

## Global Journal of Management and Business Research: A Administration and Management

Volume 23 Issue 1 Version 1.0 Year 2023

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

## The Implementation of an Integrated Information System in the Company: From Option to Obligation for Efficient and Effective Management

By Maria Silvia Avi

Abstract- Business management requires, irrespective of the company's size, the implementation of an information system that enables managers to implement a decision-making process leading to the maximisation of efficiency and income, financial and production effectiveness.

The integrated information system identifies a system in which each part and each accounting item interacts with all the other system cells. This prevents overlaps and gaps that inevitably lead to the construction of unnecessary and costly superstructures or to create a system that does not cover every information need of the company's internal user.

The integrated information system overcomes these problems and guarantees disseminating valuable information to the end-user and not overstructured concerning his information needs. Moreover, precisely because of its structure, such a system also prevents parts of these needs from being overlooked or from being filled by communication elements with no real informative substance.

GJMBR-A Classification: DDC Code: 658.4038011 LCC Code: T58.6



Strictly as per the compliance and regulations of:



© 2023. Maria Silvia Avi. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BYNCND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at https://creativecommons.org/licenses/by-nc-nd/4.0/.

## The Implementation of an Integrated Information System in the Company: From Option to Obligation for Efficient and Effective Management

Maria Silvia Avi

Abstract- Business management requires, irrespective of the company's size, the implementation of an information system that enables managers to implement a decision-making process leading to the maximisation of efficiency and income, financial and production effectiveness.

The integrated information system identifies a system in which each part and each accounting item interacts with all the other system cells. This prevents overlaps and gaps that inevitably lead to the construction of unnecessary and costly superstructures or to create a system that does not cover every information need of the company's internal user.

The integrated information system overcomes these problems and guarantees disseminating valuable information to the end-user and not overstructured concerning his information needs. Moreover, precisely because of its structure, such a system also prevents parts of these needs from being overlooked or from being filled by communication elements with no real informative substance.

1) The Integrated Information System. Introductory Considerations

wrote this article in response to a twofold need expressed by many companies, both large and small. First, in companies, there is often a coexistence of two requirements that can summarise in the terms "simplification" and "exhaustiveness".

Business efficiency requires that analysis and management tools do not represent a useless, costly and, consequently, counterproductive superstructure. As they say in the jargon, 'turning over cards' does not mean informing. Creating an extremely complex 'information monster', both to manage understand, means causing direct and economic damage to the company. Directly, the damage is measured by quantifying the out-of-pocket costs that must necessarily learn to create and maintain such a structure. Indirect costs, however, are the most insidious and dangerous. Anyone who deals with information knows perfectly well the fundamental that too much information disinformation. The same concept can be applied to the issue at hand. Suppose ten elements of knowledge are sufficient to make a decision. In that case, providing the

Author: Full Professor in Business Administration Management Department- Ca'Foscari Venezia S. Giobbe – Cannaregio, Venezia (Italy). e-mail: avi@unive.it user with 20,000 pieces of information not only does not guarantee a better decision-making process but, on the contrary, probably causes the exact opposite of what is desired. The ten elements 'hidden' in the 20,000 cannot, in all likelihood, be identified in an agile and correct way, with the consequence that the decision will be taken without the necessary information support that, on the contrary, a rigorous selection of the data would have allowed.

This principle applies in all situations. In medium-small business structures, the "sorting" element of the information to be produced and supplied is vital because, on the one hand, the direct cost of creating/managing an over-dimensioned system would cause a crash at the economic level and, on the other hand, because, often, the management - overburdened by tasks of various kinds inherent in the fact that, on the other hand, because management - overburdened by multiple tasks related to the fact that, frequently, operating in a medium-small size also means sharing many organisational functions - identifies in principle "little information but good" an inescapable concept so that the company management can be efficient and effective both at economical/income and financial/asset level. In large companies, it is even more important to providing unnecessary and/or information compared to the real needs of individual since the increase in management complexity inevitably implies an increase in the need for knowledge and, consequently, in the information set that company management must receive. The correct management of a very structured collection of information is, in itself, complex. Still, it becomes almost impossible if the data useful for decision-making are aggregates/indices included in a structure of /flows/values that has a lot of irrelevant information.

Therefore, the need to have targeted, specific and beneficial information is present both in small and medium-sized enterprises and large companies.

The vital need to have only essential information (not accompanied by a series of other communications, which are essentially useless from a decision-making and management point of view) must be combined with the need to count on complete and exhaustive information tools. Every company increasingly perceives the need to be able to rely on elements and information that cover, in an integral manner, the cognitive needs that are indispensable for the decision-making process to be conducted rationally and in such a way as to ensure the maximisation of efficiency and effectiveness, both in terms of income and in financial terms.

There is often dangerous practice of reducing the complexity of management analysis by eliminating, almost indiscriminately, values, data, quotients, aggregations, etc., to render the study itself essentially useless. The excessive simplification and the drastic reduction of the data to be analysed, carried out to "streamline" the information system, cause the implementation of a system that is not suitable for the decision-making process to improve and to be able to guarantee the maximisation of management efficiency and effectiveness.

The need to avoid creating oversized structures and the consequent need to develop information systems suited to the specific size of the company should not lead to the belief that, especially in SMEs, due to their small size, companies can be "satisfied" with determining little data, simple in calculation and interpretation. The idea that medium-sized and small companies can nowadays afford to use crude, incomplete, imperfect and non-exhaustive management tools is not only wrong but particularly dangerous.

Avoiding the creation of unnecessary overstructures does not mean, therefore, giving up having a complete and exhaustive management analysis system.

The accuracy with which a system is implemented has a considerable impact on the rationality and correctness of the management's decision-making capacity, whether it operates in SMEs or in large companies.

