	*0.000	0.733	Acceptable

\* significance level ( $0.05 \geq \alpha$ )

Source: statistical analysis results.

Table (7) shows that applying human recourses strategies in the Jordanian private hospitals are having a positive impact on customer focus principle, where (F) value was (65.176) at the significance level (0.000). while ( $\beta=1.005$  &  $T=6.066$ ). Accordingly, the first sup-

hypothesis is accepted which indicates that " there is a significance level at the level( $0.05 \geq \alpha$ ) for applying the human recourses strategies as for customer focus principle in the Jordanian private hospitals".

b) The second sup- hypothesis "there is a significance effect at level  $(0.05 \geq \alpha)$  of the human recourses strategies on continuous improvement"

**Table 8:** Results of simple regression analysis of the impact of human recourses strategies on the continuous improvement

(T) Value	Significance Level	(B) Value	(F) Value	Significance Level	(R2) Value	Result of Hypothesis
5.133	*0.000	1.111	27.177	*0.000	0.892	Acceptable

\* significance level  $(0.05 \geq \alpha)$

Source: statistical analysis results.

Table (8) shows that applying human recourses strategies in the Jordanian private hospitals are having a positive impact on continuous improvement, where (F) value was (27.177) at the significance level (0.05) while  $(\beta=1.111 \ \& \ T=5.133)$ . Accordingly, the second sup-

hypothesis is accepted which indicates that "there is a significance level at the level  $(0.05 \geq \alpha)$  for applying the human recourses strategies as for continuous improvement principle in the Jordanian private hospitals"

c) The third sup- hypothesis " there is a significance effect at the level  $(0.05 \geq \alpha)$  of the human recourses strategies on the commitment of senior management"

**Table 9:** Results of simple regression analysis of the effect of human recourses strategies on commitment of senior management

(T) Value	Significance Level	(B) Value	(F) Value	Significance Level	(R2) Value	Result of Hypothesis
2.318	*0.000	0.188	6.544	*0.000	0.755	acceptable

\* significance level  $(0.05 \geq \alpha)$

Source: statistical analysis results.

Table (9) shows that applying human recourses strategies in the Jordanian private hospitals are having a positive impact on commitment of senior management principle, where (F) value was (6.455) at the significance level (0.05) while  $(\beta=0.188 \ \& \ T=2.318)$ . Accordingly, the

third sup- hypothesis is accepted which indicates that "there is a significance level at the level  $(0.05 \geq \alpha)$  for applying the human recourses strategies as for commitment of senior management principle in the Jordanian private hospitals".

d) The fourth sup- hypothesis "there is a significance effect at the level  $(0.05 \geq \alpha)$  of the human recourses strategies on the decision making"

**Table 10:** Results of simple regression analysis of the effect of the human recourses strategies on the decision making based on facts

(T) Value	Significance Level	(B) Value	(F) Value	Significance Level	(R2) Value	Result of Hypothesis
7.322	*0.000	0.887	10.388	*0.000	0.567	acceptable

\* significance level  $(0.05 \geq \alpha)$

Source: statistical analysis results.

Table (10) shows that applying human recourses strategies in the Jordanian private hospitals are having a positive impact on decision making based on facts, where (F)value was (10.388) at the significance level (0.05) while  $(\beta=0.887 \ \& \ T=7.322)$ . Accordingly, the fourth sup- hypothesis is accepted which indicates that "there is a significance level at the level  $(0.05 \geq \alpha)$  for applying the human recourses strategies as for decision making based on facts principle in the Jordanian private hospitals"

e) The fifth sup- hypothesis "there is a significance effect at the level( $0.05 \geq \alpha$ ) for of the human recourses strategies on employee participation"

**Table 11:** Results of simple regression analysis of the effect of the human recourses Strategies on the employee participation

(T) Value	Significance Level	(B) Value	(F) Value	Significance Level	(R2) Value	Result of Hypothesis
2.887	*0.000	1.865	16.423	*0.000	0.467	acceptable

\* significance level ( $0.05 \geq \alpha$ )

Source: statistical analysis.

Table (11) shows that applying human recourses strategies in the Jordanian private hospitals are having a positive impact on employee participation principle, where (F) value was (16.423) at the significance level (0.05). While ( $\beta=1.865$  &  $T=2.887$ ).

Accordingly, the fifth sup- hypothesis is accepted which indicates that "there is a significance level at the level ( $0.05 \geq \alpha$ ) for applying the human recourses strategies as for employee participation principle in the Jordanian private hospitals".

**Table 12:** Results of multiple regression analysis on measuring the impact of the human recourses strategies on the total quality management

Strategies of Human Recourses Management	Total Quality				
	(F) Value	(R2) Value	(B) Value	(T) Value	Significance Level
Selection and Appointment	88.125	0.702	0.655	7.722	*0.000
Incentives	109.756	0.712	0.944	4.358	*0.000
Performance Evaluation	75.340	0.694	0.363	5.922	*0.002
Training	97.201	0.643	0.417	7.231	*0.004

\* significance level ( $0.05 \geq \alpha$ )

Source: statistical analysis results.

Table (12) shows the results of multiple regression analysis of human recourses strategies (selection and appointment, training, incentives and performance evaluation) on the total quality principals (customer focus, continuous improvement, commitment of senior management and decision making based on facts and employee participation). The table mentioned that incentives strategy was coming in the first place where (R2) values was (%0.712) while (F) value was (109.756) which is more the significance level (0.05). Then it followed by the strategy of selection and appointment where (F) value was (88.125) which are more the significance level (0.05). Lastly it followed by training and performance evaluation.

- strategies on the total quality principals (customer focus, continuous improvement, commitment of senior management and decision making based on facts and employee participation)
4. The study found that the incentive strategy is the most influential variables, then it followed by selection and appointment and training.
5. The strategy of "customer focus" is the most important strategy.