The selection, combined with the completeness of the data/indices/values to be used in the decisionmaking process, is the necessary but not sufficient condition for maximising the company's effectiveness and economic/financial efficiency.

Management always wants to have a tool in which the starting point of the analysis is obvious. In a similarly intelligible manner, the individual steps necessary to follow are identified so that the information can improve the decision-making process.

Understanding where to start, what to do in the process, and the endpoint of the information process is indispensable for the decision-maker to make full use of the data pool that the proposed system provides to the manager.

In the following pages, we will deal with the three points mentioned above in a synthetic way to provide all readers with the interpretative key that allows implementation of an integrated information system

created, taking into account the particular cognitive needs of SMEs and large companies.

In highly synthetic terms, and valid only to make sense of the broad analysis that will develop in the following pages, these simple and, only apparently, can underline banal considerations:

- 1) the management perceives global economic/financial information need, it is necessary that the analysis foresees, as a first compulsory step, the in-depth, analytical and exhaustive study of the income and monetary/financial situation of the company at the moment in which one starts this business investigation. Pretending to implement control/analysis/research systems that relate to the future without understanding the company's strengths and weaknesses that can be identified when the examination begins is simply absurd and, what is more, dangerous. Fantastic because the thought of planning for the future without knowledge of the present appears, in all evidence, to be an unfeasible operation. Dangerous because attempting such an operation could lead to the unintentional creation of income and/or financial crashes that could potentially cause situations that are very difficult to recover from. Therefore, the starting point must necessarily be the development of a complete analysis of the company's income, financial and monetary situation, carried out on final data as close as possible to the moment in which management analysis and implementation of the integrated analysis system begins.
- After having understood the initial company situation, it is necessary, first of all, to understand "compulsory" nature of formalising a management control system. In general, one often hears it said that there is always some planning in the entrepreneur's mind even in the absence of a formal structured system. However, the complexity of today's economy also requires a formalisation of the objectives that the company wants to achieve. Therefore, in this programming phase, can generally identify two problems:
  - a) The first "impasse" may be related to the tendency that every human being develops novelty. towards Introducing control/programming/analysis system frequently comes up against the idea that "since it has gone well up to now, there is no reason to change...". The task of top management is certainly to make all employees understand that, at present, even in small and mediumsized enterprises, analysis, planning and indepth analysis of the company's areas of strength and weakness are necessary but not sufficient condition for the company to continue to thrive. Necessary because, without it,

everything is left to improvisation, which is very dangerous in times of solid market turbulence. Not sufficient because the company does not produce cash flows and income just because there is a system of planning and analysis. The company thrives because it is the result of a winning business idea. However, the absence of final analysis of data, severe planning and an understanding of the reasons that led to achieving results other than those set can undermine the solidity of a company, even if it is potentially successful.

- b) The second problem may, on the other hand, be related to the lack of understanding of the various logical steps that must, appropriately, be followed in the economic/financial planning phase. In fact, in many companies, the need for analysis, both final and preventive, is perceived, but the logical path is unclear. Planning is a jigsaw puzzle that must construct according to precise logic. Failure to follow the right approach can invalidate the planning itself. This is why, in the following chapters, we will identify, in a comprehensive but straightforward way, the sequence of operations that the implementation of a planning system requires.
- c) After having identified, on the one hand, the starting point of the analysis/depth analysis of the economic/financial situation and, on the other hand, the sequence of steps to be followed to build an effective and efficient planning model, it is necessary, to achieve useful information results, to have very clear in mind what the "endpoint" of the system is. In other words, it is essential to clarify, ex-ante, the natural and inevitably complex objective of the entire integrated analysis system. In this text, the goal will be to create an information help management "structure" that can understand the company's economic/financial situation, both in global and analytical terms. Anyone who reads the following chapters will easily understand the need for the system to be structured in such a way as to analyse, in all their facets, the various management segments of the company. However, there is nothing to prevent the reader from considering structuring an information system that, although integrated, is smaller in size than that provided for in the The particular configuration organisation of the following paragraphs will enable everyone to identify the areas of most significant interest. Consequently, it will allow the reader, if he/she deems it appropriate, to implement an information "micro-system" that, while identifying only a part of what could be

achieved, configures a set of data with its coherence and logic.

At the end of the process, it is necessary to understand what results the company fully has achieved in terms of final data.

As will be seen in the following chapters, this phase of "understanding" the values achieved expost requires two distinct moments characterised by equal relevance and operational dignity:

- a) if we are at the end of the financial year N and, concerning this administrative period, planning (partial or total, carried out in the last weeks of the administrative period N-1) has been carried out, it is first of all necessary to make a comparison between the objectives achieved at the end of the financial year N and the targets planned for the same financial year. The comparison between what we wanted to achieve and what we performed is necessary to understand the company's health. It is evident that, without a phase of comparison with the set objectives, the analysis of the final results achieved after implementing a management control process remains incomplete. Therefore, the comparison between planned and actual data is a crucial phase in analysing company data, without which, in reality, the results achieved remain without a specific in-depth analysis of the management's fundamental ability to complete the set targets. As you will see in the following pages, the comparison, practical and useful, must be carried out in terms of synthetic corporate values and analytical data concerning individual financial reporting items. The analysis of identifiable variations between planned and actual data, therefore, requires two levels of study. First, it is necessary to consider macro-aggregates and summary quotients/flows. It is only appropriate to examine the data in terms of individual costs and revenues (this comparison is generally referred to as "analysis of variations"). Combining the two examinations (synthetic and analytical) ensures an understanding of why the actual results are equal to or different from the planned values.
- b) Secondly, it is essential to compare the two latest sets of final data in the company's possession. To understand the company's reality, it is "compulsory" to understand the variances created between the absolute values of the last financial year closed (financial year N) and the financial reporting data of the previous financial period. Understanding the temporal trend of the data relating to the closing of the accounts is extremely useful to give the

company management the desired direction. It is advisable to carry out this temporal analysis of the final data only on the overall financial reporting values and quotients/flows concerning the company. Comparing individual costs and revenues and their components in the intertemporal analysis of actual values does not make much sense unless the planning phase is absent in small and medium-sized companies. In such a case, the comparison of data determined at the end of administrative periods is the only instrument for in-depth management analysis. Only in this hypothesis, the splitting, as far as possible in the absence of planning, of costs and revenues with consequent analysis of the individual variations can be considered valid.

Analysis of the Income and Financial Situation from which the Company is Starting Out: Preparation of Final Financial Reporting Values

The macro and micro structuring subsequent implementation of an information system adapted to the needs of individual companies require the clarification of some banal considerations which, in reality, represent the sine qua non-conditions so that the in-depth analysis of the company situation is not redundant or, on the contrary, too synthetic/simplified.

Very often, one reads studies with rather extravagant names which aim, according to them, to develop innovative research in the field profitability/financial analysis.

The writer is perplexed by applications/studies /analyses that, with often foreign terms, strike the imagination of the reader/manager by hypothesising excellent results in terms of information.

The innovation of tools for in-depth analysis of the company's income and financial situation must, of necessity, be the subject of continuous development and improvement. In our opinion, however, very often, this constant optimisation passes through simple and, apparently, banal considerations that only pure marketing necessities transform into 'remarkable changes to what already exists.

Loaic. combined with simplicity, associated, on the one hand, with crystal-clear clarity of the results to be achieved and, on the other, with perfect knowledge of the accounting tool to be studied, leads to excellent results without having to resort to an exhausting search for new "names" to give to agencies which, when seen in reality, represent only the "traditional" cleverly disguised as an "innovative tool that guarantees results never achieved before".

The manager needs tools to understand the company's income and financial situation. This must be for apparent reasons, efficiently achieved,

effectively, i.e. by minimising costs and maximising the results/benefits obtained from the analysis.

The analysis, seen in these terms, is deepened as if it represented, for example, the goal of production/sales by the company.

Every manager understands that the company aims to maximise income from the business in the long term. If a company produces chocolates, everyone believes that the product should be manufactured and marketed in the quest to minimise costs and maximise results (economic, financial and market).

The analysis of accounting data should be treated as if it were a company product. The maximisation of the gap between costs, direct and indirect, incurred to implement/use the information system and the advantages/results obtained as a result of the latter's implementation must be a vital objective of those who are about to implement an analysis /programming system.

To maximise financial reporting data's communicative informative and effectiveness, companies must adopt an integrated analysis system.

An analysis scheme can be defined as "integrated" when it forms a whole system. In this regard, it should be remembered that the concept of a system is based on the interrelation of several elements. Only in the presence of this interconnection is it possible to speak of an analysis system. The system will have a further connotation of "integration" when, in addition to the existence of a correlation expressible in substantial terms, an interconnection of a "terminological" nature can also be identified among the various elements. In order to provide a complete, exhaustive and, above all, comprehensible picture of the company's situation, there must, therefore, be a real conceptual integration at the level of substance and form.

From a substantive point of view, integration must be developed because only in the presence of such a characteristic can the conceptual scheme of analysis cover every area that requires further investigation. Formal integration is indispensable if the results of the study are to be understood and communicated effectively. The use, for example, of the same terms identifying similar concepts appears to be an indispensable element if the analysis is to be understandable to all those for whom it is intended. Using different words to identify other ideas is equally crucial for the correct understanding of the results obtained from the analysis of accounting data.

Integration, therefore, means the construction of a unitary scheme that permeates each step of the analysis.

As is well known, the analysis of management data, both actual and planned, uses a set of indispensable tools: financial/asset and income indicators, re-grouping of financial statements, reclassification of budgets (general and operational) of the company, financial flows, intermediate income values such as margins, etc...

Adopting an integrated analysis system implies a necessary correlation, both substantial and formal, between all the aforementioned tools. Each operational phase of the information system must be interconnected with the previous and the following one.

The output documents of the planning must be able to "talk" with the final balance sheet and profit and loss account, the aggregations must be inter-related both formally and substantively, and finally, the microaggregates determined in the course of the business analysis must necessarily be able to be correlated both with the output of the planning and with the result of the final statement of values.

The use of an integrated analysis system makes it possible to develop a management tool for studies, data collection and programming characterised by a substantial uniformity of vocabulary and substance.

The implementation of an integrated system prevents two conceptually different data from being given the same name or, conversely, two substantially identical aggregates from having other terminological qualifications.

The final analysis must form a continuum with the programming phase, just as the programming results must be closely correlated with the final output. Only by acting in this way is it possible to create a system of analysis that is truly useful to businesses. In other words, a system whose income impact in terms of costs (direct and indirect) has a reason to exist in the light of the "information and management" results achieved.

This part of the work is specifically dedicated to an in-depth examination of the company's income and financial/asset situation. In a correct, exhaustive and analytical way, the condition in which the company operates when a system of analysis is implemented represents a sine qua non-condition so that the entrepreneurial management can maximise efficiency and effectiveness in both the financial and income spheres.

Analysing, appropriately, the final data of the last available financial reporting or, better, carrying out an in-depth study of the previous approved financial statements (it is advisable always to carry out the analysis on at least five financial statements) is the necessary condition, even if not sufficient, for the management to make rational decisions and be fully aware of the impact that these actions will cause both financially and in terms of profitability.

Knowing how to carry out a correct financial reporting analysis is often considered an "obsolete" operation, and, consequently, everything related to this information system is dangerously undervalued.