### V. FINDINGS OF THE STUDY

1. The study showed that there is a high level of applying the management of human resources strategies, with average (3.78) and standard deviation (0.72).
2. The study indicates that level of applying the total quality management was (3.69) and standard deviation (0.82).
3. The study showed that there is a statistically significant impact on the human recourses

### VI. RECOMMENDATIONS

1. Jordanian private hospitals must realize the importance of applying the total quality and developed it.
2. The need to train the employees because its is the most important element in the strategy of the human resources management to keep pace with everything new and thus to continues improvement
3. Focus on the customer as the key to the success of hospitals.
4. Encourage employees to work in a team and close the gap between them and the higher management in order to involve them everything related to the hospital.



## REFERENCES RÉFÉRENCES REFERENCIAS

1. Abbad, J. and Al-Hawary, S.I.S. (2014). Measuring Banking Service Quality In Jordan: A Case Study of Arab Bank. *Abhath Al – Yarmouk*, Vol.27, No.3, pp. 2179-2198.
2. Afaf Alsaati, Mahmud almasari, the effect of management features in applying the total quality journal of Babylon university. NO (3) VOL 23, 2015
3. Al- Nadawi, Abdalaziz Badaer, Globalization of human resources management is strategic.- ALmaseerah publishing house 1st ed. Pp142, 2009.
4. Al-autaiby, Faleh Al-shujaa', the extent of applying the standards of quality and its impact on the performance of human resources, an applied study on human resources management in the Kwaiti national Guard. Unpublished master thesis, meddle east university, Jrdan 2010.
5. Al-Ezzawi, Mohamed Abdalwahhab, management of total quality, Jordan, Al- Yazori Piblishing house ,2005
6. Al-Hawary, Faleh Abdulqader, the reality of applying the total quality management in the Jordanian private hospitals. *Albasaer university*, Vol 12, NO 1, 2008.
7. Al-Hawary, S.I. , Alghanim, S.A. and Mohammad, A.M. (2011), "Quality level of health care service provided by King Abdullah educational hospital from patient's viewpoint", *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 2 No. 11, pp. 552-572.
8. Al-Hawary, S.I.S (2011). Human Resource Management Practices in ZAIN Cellular Communications Company Operating in Jordan. *Perspectives of Innovation in Economics and Business*, 8(2), 26-34.
9. Al-Hawary, S.I.S (2015). Human Resource Management Practices as a Success Factor of Knowledge Management Implementation at Health Care Sector in Jordan. *International Journal of Business and Social Science*. 6(11), 83-98.
10. Al-Hawary, S.I.S. & Metabis, A. (2013). The impact of Internal Marketing Practices on Services Quality of Commercial Banks in Jordan. *International Journal of Services and Operations Management (IJSOM)*. 13(3), 313-337.
11. Al-Hawary, S.I.S. (2012), "Health care services quality at private hospitals, from patients' perspective: a comparative study between Jordan and Saudi Arabia", *African Journal of Business Management*, Vol. 6 No. 22, pp. 6516-6529.
12. Al-Hawary, S.I.S. (2013a). The role of perceived quality and satisfaction in explaining customer brand loyalty: mobile phone service in Jordan. *International Journal of Business Innovation and Research*. 7(4), 393-413.
13. Al-Hawary, S.I.S. (2013b). The Roles of Perceived Quality, Trust, and Satisfaction in Predicting Brand Loyalty: The Empirical Research On Automobile Brands In Jordan Market. *International Journal of Business Excellence (IJBEX)*. 6(6), 656-686.
14. Al-Hawary, S.I.S., Metabis, A. (2012). 'Service quality at Jordanian commercial banks: what do their customers say?'. *International Journal of Productivity and Quality Management*. 10, 3, 307-334.
15. Al-Hawary, S.I.S. Alajmi, H.M (2017). Organizational Commitment of the Employees of the Ports Security Affairs of the State of Kuwait: The Impact of Human Recourses Management Practices. *International Journal of Academic Research in Economics and Management Sciences*, 6(1), 52-78.
16. Al-Hawary, S.I.S. and Al-Menhaly, S.M. (2016). The Quality of E-Government Services and its Role on Achieving Beneficiaries Satisfaction. *Global Journal of Management and Business Research: A Administration and Management*, 16(11), 1-11.
17. Al-Hawary, S.I.S. and AL-SMERAN, W.F. (2016). Impact of Electronic Service Quality on Customers Satisfaction of Islamic Banks in Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(1), 170-188.
18. Al-Hawary, S.I.S. and HUSSIEN, A.J. (2016). The Impact of electronic banking services on the Customers Loyalty of Commercial Banks in Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(1), 50-63.
19. Al-Hawary, S.I.S. and Shdefat, F.A. (2016). Impact of Human Resources Management Practices on Employees' Satisfaction A Field Study on the Rajhi Cement Factory. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(4), 274-286.
20. Al-Hawary, S.I.S. Nusair, W.K (2017). Impact of Human Resource Strategies on Perceived Organizational Support at Jordanian Public Universities. *Global Journal of Management and Business Research: A Administration and Management*, 17(1), 68-82.
21. Al-Hawary, S.I.S., Al – Qudah, K.A, Abutayeh, P. M. Abutayeh, S. M. Al – Zyadat, DY. M. (2013). The impact of internal marketing on employee's job satisfaction of commercial banks in Jordan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(9), 811-826.
22. Al-khateeb, samer kamel, Rana hamzeh salman, the impact of human resources strategies implementation on the total quality in Jordanian private hospitals, *journal of Babylon university*, NO 3, VOI 22, Iraq, 2014.