Often, commercial reasons lead to creating tools that implicitly place the analysis of financial reporting as an element of secondary importance in the company's information environment.

Nothing can be more deviant and dangerous. The lack of a proper analysis of final data inevitably prevents the creation of an information system that helps to improve the decision-making process of managers.

Knowledge of the strengths and weaknesses of the "starting point" appears to be an indispensable element to develop all the subsequent steps (planning, control, etc.) appropriately.

The analysis of financial reporting or, as has already been pointed out, of the latest financial statements (studying the trend of values is more significant than dwelling on the precise data of a single financial year) can never be considered an "outdated" or "obsolete" step or, worse still, "replaceable with more refined tools".

We can study every value through various "magnifying glasses", and everyone must improve the classic tools of study. Under no circumstances can the analysis of final balance sheets be replaced by other information tools.

The task of scholars is to improve the information system output of the analysis, not to identify means that would suppress it or make it practically unusable because of the superficiality with which the study is carried out.

At this point, should make a further observation regarding the correct use of the tools for analysing the company's final data, summarised in financial reporting. For "didactic" reasons and the sake of clarity, the following pages will illustrate the various indicators, aggregates, flows, and intermediate values that are indispensable for "sequential" analysis of the company's income and financial/asset situation. Each helpful element for the investigation will be analysed analytically, separately from the other indicators. In each part of this work, the correlations that can identify between the various aggregates and values will be highlighted, but, for communication purposes and to make any consideration made regarding the various aggregates/indices/flows easily understandable, the explanation of the various analysis tools will have to be made individually. And this, not because we should study each element separately from the others, but only because the simultaneous systemic explanation of all the indicators would make the comprehension of the logic of construction/interpretation of the specific data extremely complex. The analytical description of each index/date/flow/aggregate individually serves, therefore, exclusively, to communicate, in a clear way, the meaning of the value under study. After this logical/didactic step, it will therefore be easy for anyone to understand all the connections that can identify

between the different accounting determinations. These inter-connections will be particularly highlighted to facilitate the implementation of a truly integrated information system from the point of view of technical construction and correct global interpretation.

The following pages will examine operational phases for constructing the integrated financial/revenue analysis/programming system d in detail. As a preliminary remark, some observations should be highlighted, which will subsequently be the subject of further in-depth analysis:

- First of all, it must bear in mind that each index/flow requires a prior reclassification of the values. As will be pointed out in the following paragraph, such a reclassification is not a mere automatic operation to be delegated to inexperienced persons since any reclassification error may render the calculated indicators meaningless or, in the worst case, with values precisely opposite to the real ones.
- Secondly, it must be understood how distinguishing between income and financial ratios represents a mere illustration of the complexity of interpretation of the various indicators used to analyse financial reporting data. Most indicators are characterised by the coexistence of an "economic" side and a "financial" side. Even in this case, the separation is made only for "didactic" communication of the instruments. The inter-connections and the various facets of the data calculated based costs/revenues/assets/equity can only be fully understood after understanding the logic of index construction. This initial, admittedly improper separation is helpful to help understand the more obvious elements of the data and aggregates. The understanding of the indexes/flows/aggregates can only occur after having carried out this first step of the study, which, due to the characteristics indicated above, identifies a necessary but not sufficient action. The knowledge of the most evident elements of the data calculated based on the financial reporting values serves to mentally construct that integrated system which, to be effective, after having been explained and been built in an unexceptionable manner, must also permeate the analyst's mind to make possible and logical the correlation between indicator/flow/aggregate and all the others.
- Thirdly, it is necessary to point out an obvious consideration that is often underestimated. The financial reporting being examined must reflect the business reality that it is intended to summarise in economic and financial values. If the analysis is carried out on untrue financial statements, it is evident that the results are unreliable. This consideration may be considered trivial and superfluous. To assume that analysing false

financial reporting is an absurd operation seems to identify the obvious. In reality, the above reflection captures an element of the analysis that is often underestimated due to the lack of consideration of a particular accounting "distortion" that is very frequent in Italian companies. This is not the right place to deal in depth with the integrity of financial reporting.

To make correct considerations regarding the analysis of financial reporting, it is necessary to underline, in a particularly marked manner, how the investigation leads to significant results only if the data subject to analysis reflect the company's reality. Financial reporting, as is well known, must be drawn up following the provisions of legal regulations supplemented by national international accounting standards. The distinction between national standards, IAS/IFRS standards and US GAAP standards (to mention the most widespread international and national standards) makes it clear that the identification of a truth, even a "relative" truth (the absolute truth, in financial reporting, cannot exist by definition), is far from being achieved. Given these differentiations, even approaching the "truth" appears to be a complicated operation. However, the complexity of such a conceptual operation does not prevent us from hypothesising the possibility of drawing up truthful financial reporting insofar as it complies with the (national or international) "accounting standards". One can argue about the appropriateness of using one set of accounting standards rather than another; one can identify gaps and inaccuracies in the various "sets" of accounting standards; one can even identify errors in certain documents drawn up by national and international boards, but, regardless of all this, one can never conclude that such considerations make it advisable not to apply the standards themselves. Accounting standards, whether national, international or country-specific (e.g. US GAAP), represent an element that, although marked by potential or actual limitations, is indispensable for preparing financial reporting characterised by truthfulness and factual correctness.

Non-application of the accounting standards must be motivated by exceptional circumstances that apply generally accepted and customarily suggested rules to company preparers of financial statements inappropriate.

A very relevant element concerns the potential presence of tax values without income content in financial reporting.

Each country has different regulations, but the element that should distinguish all financial statements is that, according to various methodologies, all users outside the company should determine the income actually and economically produced by the company. Suppose this value is derived from the summation of data without economic content (such as tax values without income substance). In that case, the information deducible from financial reporting will be misleading as well as manifestly incorrect.

Therefore, the statutory income statement and balance sheet must show, either exclusively or depending on the various countries' regulations, amounts with accurate economic content.

On the other hand, for tax or other reasons, items with no economic content and only a tax value are included in the financial reporting. This creates the conditions for a decision-making process that is misled by incorrect data. This decision-making process can affect both internal managers and external parties.

If tax accounting entries without any economic content are present in financial reporting, three types of consequences occur, which can be summarised as follows:

- a) Consequences of an Informative Nature Towards the Outside World: Financial reporting prepared based on tax values do not reflect the economic-financial reality of the company. Communication to the outside world is therefore distorted with the consequence that users (e.g. company creditors, shareholders, workers, lenders, etc.), for whom financial reporting represents the only element of information about the company, have at their disposal data that fail to illustrate the reality of the economic entity to which they refer. Therefore, the ultimate consequence is that people outside the company are forced to make decisions based on values that do not reflect the reality of the business in which they are interested.
- b) Consequences of a Legal Nature: The inclusion, in financial reporting, of values without economic content entails the non-compliance with the truthfulness postulate imposed by Article 2423 of the Italian Civil Code. As we have pointed out in the previous pages, untruthful financial reporting is illegitimate financial reporting. Since the invalidity is related to content defects, the relevant approval resolution must be considered radically null and void. The recognition in the accounts (the results of which are reflected in the financial reporting for the financial year) of amounts with no economic content therefore undoubtedly creates the conditions for the financial reporting within which such accounts have been recognised to be considered untrue. This is the case both if the recognition of a tax value in financial reporting results in an overstatement of income and the opposite hypothesis.

If an expense of 100 is recognised in financial reporting when there is a negative "real" income of 110, everyone would agree that the gain (or loss) has been overstated (or understated) because there is no negative value of 10 in the income statement (think, for example, of black purchases with no transit through the income statement). In stating this, implicitly, the untruthfulness of the profit and/or loss recorded in the accounts is highlighted and, it seems to us to be able to affirm that, to the ascertainment of overvaluation of income, must, necessarily, lead to a declaration of invalidity of the financial reporting.

It is assumed that everyone would agree that financial reporting is unlawful to even in the opposite case. In the hypothesis, the "real" cost is lower than the cost recorded in the income statement. In such a case, the income reported would be underestimated because the costs recorded in financial reporting, at least partially, would not identify any input but would represent, exclusively, entries without economic content. Also, in this hypothesis, the writer assumes that everyone would agree in considering financial reporting null and void.

The reason why the financial reporting preparer includes in the income statement a non-existent cost or does not record an economically correct cost does not affect the assessment of the illegality of financial reporting.

It does not seem possible to "graduate" the reasons why an existing cost is not recognised or a nonexistent value is recognised in the accounts. The "justifications" underlying the erroneous recognition can, at most, be taken into account when addressing the issue of the criminal relevance of the invalidity. In the context of criminal misrepresentation in financial reporting, the aspect of justification is, in fact, of legal importance. This is not the case concerning civil law illegality. Untrue financial reporting is unlawful financial reporting. More specifically, it is "null and void" financial reporting insofar as it infringes on the information rights of the community outside the company.

If the reader agrees with the above statements, he must also accept the considerations that must develop regarding the consequences of such accounting behaviour. If, on the one hand, the recognition of a non-existent cost or the non-recognition of a "real" cost identify, without a shadow of a doubt, causes of invalidity of financial reporting, on the other hand, it is hard to see how a document could be considered valid and, therefore, truthful, in which exactly this occurs following the "import" of tax values that have nothing to do with "economically correct" costs and revenues.

c) Information Consequences within the Company: Considering the theme of this work, it is appropriate to focus on this issue, leaving readers interested in the other topics set out in points A and B, the burden of deepening, in specific texts, the legal and jurisprudential issues.

Regarding the repercussions the management's decision-making process of the inclusion in financial reporting of tax values that are distorted concerning reality, it should be remembered that, in most cases, general accounting values are taken as a basis for identifying useful data for management control purposes. It is clear that the use of incorrectly determining costs (which, as a result, may be higher or lower than the economically correct ones) leads, on the one hand, to a financial reporting analysis that provides results and outputs that are completely distorted compared to the "real" company situation and, on the other hand, prevents the implementation of policies that allow the achievement of the objectives of the control system which are identified, essentially, in the maximisation of management efficiency and effectiveness. In this area of "consequences", the victims are precisely the company managers who determine indices, flows, aggregates, various indicators, costs and product returns based on incorrect values. Hoping that the reader will forgive the subsequent analogy, it can be said that this behaviour brings to mind those individuals who, from within the company, subject financial reporting to an in-depth analysis using indicators in the full knowledge that the document submitted for examination does not contain, for example, data on sales made 'off the books'. Even in this field, the consequences can be detrimental because deciding based on values that, economically, do not reflect the truth means taking as a reference point data that, potentially, can be misleading and wrong.

Leaving aside all legal considerations, it is clear that the preparation and subsequent analysis of false financial reporting lead to decisions that are not in line with the reality under investigation. It is clear that the more the data included in the financial reporting are different from the economically correct values, the more the results of the management analysis (and management control) will be unusable as they are misleading. Suppose, for various reasons, erroneous data is included in the profit and loss account (although aware of the legal and decision-making consequences that such behaviour may cause). In that case, the analyst and the controller must consider such discrepancies when interpreting the data output of the analysis system and the management control system. Otherwise, decisions are taken that are irrational and counterproductive, uneconomic, and contrary to an efficient and effective financial policy.

At the end of this brief introduction on the founding elements of a practical, valuable and complete final financial reporting analysis, the writer thinks it appropriate to make a final consideration arising from the consulting experience developed over the last twenty years.