23. Alshurideh, M. T, Al-Hawary, S.I.S., Batayneh, A.M.I., mohammad A. I, and Alkurdi, B.. (2017). The Impact of Islamic Banks' Service Quality Perception on Jordanian Customers Loyalty. *Journal of Management Research*. 9 (2), 139-159.
24. Armstrong Michael (2009). "Human Resource Management Practice". 10<sup>th</sup> ed. Personnel Management- Hand Books
25. Ayedh, the role of university of science and technology hospital management in applying the total quality, *Arab journal for quality assurance in higher education*. NO (11), 2013
26. Bani Mustafa, Suhail Mohamed the total quality management and its impact on academic performance qualifications in the Saudi universities , Majmaah university, *journal of Arab studies in education and psychology (ASEP)*, NO 28, section 2, 2012.
27. Inyang Benjamin James(2010). " Strategic Human Resource Management (SHRM): A Paradigm Shift for Achieving Sustained Competitive Advantage in Organization". *International Bulletin of Business Administration*, Euro Journals, Inc
28. Jawad Kadem, modern management system for higher education, assafaa' publishing house, Amman, 2011, Pp 142.
29. Maher Ahmed, the management of human resources, El Gamaya publishing house, Alexandria. 2009.
30. Mazgash, abdulhalem, improve the institution performance under the management of total quality, unpublished thesis, Algeria university, 2012.
31. Michael Armstrong, management human resources strategy, Enas Al-Wakel translation, Arab Nile group, 2008, Pp 24.
32. Muhsen Abduljaber, Abdulkareem, Sapah Alnajar, management of production and process athakerh publishing house ,Bagdad 2012.
33. Psychogios, Alexandros, G., "Understanding Total Quality Management in Context", Vol. 12, No. 1, March, 2007.
34. Russel, Robert. S & Taylor, Bernardw, 2009, *Operations Management : Along the Supply chain*, 6th Ed, John Willy &sons, INC.
35. Slack, Nigel.; Chambers, Stuart. & Johnston, Robert, 2010, *Operations Management*, 6th Ed., Prentice-Hall, London.
36. Stevenson, William, 2009, *Production / Operations Management*, 10th Ed., Mc GRAW-Hill, New York.





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## Management and Analysis of Financial Leverage for Market Value of Shares for Jordanian Service's Companies

By Dr. Mohammad Abdulmajeed Saho

**Abstract-** The importance of this study the came from the role of these companies in the national economy. On the other hand problem of the study comes form of the following question: Is there an impact of financial leverage on the market value of the shares for service companies? Conclusion: After a statistical analysis which showing the presence effect of financial leverage indicators on the market value of shares for service companies listed in Amman Stock exchange. Recommendations: Based on the conclusions of this study, the researcher reached the requirement to provide specialized and experienced staff to interpret and understand financial indicators of assess (the strengths and weaknesses in the financial plans and policies governance) that enterprise level of performance which makes investment decisions. Requirement to do further studies involving larger sample either to study or a longer period of time, to do a similar study on other financial markets in the Arab world to learn about the impact of the Finance leverage on the market value of the companies.

**Keywords:** financial leverage, share, book value.

**GJMBR-A Classification:** JEL Code: M19



*Strictly as per the compliance and regulations of:*



# Management and Analysis of Financial Leverage for Market Value of Shares for Jordanian Service's Companies

Dr. Mohammad Abdulmajeed Saho

**Abstract-** The importance of this study the came from the role of these companies in the national economy. On the other hand problem of the study comes form of the following question: Is there an impact of financial leverage on the market value of the shares for service companies? Conclusion: After a statistical analysis which showing the presence effect of financial leverage indicators on the market value of shares for service companies listed in Amman Stock exchange. Recommendations: Based on the conclusions of this study, the researcher reached the requirement to provide specialized and experienced staff to interpret and understand financial indicators of assess (the strengths and weaknesses in the financial plans and policies governance) that enterprise level of performance which makes investment decisions. Requirement to do further studies involving larger sample either to study or a longer period of time, to do a similar study on other financial markets in the Arab world to learn about the impact of the Finance leverage on the market value of the companies.

**Keywords:** financial leverage, share, book value.

## 1. INTRODUCTION

Life around us and each science will be developing to keep pace with developments taking place around us, and as a result of the evolution that has occurred in the capital markets, economic globalization, and the pursuit of the administration that expand the wealth of owners had to be the evolution of the administrative and financial the methodology of science is clear and properly. As a result of these developments that have become "Financial Position" specializes in the management needed to carry objects of various activities of funds, as well. Make decisions that determine the quality of those funds that are the sources obtained, which determine the optimum blending between different sources of funding, "short and long term." Financial management relies on the usages of instruments and methods of quantitative analysis arriving the best options, whether belonging to the part financing, production or financial problems which the administration put to take a particular decision, as well as whether a question of funding for a particular project or buy a specific asset or a trade-off between several ways of financing. The financial leverage result of using fixed costs or debt financing structure in order to

maximize the return on equity (Gitmen, 2003). Overall, the increased financial leverage result of increasing in yield and risk. The amount of leverage in the financial combination structure nevertheless debt or equity funds in the financial structure of the company that could affect a large and significant on the market value of the company through its impact on the company return. Unlike some of the reasons for the high risk management and the company can fully control to use financial leverage. The importance of this study, being one of the limited studies that aim to clarify the relationship between financial leverage and the market value of shares for companies, also it increases the importance of this study the role of these companies in the national economy. On the other hand problem of the study comes form of the following question:

Is there an impact of financial leverage on the market value of the shares for service companies?

Determinants of the study: will include a period of 15 years (from the end of 2000 and until the end of 2015) which is ample time to conduct the study.

**The study hypothesis:** There is no statistically significant impact for financial leverage on market value for the companies service.

**Description data variables:** This study addressed the shareholders companies in the Jordanian capital market, which plays a big role in the national economy. So we will take the service sector companies as a sample for this study.