Implementing an integrated analysis system consisting of financial reporting analysis, planning and comparison between the results achieved and the objectives set inevitably requires the management's

willingness to "structure" and use such a management tool

In the presence of a negative or even uncooperative attitude on the part of both managers and administrators, the implementation of an integrated system of final analysis and planning is, in essence, doomed to failure.

With specific regard to the subject of this chapter, namely the analysis of final financial reporting, it should note that a total delegation to the analyst is impossible without a collaborative and proactive willingness within the company.

Whoever plans an analysis (and forecasting) system needs access to a series of information that only internal managers possess. The person who has to 'create' and implement, for example, a reclassification of the profit and loss account or balance sheet, which takes into account the specific characteristics of the company, cannot carry out any sensible operation without the collaboration of the company's internal stakeholders.

Implementing an integrated analysis and management control system requires managers to devote time and energy to this project.

Business consultants are often asked to set up analysis systems "with the understanding that you do everything because your internal staff is so busy". we cannot accept such a request. The direct intervention of the company management and, for some operations, of the administrative staff, is not an 'optional extra' which, in the case of very busy subjects, can be avoided by increasing the consultant's work.

The less time management dedicates, especially in the initial phase of preparation of the system's founding elements, the greater approximation will characterise the system's output results: the analysis of the final data and the creation of a planning and control system requirements, the implementation phase, the massive intervention, and the solid and conscious collaboration of the company management. The absence of such cooperation can significantly reduce the effectiveness of the entire system. This is why the "tailor-made creation" of an integrated analysis and planning system necessarily requires the company to invest in the most precious element in it, i.e. the time and expertise of the company management.

The entire delegation to the consultant of each phase of the implementation of the system, in order not to further commit the company's working personnel, is contrary to the company's interest since the external professional will have to manage/interpret/reaggregate /synthesise/interconnect a series of data in the absence of indispensable information. As it can be easily understood, this circumstance will cause the realisation of a tool that will never fully develop its capacity to help the management take rational, effective and efficient

decisions both from an economic and financial/asset point of view.

The intervention of the company's management and the help of the administrative staff must therefore be considered a sine qua non-element so that the implementation of the integrated system of analysis and company planning can achieve the objectives for which it is structured, developed and, subsequently, subjected to continuous improvements and interventions aimed at maximising the efficiency and effectiveness of the decision-making process of the company's management.

Ongoing analysis of company data: the so-called management control in an integrated information system. Management control and planning from a separate element accounting integrated with the study of financial reporting and the general budget and all the values constituting the information system itself.

In the preceding pages, it has been highlighted essential it is to maximise management effectiveness and efficiency to implement an integrated analysis system. The in-depth analysis of the company's global situation, understood in its entirety, through the comparison with multiple aggregates of balance sheet and income items that can deduce from the financial reporting for the year, is a sine qua non condition for management to be defined based on the company's situation and not on the wave of emotions that are more or less disconnected from the business reality.

If, on the one hand, the analysis of financial reporting values identifies a fundamental step to ensure consistency between choices/decisions and the company's equity, income and financial situation, on the other hand, this type of in-depth analysis is not sufficient to ensure proper management.

The objective of financial reporting is to analyse the financial results of the company as a whole.

As it is clear, this analysis, if on the one hand, it represents a necessary condition for the management of the company, on the other hand, it identifies a low condition to ensure that the entrepreneurial management can be carried out in full awareness of what is happening within the company.

To manage companies consciously, it is necessary to understand that financial reporting, although relevant and necessary, is characterised by two features which, at the same time, represent its main strengths and its most relevant "limits":

- 1) Firstly, financial reporting aggregates values at the company level. The company is interpreted as a single entity and, consequently, the accounting data concern the whole business structure:
- 2) Secondly, financial reporting only contains final figures. By definition, forecast and planned values cannot be included in this document (even if part of

the balance sheet and income statement data are influenced by considerations concerning the future of the company (think, for example, of depreciation, closing stocks, provisions for future risks and charges, etc.).

To maximise effectiveness and management efficiency, it is therefore essential, on the one hand, that choice is based on analytical data regarding single objects of interest (e.g. products, departments, etc.) and, on the other hand, that the management can rely not only on actual data but also on planned values, without which the decision-making process takes paths that are dangerously unsuited to the real needs of the company.

To ensure effective and efficient management, it is necessary to interpret the company not only as a unitary entity but also as a sum of "molecular" elements whose correlations and interdependencies constitute a fundamental element of the company's success.

To investigate these "company cells", financial reporting demonstrates the "intrinsic" limits of an information tool whose primary objective is to highlight the company's financial, equity and income situation interpreted as a single entity. The management control overcomes these theoretical/operational limitations and allows the deepening of the "fractional" management of the company.

The study of the single products placed on the market by the company, of the single departments constituting the company, and the different activities developed in the entrepreneurial sphere are only some of the primary management control objectives. With its logic of planning alongside the calculation of values, this system allows the entrepreneurial energy to be channelled towards a constant increase in the company's overall profitability and the search for the financial and patrimonial balance of the company itself.

Therefore, management control is not an academic or didactic tool but an indispensable element for all companies, including small and medium-sized ones, to improve their performance.

The need to count on analytical data regarding single objects (e.g. products, departments, lines, activities, etc.) is accompanied by the need for managers to be able to make their decisions based not only on actual data but also on planned values.

In recent years, given the complexity of the economic environment in which companies operate and the greater frenetic nature of markets, the budget and the concept of planning itself have been the subject of questions, both from scholars and from operators, about their real usefulness in a historical moment marked by the real impossibility of a certain and precise "forecast" (if it can be said that, in other historical periods, this was possible).