In this study, usages of leverage indicators to measure first the book value of the total divided by the book value of total assets and liabilities. The other indicator is the book value of long-term debt divided by total assets (Shakhatreh 2012). (The study methodology will applies multiple regression equation to find the impact of financial leverage on the market value for companies shares of the variables:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Where as:

$Y$ : expresses the dependent variable in the model which is the market value of shares.

$X_1, X_2$ : reflect the independent variables in the model, namely, (the book value of the total divided by the book

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value of total assets, the book value of the debt of long-term obligations divided by total assets), respectively.

$B_1$ ,  $\beta_2$ : express the regression coefficients.

$E$ : expresses the random error.

Financial Leverage: Intended leveraged entity's dependence on borrowing from banking and financial institutions to build their financial needs, thus be fixed financial costs are the debt interest or paid, also if the company raises preferred shares to meet those needs, the fixed financial costs here are in Dividend preferred stock that the company will be paid to shareholders, so the preferred stock has a guaranteed profit and specific (Attar, 2001). Financial leverage as the ratio of total debt to total assets, or to the total value of the company (Brigham and Lewiston-1993). As well as the degree of adoption of facility to finance its assets on sources of fixed-income funds (whether loans, bonds, or preferred shares) which affects the profits earned also affects the degree of risk they are exposed to (Indian, 1997). so called proprietary trading, which means an entity using third party funds in order to achieve the greatest possible return for the owners and the owners of the facility, which represents the ratio of total liabilities to total assets. Evident from the preceding definitions that leverage include measuring the total liabilities (long and short term) to total assets, but some may consider that leverage is limited to debt or long-term commitments effect only, but the most correct according to the most recent studies. Total Leverage: It is also possible to determine the effect of each operating leverage and funding on the profits and risks of the company by using the same method that was used for both funding and operating. This combined is called total leverage. It means that using of operational and financing fixed costs in order to maximize the impact of the change in net sales on the profit per ordinary profits that generated per share (2003, Gitman). From the above it is clear that the financial Leverage generally reflects the facility's reliance on the instruments of production, the sources of fixed-cost financing. To raise the two effects, it contributes to increasing the yield earned by ordinary shareholders, but it also contributes to increased risks that are exposed to the virus, the survival of other factors unchanged, it is expected result to increase in yield that rise in the market value of shares, as It is expected the result as a result of increased risk reduction in the market value for shares. Here are facing a shareholder relationship between return and risk, we mean compensatory relationship (Risk, Return: Trade Off) so as to contribute in the end to maximize the market value of the facility. This happens when it reaches its decisions to the point where the positive impact tied to the yield increase with the negative impact of the increasing risk, it's break-even point (Gitman, 2003) Leverage indicators: Debt Position indicates that the debt situation in the facility to the extent by using

other people's money in the creation of the profits, ie the extent to which I went to management of enterprise rely on others to finance their needs, It is believed (Clarke, 2011) that the company is depending heavily on debt to finance their operations may lead to influence the objectives and policies, so that shift attention between providing a return of multiple parties with a stake in the company to meet the needs of creditors as reflected in the performance for company and its market value as a result of the risks high-imposed debt, so the loans and the benefits of the service will lead to the depletion of resources companies of cash needed to run its projects.

It will be measuring this variable in the current study through the most common size of debt criteria, (League, 2006.) Proportion of commitments to total assets of company- : This ratio measures the portion of the assets, which were funded by creditors, and means to increase this percentage to increase the amount of funds used by the shareholders of funds to create a profit which calculated as follows:  $\text{Leverage} = \frac{\text{total liabilities}}{\text{total assets}}$ . This figure means that the facility was financed certain percentage of their assets to debt, which means that each dinars untapped one in total assets resulting in debt by a certain of dinar. It is noted that the higher this percentage increased risk and expected return. Ratio of liabilities to total equity- : This ratio measures the portion of the assets that have been financed from equity. So increasing this percentage to increase the amounts used by the establishment of equity rights to create revenue, it is calculated as follows:  $\text{Leverage} = \frac{\text{total liabilities}}{\text{total equity}}$ . This figure means that the facility was financed certain percentage of their assets through equity. This means also that every single dinar untapped equity in the total debt increased by a rate of the dinar. It is noted that the higher percentage increased risk not lead to the company's ability to service its debt and its exposure to the bankruptcy.

## II. PREVIOUS STUDIES

Study. Cakici, Nusret; Chatterjee, Sris; Topyan, Kudret, (2015): Decomposition of book-to-market and the cross-section of returns for Chinese shares In this paper, we show that the book-to-market decomposition described in Fama–French (2008) significantly improves the predictive power of the estimation for an important emerging market, viz, Chinese shares. Second, we show that this improvement comes mainly from the change in book equity and not from the change in price. The predictive power of the change in book equity is most pronounced for large stocks, for stocks listed on Shenzhen Exchange, for stocks with low book-to-market (or growth stocks), and for Class B shares. Net Share Issue and Momentum add no explanatory power to the predictive regressions. Study Choi, Jaewon. Richardson, Matthew. (2016). Investigation the volatility of firms'