It is precisely at times of uncertainty that the management of a company must be based, instead of improvisation, on a set of cognitive elements that allow managers to develop the decision-making process in full awareness of the income, financial and asset consequences of such decisions. Undoubtedly, the information that can be drawn from the financial reporting for the year cannot be considered exhaustive, since the conciseness, the precision implemented to the detriment of timeliness and the inclusion of only actual values, make this document insufficient for the information needs of business managers to be fulfilled.

This information - which must guarantee timeliness even at the expense of a specific (limited!) degree of accuracy - must also allow for evaluating managerial performance.

This information is a critical element in ensuring that promotions, bonuses in the broadest sense and sanctions are allocated to managers fairly and transparently. In this regard, it should be emphasised that the responsibility assigned to the various managers must always be accompanied by decision-making levers on which they must act freely. The assignment of duties and the related attribution of management levers implicitly require that the accounting elements on which individual managers can work are fully known. Secondly, these values are correctly attributed to the subjects directly responsible. We can only achieve these objectives if the information support can provide, on time, analytical information concerning the individual areas of competence.

The achievement of management effectiveness and efficiency requires that the system orients its structure towards objectives aligned with the mediumlong term strategy. Short-term planning must therefore be constantly and in all its parts univocally interrelated with medium-term planning.

In general, it is stressed that management control is a system to support decision-making and not a set of procedures whose primary objective is the inspection and verification of managers' performance.

In reality, this statement is only partially true. A "complete" control system (and, later on, we will understand the reason for the use of this term) is, in fact, always characterised by the phase of comparison between expected and achieved results. From such a comparison, an assessment of the management's performance inevitably arises.

Therefore, if on the one hand it is true that the control system should not be seen as a means of inspection, on the other hand it is equally true that the phase of identification of the variations between the objectives set and the results achieved, inevitably involves a moment of verification.

Concerning the problem of correlation between the concept of control and the support and inspection activity, it is

About the problem of correlation between the concept of control and the support and inspection activities, it is essential to emphasise how the implementation of the integrated analysis/programming system can be successful and, consequently, only succeed in ensuring that the objectives of efficiency and management effectiveness can be achieved if the entire management shares the aims of the project and perceives information as the whole system as a tool that does not punish but helps company management. In this sense, it can certainly be said that the integrated analysis/programming/control system does not identify a set of inspection and verification procedures. This, however, does not mean that, inevitably, in the context of an information structure such as the system proposed here, a phase should be envisaged in which the expected results and the objectives achieved are compared without, of course, all this being implemented in a spirit of "criminalisation" of the activities carried out by individual managers.

As can be seen from what has been said so far, it has been considered appropriate to go beyond the position Theoretical doctrine characterised by the interpretation of management control as a system "partially detached" from the set of information, accounting and not, connected to the analysis of the company considered in its entirety and unity. Many authors, facing the problem of control, raise a virtual "wall" between the study of financial reporting and the information structure connected to individual analytical objects such as products, departments, etc... This position is not reflected in the company's reality since the management of a company perceives the need to count on a series of information that can provide helpful tools to improve the decision-making process. In this sense, interpreting management control as "something separate" from the set of all other information means at the corporate level and, as such, difficult to integrate with them, means laying the groundwork for:

- 1) The creation of information duplication;
- The lack of information concerning specific sectors not explicitly covered by the individual parts of the broader information system, which is also fragmented in organisational terms;
- The creation of an information over-structure that feeds on itself, in terms of the production of data, both accounting and non-accounting, which are often useless and therefore misleading;
- 4) The formation of organisational figures that may come into conflict due to the different roles they play within the company organisation.

From this, the system supporting managerial decisions cannot be limited to the so-called management control. Still, it is appropriate, or better, indispensable, to be interpreted as an integrated analysis and planning system. This vision does not

prevent the interpretation of management control as a part of the more comprehensive corporate information system. Still, it avoids the danger of considering the latter pre-eminent over any other form of intra-company communication.

It is for this reason that, in the writer's opinion, when dealing with the problem of the information structure necessary for the management to prepare the decision-making process most appropriate to the company's reality, one should not limit oneself to discussing management control but, dropping useless and misleading labels, it would be appropriate or, rather, indispensable, to refer to a broader "integrated analysis/programming/control system".

Of course, the above considerations do not prevent us from highlighting how company managers need additional and different information from what a system focused exclusively on financial reporting can offer. This has already been underlined several times and, therefore, it is considered as established.

The perception of the unity of the information system, both by the users of the information and by the managers of the system, guarantees the maximisation of the company's performance since only the complete vision of the company's situation (intended both as a unit and as a sum of micro-sections) allows decisions to be taken that are more consistent with the real company situation. If, on the one hand, it is detrimental to have only a global vision of the company without being able to count on information regarding individual products, activities, departments, centres, etc., on the other hand. it is equally dangerous to base management actions exclusively on the knowledge of parcelled information.

This means that it can only guarantee the success of an information system if all managers interpret it as a unicum. It is possible to identify various areas of focus of interest without this implying any separation between "sections" of the system. Therefore, unity is a feature of the company and an element that must necessarily characterise the information system on which the entire management decision-making process is based.

For reasons of expositive understandability, we will now explain the characteristics that are generally identified when dealing with the so-called management control. From what has been written in the previous pages, the reader will certainly have understood how this system should be interpreted in an interrelated and interconnected manner with all that has been illustrated in the first part of this work, otherwise the construction of multiple "information systems" whose concatenation prevents the maximisation of company's effectiveness and efficiency.

Therefore, the management control must be interpreted as one of the integrated analysis /programming system elements, precisely as it happens with the part of the information structure concerning the analysis - income and financial - of financial reporting. Any attempt to separate and interpret the various parts of the system separately can only lead to information gaps and organisational dyskinesis, which are fatal to any company/enterprise.