assets in contrast to existing studies that focus on equity volatility. We estimate asset volatility using a comprehensive data set on the market values of corporate security returns. We find significant differences between the properties of equity and asset volatilities with implications for several important areas of finance. First, financial leverage has a large influence on equity volatility. Second, leverage and asset volatility have permanent and transitory effects, respectively, on equity volatility, helping explain the short- and long-run dynamics of equity volatility. Third, we analyze and compare the cross-section of asset versus equity returns. Study Agliardi, Elettra. Amel-Zadeh, Amir. Koussis, Nicos (2016). Developing and empirically test a trade-off model for the analysis of leverage changes in mergers and acquisitions. Our study extends prior findings of a post-merger increase in leverage for the acquiring firm, by linking this leverage increase to merging firms that are less correlated, create significantly larger growth options, and have lower bankruptcy costs and lower volatility. Specifically, we show that acquiring firms are more likely to finance diversifying acquisitions with debt as equity holders exploit the increased debt capacity with higher leverage resulting in total merger gains that are positively associated with financial synergies. We also provide evidence of a U-shaped relationship between growth options and leverage changes theoretically and empirically in the context of mergers. A comprehensive model with financial, operational synergies and growth options is developed and tested for M&A. Cross-sectional differences in leverage changes and merger gains are explained. We find a U-shaped relationship between growth options and leverage changes in mergers. We challenge prior empirical evidence on co-insurance effects and shareholders' gains in M&A. The relation between growth options created with the merger and debt financing is non-monotonic. Study Antzoulatos, Angelos A. Koufopoulos, Kostas. Lambrinoudakis, Costas and Tsiritakis, Emmanuel (2014). We explore the effect of financial development on corporate capital structure and the tightness of financial constraints that firms face. We employ an econometric technique that allows us to explicitly test for convergence in capital structure. This technique increases the power of our statistical tests. In doing so, we identify a group of convergent firms. The driving force of convergence is financial development, which positively affects the firms' leverage ratio. We also identify a group of firms, whose leverage is not affected by financial development, because they are financially constrained. We test for convergence in corporate capital structure. A group of convergent firms is identified. Convergence is driven by financial development, which affects leverage positively.

Financially constrained firms' leverage is not affected by financial development. Study Alipour,

Mohammad. Pejman, Mohammad Ebrahim. (2015). explores the effect of the degree of operating leverage, financial leverage, and efficiency on market value added. The purpose of this paper is to investigate economic value added (EVA), as a performance measurement model, as compared to six traditional accounting performance measures vis-à-vis the market value of firms listed on Tehran Stock Exchange (TSE).

The paper also explores the effect of the degree of operating leverage, financial leverage, and efficiency on market value added. The paper uses a sample of 450 firm-year observations from the Iranian market and applies pooled ordinary least square and panel data regression. The results indicate that EVA has no superiority over other performance measures, and that return on sales and return on assets are more powerful than EVA in explaining firm market value. Due to EVA's lack of correlation with market value, investors cannot use it as an internal value creation measure along with the traditional performance measures. This paper is one of the first studies on the relevance of traditional accounting and value-based performance measures in explaining TSE market values. The results extend EVA's role in explaining market values, and address its effect on investors' decisions in a continental Asian market with characteristics similar to that of Iran.

Study Bhagat, Sanjai. Bolton, Brian. (2015). We investigate the link between firm size and risk-taking among financial institutions during the period of 2002 - 2012 and find size is positively correlated with risk-taking measures. Second, a decomposition of the primary risk measure, the Z-score, reveals that financial firms engage in excessive risk-taking mainly through increased leverage. Third, banks that enjoy better corporate governance engage in less risk-taking. Fourth, investment banks engage in more risk-taking compared to commercial banks. Finally, the positive relation between bank size and risk is present in the pre-crisis period (2002–2006) and the crisis period (2007–2009), but not in the post-crisis period (2010–2012). Study (Yunus, 2011): This study aimed to identify the impact of the application of the fair value of financial instruments held accountable for earnings per share of each of the market rate of return and the return on net income through the theoretical aspects associated with the subject, the scientific underpinnings of accounting and processors analysis related thereto. To achieve this purpose, the tests hypotheses through the analysis of financial statements for each of the income statement, statement of changes in shareholders' equity and cash flow statement of the number of (13) companies listed in the Palestinian market for the period from 2004 to 2009 and measure the correlation coefficients and regression to determine the strength and direction of the relationship between independent and dependent variables, the study showed that the return on the stock market positively influenced by all of the variables (net

income, and earnings of financial instruments, the proposed dividend to shareholders, the cumulative change in fair value, while earnings per share of the market variables dividends has not been affected to the shareholders, and the balance cash and cash equivalents, and the results showed the majority of companies to achieve the subject of study for possessory security gains, which reflected positively on the financial performance of those companies, thereby increasing earnings per share of profit. Study (Khryosh, 2003): This study aimed to measure the cash flows related to the market value of the shares of banks and financial establishments Jordanian contribution, that assumed a positive relationship between the net cash flows and market value in the long term and short term, the study used the simple regression equation to study the relationship and effect between variables of the study, the study results indicated that there were no statistically significant relationship between the market value per share and net cash flows. And the lack of a statistically significant relationship between the market value of the shares and the ratio of net cash flows to long-term or short-term liabilities, the study recommends more attention to their own financial indicators cash flow impact on the market value of the shares. Study (credited, 2001): This study aimed to test the relationship between market returns for shares accounting profit taking into account the size of the enterprise, through the study of the impact of each variable of variables representing the profit variable change in earnings per share and a variable level of per

share profits for the same that relationship through the charts. the study concluded for several results of the most important, that all of the variable capacity of earnings per share and a variable level of earnings per share does not explain more than 10% of the market returns, the study recommended to increase the profitability of companies and raise revenue shares. Study (Kamal & Others, 2010): This study aimed to identify the extent of the leverage effect of the policy dividend consisting of a sample of (403) is a company listed on the financial Karachi for the period 2002 - 2008, accounting for Leverage study by indebtedness, showed results of the study to leverage an impact on the dividend policy, on the other hand, the study showed that financial leverage has a negative impact of increased dividends.

### III. METHODOLOGY

The following are results of the study analysis that aimed to identify the impact of financial leverage on the market value of shares for service companies: School premise does not affect the leverage indicators on the market value of shares for service companies listed in Amman Stock exchange. Using both (the proportion of liabilities to total assets of the company and the ratio of total liabilities to equity) to express the financial performance of those service companies listed in Amman Stock Market. Multiple regression was applied to study the impact of financial leverage on the market value of shares, Table No. 1 illustrates this.

Table 1: The results of the application of multiple regression to examine the impact of the financial leverage indicators for companies on the market value of the shares

Statistical significance	F	R-square	R	Statistical significance	T	$\beta$	Variable
0.00	32.42	0.48	0.070	0.00	7.65	6.77	The proportion of liabilities to total assets of the company
				0.00	7.86	6.96	Ratio of total liabilities to equity

From above table that the value of (R) amounted to (0.070), a value that is statistically significant, which indicated that the function of correlation between the (independent variable) depending on the services sector, the value of (R-square) (0.48) which is a function value statistically explain the inability of financial performance indicators for companies to influence the market value, amounting to test the value of (F) (32.42), a statistically significant value at the significance level ( $\alpha = 0.05$ ), this indicates the presence of a statistically significant relationship between financial performance indicators for companies and the market value of the shares in the services sector.

### IV. CONCLUSION

After a statistical analysis which showing the presence effect of financial leverage indicators on the market value of shares for service companies listed in Amman Stock exchange.

### V. RECOMMENDATIONS

Based on the conclusions of this study, the researcher reached the requirement to provide specialized and experienced staff to interpret and understand financial indicators of assess (the strengths and weaknesses in the financial plans and policies governance) that enterprise level of performance which

makes investment decisions. Requirement to do further studies involving larger sample either to study or a longer period of time, to do a similar study on other financial markets in the Arab world to learn about the impact of the Finance leverage on the market value of the companies.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. *Abdul Rahman, Nomani Abdel Fattah*, (2003), "The impact on cash flows of market value of shares for Jordanian banks, joint-stock companies", Arab Journal of Administrative Sciences, Vol. 10, No. 1, S.51-Agliardi, *Elettra*.
2. *Amel-Zadeh, Amir. Koussis, Nicos*. (2016), Department of Economics, University of Bologna, Piazza Scaravilli, 2, Bologna 40126, Italy. Journal of Empirical Finance June 37: 37-58
3. *Alhamka, Hamza, and Jazrawi, Ibrahim Mohamed Ali*, (1998) "Financial Management surgery, analytical scientific approach to decision-making". Dar Al Safa, Oman:.
4. *Alipour, Mohammad. Pejman, Mohammad Ebrahim. Khalkhal Branch*, Islamic Azad University, Khalkhal, Iran. Global Economics and Management Review January-June 2015, 20(1): 6-14.
5. *Elsevier Antzoulatos, Angelos A. Koufopoulos, Kostas. Lambrinoudakis, Costas and Tsiritakis, Emmanuel*. Department of Banking and Financial Management, University of Piraeus, 80 Karaoli and Dimitriou St., Piraeus 185 34, Greece. "Capital Structure Convergence: The Role of Financial Development". Journal of Corporate Finance Dec 2014. Elsevier
6. *Attar, Rashad*, (2001), "Financial Management and Financial Analysis" i 1, Dar El Barka, Oman.
7. *Bhagat, Sanjai. Bolton, Brian*. a University of Colorado , United States. Journal of Banking and Finance October 2015 59:520-537. Elsevier
8. *Brigham, Weston*, "administrative funding" Translation: asymptomatic
9. *League, a supporter*,. (2006), "The Book of the financial analysis using a computer," second edition.
10. *Cakici, Nusret; Chatterjee, Sris; Topyan, Kudret* Pacific-Basin Finance Journal. Decomposition of book-to-market and the cross-section of returns for Chinese shares. 2015
11. *Clarke, M, seng, D. and Whiting, R.H.*(2011), "Intellectual Capital and firm Performance in Australia", available at: emerald.
12. *Choi, Jaewon. Richardson, Matthew*, (2016). Department of Finance, College of Business, University of Illinois, 515 E Gregory St., Champaign, IL 61820, United States. Journal of Financial Economics August 121(2): 254-277. Elsevier.
13. *Clarke, M, seng, D. and Whiting, R.H.* (2011), "Intellectual Capital and firm Performance in Australia", available at: emerald.
14. *Gitman, j. Lawrence*.(2003). principles of managerial finance. Tenth edition, Addison-wesley, inc.
15. *Hind, Munir Ibrahim*, (1997), "Financial Management: An Introduction analytical contemporary" i 3, the modern Arab Bureau, Alexandria.
16. *Kamal, Y, Aasia A, Waqas R* (2010) "Impact of finanancial leverage on dividend policy" Instiute of Management Sciences Hayatabad, Peshawar, Pakistan.
17. *Ramadan, Ziad*, (1996), "financial management in joint-stock companies" House of serenity, Oman.
18. *Saleh, a key*,, (2010). "The efficiency of the stock market requirements," the magazine researcher - Number 7, Mohammed Hadhar University, Biskra.
19. *Shakhathreh, Mamoun Yassin*. (2012). Factors affecting the market value of shares of Applied Study on the Amman Stock Exchange, Egyptian Journal of Commercial Studies - Egypt, vol 36, p.
20. *Vantage, a supporter*, (2001). "The impact of accounting profits on market returns for shares: An Empirical Study in. Iraq", Arab Journal of Accounting, Vol. 4, No. 1, p. 7
21. *Younis, Khalid Abdul Rahman*. (2011). "The impact of the application of the fair value of financial instruments accounting on stock returns", Faculty of Commerce - Accounting Department, the Islamic University.



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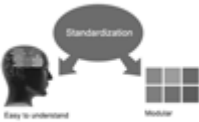




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- Numbering of First Main Headings (Heading 1) must be in Roman Letters, Capital Letter, and Font Size of 10.
- Numbering of Second Main Headings (Heading 2) must be in Alphabets, Italic, and Font Size of 10.

**You can use your own standard format also.**

### Author Guidelines:

1. General,
2. Ethical Guidelines,
3. Submission of Manuscripts,
4. Manuscript's Category,
5. Structure and Format of Manuscript,
6. After Acceptance.

### 1. GENERAL

Before submitting your research paper, one is advised to go through the details as mentioned in following heads. It will be beneficial, while peer reviewer justify your paper for publication.

### Scope

The Global Journals Inc. (US) welcome the submission of original paper, review paper, survey article relevant to the all the streams of Philosophy and knowledge. The Global Journals Inc. (US) is parental platform for Global Journal of Computer Science and Technology, Researches in Engineering, Medical Research, Science Frontier Research, Human Social Science, Management, and Business organization. The choice of specific field can be done otherwise as following in Abstracting and Indexing Page on this Website. As the all Global

Journals Inc. (US) are being abstracted and indexed (in process) by most of the reputed organizations. Topics of only narrow interest will not be accepted unless they have wider potential or consequences.

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- 2) Drafting the paper and revising it critically regarding important academic content.
- 3) Final approval of the version of the paper to be published.

All authors should have been credited according to their appropriate contribution in research activity and preparing paper. Contributors who do not match the criteria as authors may be mentioned under Acknowledgement.

Acknowledgements: Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

**Appeal of Decision: The Editorial Board's decision on publication of the paper is final and cannot be appealed elsewhere.**

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## 3. SUBMISSION OF MANUSCRIPTS

Manuscripts should be uploaded via this online submission page. The online submission is most efficient method for submission of papers, as it enables rapid distribution of manuscripts and consequently speeds up the review procedure. It also enables authors to know the status of their own manuscripts by emailing us. Complete instructions for submitting a paper is available below.

Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.





To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

Complete support for both authors and co-author is provided.

#### 4. MANUSCRIPT'S CATEGORY

Based on potential and nature, the manuscript can be categorized under the following heads:

Original research paper: Such papers are reports of high-level significant original research work.

Review papers: These are concise, significant but helpful and decisive topics for young researchers.

Research articles: These are handled with small investigation and applications

Research letters: The letters are small and concise comments on previously published matters.

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The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also. Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

**Papers:** These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

(a) Title should be relevant and commensurate with the theme of the paper.

(b) A brief Summary, "Abstract" (less than 150 words) containing the major results and conclusions.

(c) Up to ten keywords, that precisely identifies the paper's subject, purpose, and focus.

(d) An Introduction, giving necessary background excluding subheadings; objectives must be clearly declared.

(e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition; sources of information must be given and numerical methods must be specified by reference, unless non-standard.

(f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;

(g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.

(h) Brief Acknowledgements.

(i) References in the proper form.

Authors should very cautiously consider the preparation of papers to ensure that they communicate efficiently. Papers are much more likely to be accepted, if they are cautiously designed and laid out, contain few or no errors, are summarizing, and be conventional to the approach and instructions. They will in addition, be published with much less delays than those that require much technical and editorial correction.



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It is vital, that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

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*Language: The language of publication is UK English. Authors, for whom English is a second language, must have their manuscript efficiently edited by an English-speaking person before submission to make sure that, the English is of high excellence. It is preferable, that manuscripts should be professionally edited.*

Standard Usage, Abbreviations, and Units: Spelling and hyphenation should be conventional to The Concise Oxford English Dictionary. Statistics and measurements should at all times be given in figures, e.g. 16 min, except for when the number begins a sentence. When the number does not refer to a unit of measurement it should be spelt in full unless, it is 160 or greater.

Abbreviations supposed to be used carefully. The abbreviated name or expression is supposed to be cited in full at first usage, followed by the conventional abbreviation in parentheses.

Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than  $1.4 \times 10^{-3} \text{ m}^3$ , or 4 mm somewhat than  $4 \times 10^{-3} \text{ m}$ . Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

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### Optimizing Abstract for Search Engines

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A major linchpin in research work for the writing research paper is the keyword search, which one will employ to find both library and Internet resources.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy and planning a list of possible keywords and phrases to try.

Search engines for most searches, use Boolean searching, which is somewhat different from Internet searches. The Boolean search uses "operators," words (and, or, not, and near) that enable you to expand or narrow your affords. Tips for research paper while preparing research paper are very helpful guideline of research paper.

Choice of key words is first tool of tips to write research paper. Research paper writing is an art. A few tips for deciding as strategically as possible about keyword search:



- One should start brainstorming lists of possible keywords before even begin searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in research paper?" Then consider synonyms for the important words.
- It may take the discovery of only one relevant paper to let steer in the right keyword direction because in most databases, the keywords under which a research paper is abstracted are listed with the paper.
- One should avoid outdated words.

Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

Numerical Methods: Numerical methods used should be clear and, where appropriate, supported by references.

*Acknowledgements: Please make these as concise as possible.*

#### References

References follow the Harvard scheme of referencing. References in the text should cite the authors' names followed by the time of their publication, unless there are three or more authors when simply the first author's name is quoted followed by et al. unpublished work has to only be cited where necessary, and only in the text. Copies of references in press in other journals have to be supplied with submitted typescripts. It is necessary that all citations and references be carefully checked before submission, as mistakes or omissions will cause delays.

References to information on the World Wide Web can be given, but only if the information is available without charge to readers on an official site. Wikipedia and Similar websites are not allowed where anyone can change the information. Authors will be asked to make available electronic copies of the cited information for inclusion on the Global Journals Inc. (US) homepage at the judgment of the Editorial Board.

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Acrobat Reader will be required in order to read this file. This software can be downloaded

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**1. Choosing the topic:** In most cases, the topic is searched by the interest of author but it can be also suggested by the guides. You can have several topics and then you can judge that in which topic or subject you are finding yourself most comfortable. This can be done by asking several questions to yourself, like Will I be able to carry our search in this area? Will I find all necessary recourses to accomplish the search? Will I be able to find all information in this field area? If the answer of these types of questions will be "Yes" then you can choose that topic. In most of the cases, you may have to conduct the surveys and have to visit several places because this field is related to Computer Science and Information Technology. Also, you may have to do a lot of work to find all rise and falls regarding the various data of that subject. Sometimes, detailed information plays a vital role, instead of short information.

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**3. Think Like Evaluators:** If you are in a confusion or getting demotivated that your paper will be accepted by evaluators or not, then think and try to evaluate your paper like an Evaluator. Try to understand that what an evaluator wants in your research paper and automatically you will have your answer.

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**5. Ask your Guides:** If you are having any difficulty in your research, then do not hesitate to share your difficulty to your guide (if you have any). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work then ask the supervisor to help you with the alternative. He might also provide you the list of essential readings.

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**15. Use of direct quotes:** When you do research relevant to literature, history or current affairs then use of quotes become essential but if study is relevant to science then use of quotes is not preferable.

**16. Use proper verb tense:** Use proper verb tenses in your paper. Use past tense, to present those events that happened. Use present tense to indicate events that are going on. Use future tense to indicate future happening events. Use of improper and wrong tenses will confuse the evaluator. Avoid the sentences that are incomplete.

**17. Never use online paper:** If you are getting any paper on Internet, then never use it as your research paper because it might be possible that evaluator has already seen it or maybe it is outdated version.

**18. Pick a good study spot:** To do your research studies always try to pick a spot, which is quiet. Every spot is not for studies. Spot that suits you choose it and proceed further.

**19. Know what you know:** Always try to know, what you know by making objectives. Else, you will be confused and cannot achieve your target.

**20. Use good quality grammar:** Always use a good quality grammar and use words that will throw positive impact on evaluator. Use of good quality grammar does not mean to use tough words, that for each word the evaluator has to go through dictionary. Do not start sentence with a conjunction. Do not fragment sentences. Eliminate one-word sentences. Ignore passive voice. Do not ever use a big word when a diminutive one would suffice. Verbs have to be in agreement with their subjects. Prepositions are not expressions to finish sentences with. It is incorrect to ever divide an infinitive. Avoid clichés like the disease. Also, always shun irritating alliteration. Use language that is simple and straight forward. put together a neat summary.

**21. Arrangement of information:** Each section of the main body should start with an opening sentence and there should be a changeover at the end of the section. Give only valid and powerful arguments to your topic. You may also maintain your arguments with records.

**22. Never start in last minute:** Always start at right time and give enough time to research work. Leaving everything to the last minute will degrade your paper and spoil your work.

**23. Multitasking in research is not good:** Doing several things at the same time proves bad habit in case of research activity. Research is an area, where everything has a particular time slot. Divide your research work in parts and do particular part in particular time slot.

**24. Never copy others' work:** Never copy others' work and give it your name because if evaluator has seen it anywhere you will be in trouble.

**25. Take proper rest and food:** No matter how many hours you spend for your research activity, if you are not taking care of your health then all your efforts will be in vain. For a quality research, study is must, and this can be done by taking proper rest and food.

**26. Go for seminars:** Attend seminars if the topic is relevant to your research area. Utilize all your resources.



**27. Refresh your mind after intervals:** Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

**28. Make colleagues:** Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

**29. Think technically:** Always think technically. If anything happens, then search its reasons, its benefits, and demerits.

**30. Think and then print:** When you will go to print your paper, notice that tables are not be split, headings are not detached from their descriptions, and page sequence is maintained.

**31. Adding unnecessary information:** Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

**32. Never oversimplify everything:** To add material in your research paper, never go for oversimplification. This will definitely irritate the evaluator. Be more or less specific. Also too, by no means, ever use rhythmic redundancies. Contractions aren't essential and shouldn't be there used. Comparisons are as terrible as clichés. Give up ampersands and abbreviations, and so on. Remove commas, that are, not necessary. Parenthetical words however should be together with this in commas. Understatement is all the time the complete best way to put onward earth-shaking thoughts. Give a detailed literary review.

**33. Report concluded results:** Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

**34. After conclusion:** Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print to the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects in your research.

## INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

### Key points to remember:

- Submit all work in its final form.
- Write your paper in the form, which is presented in the guidelines using the template.
- Please note the criterion for grading the final paper by peer-reviewers.

### Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.



Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

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Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear

- Adhere to recommended page limits

Mistakes to evade

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- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

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- Keep on paying attention on the research topic of the paper
- Use paragraphs to split each significant point (excluding for the abstract)
- Align the primary line of each section
- Present your points in sound order
- Use present tense to report well accepted
- Use past tense to describe specific results
- Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives
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Choose a revealing title. It should be short. It should not have non-standard acronyms or abbreviations. It should not exceed two printed lines. It should include the name(s) and address (es) of all authors.



## Abstract:

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript-- must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing references at this point.

An abstract is a brief distinct paragraph summary of finished work or work in development. In a minute or less a reviewer can be taught the foundation behind the study, common approach to the problem, relevant results, and significant conclusions or new questions.

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- Reason of the study - theory, overall issue, purpose
- Fundamental goal
- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

## Approach:

- Single section, and succinct
- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

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The **Introduction** should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

## Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.



- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

#### **Procedures (Methods and Materials):**

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

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- Explain materials individually only if the study is so complex that it saves liberty this way.
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- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

#### **Methods:**

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

#### **Approach:**

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

#### **What to keep away from**

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

#### **Results:**

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.





## Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

### What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

### Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

### Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

### Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a argument should be. Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly described. Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved with prospect, and let it drop at that.

- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

### Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.



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<i>Methods and Procedures</i>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
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<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



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