In general, introducing a control system within a company to complete the part of the system concerning the profitability and financial analysis of the company in its complexity and entirety requires the identification of the components making up the system, or rather, the control sub-system.

Even though at a terminological level, scholars identify the sections of the control system with very different terms, it is possible to state that, at a substantial level and leaving aside the formal terms used to identify the individual parts; various authors unanimously believe that the presence of three subsystems characterises management control:

- Information sub-system 1)
- Organisational sub-system;
- 3) Dynamic process sub-system.

For the reasons given in the previous pages, each of the three parts identified above shows an evident connection and inter-relation with the portion of the integrated system focused on the analysis of the company's global accounting data.

The information sub-system identifies the set of indications/data/notes/values/clarifications/refinements concerning information, quantitative and qualitative, necessary for the decision-making process in the best conditions.

Therefore, this sub-system identifies the set of information, both accounting and non-accounting, which is indispensable to enable managers to make decisions following the set objectives and quantify both the goals and the results obtained. There is no need to elaborate further on the obvious connections between this subsystem and the output of the integrated system of financial reporting analysis described in the previous pages.

On the other hand, the organisational subsystem identifies the set of responsibilities assigned to the various company managers. In this part of management control, the interconnection with the section of the integrated analysis system focused on reportina also evident. financial is responsibilities are assigned having as reference only small "segments" of the company without reconciling the needs of the company's global vision. In that case, there is a high risk of proceeding with responsibilities that, instead of advancing the company, may cause it to rearess towards regressive situations consequently, extremely dangerous.

Moreover, it should be remembered that this is only indirectly linked to the company's organisational structure. The company's organisational chart is only the starting point for the organisational sub-system of control to be developed. The term control sub-system refers to the actual allocation of responsibilities within the control system. In this respect, it should be remembered that, for this assignment to be practical, the duties assigned to each manager must have particular characteristics:

It must transparently transfer the responsibilities; any lack of clarity as to the manager's actual responsibility represents a weakness in the control system;

As far as possible, the responsibilities assigned must not be subject to duplication and overlapping. When the same object is the responsibility of more than one person, it may remain incompletely managed at an adequate level since each person considers that the other person is responsible for the actual management of the variable subject to responsibility. Co-responsibility must therefore be limited as much as possible. In many cases, it should note that it cannot eliminate it because some areas require the intervention of several parties. For the management control system to be effective and efficient, it is therefore not required that all coresponsibility be eliminated, but rather that it be limited to cases that are necessary indispensable;

The responsibilities attributed to managers must, as far as possible, be measurable. In various fields of management control, quality aspects inevitably become essential elements of the control system. This is positive and, therefore, cannot be eliminated. Quantitative aspects, however, are often the only ones that can be measured and thus can be made the subject of performance evaluation by managers. The measurability of the objectives and the consequent results obtained is at the basis of the quantification of the action performed by managers. In this case, it can say that responsibility is measurable and can therefore be used, without the possibility that subjective elements may invalidate the considerations that can be drawn from the comparison between objectives and results achieved and the purposes of evaluating the activities of business managers.

The dynamic process sub-system identifies the steps through which what is commonly called "management control" can be implemented. The dynamic 'part' of management control is the central element of this system. Suppose the control process is not activated correctly. In that case, the management control system becomes a useless superstructure that produces information that cannot use for the efficient and effective management of company resources.

The dynamic dimension of the control system consists of the following phases:

- Indication of the corporate mission;
- Explaining the medium-long term macro-objectives with a consequent indication of corporate strategies;
- Indication of short-term objectives
- Management action aimed at achieving the set objectives:
- Final assessment of the results obtained in the various company areas;
- Comparison between the set objectives and the results obtained;
- Possible implementation of corrective actions aimed at ensuring that, in the following period, can achieve the objectives or modification of the objectives themselves if it is noted that the previously indicated objectives and the strategies based on which the company actions were defined are no longer valid for the following period due to the occurrence of particular contingencies that have made the pre-set objectives and the identified strategies obsolete.

Also, in this case, the connection with the integrated analysis system concerning reporting and its static and dynamic analyses is evident. It would be impossible to understand how objectives, both short and long term, can be identified without having a global vision of the company situation in its entirety.

Since this work focuses on the illustration of management helpful accounting to management to improve the decision-making process, our attention will be polarised on the information sub-system, which we mentioned earlier. We refer the reader to specific works on these subjects for the other two dimensions of the control sub-system (organisational and dynamic).

The in-depth examination of the information sub-system requires the prior identification of what is generally identified as the "content" of this sub-system. As can be easily understood, the elements that make up this portion of the integrated analysis/programming /control system are taken directly from concatenation of the control phases themselves.

As repeated several times, one should not and cannot make a "virtual division" between the part of the integrated information system concerning financial reporting and its multiple analyses (static and dynamic) and the "section" more closely connected with what is generally identified as management control objectives. For this reason, the information sub-system we have discussed in the previous pages forms a whole with the integrated analysis system illustrated in the first part of this book. The consequence is that it is impossible to identify, in an autonomous way, the components of the control information sub-system since they integrate,

completing each other, with the elements of analysis that are embodied in in-depth analyses, both static and dynamic, of the asset, financial and income values of financial reporting.

In the light of this consideration, it can say that the integrated analysis/programming/control system must, necessarily, include within it:

- The general accounting and everything related to the preparation of financial reporting for the year prepared following civil law;
- The various reclassifications carried out to aggregate the financial reporting values in a helpful way to understand the financial and income situation of the company;
- The static and dynamic analyses carried out considering the financial reporting values;
- Analytical accounting, which, unlike general accounting, is based on an accrual concept. Therefore, the entries in the analytical accounts are implemented not according to a logic of numerical manifestation but according to the economic competence of the individual operations. By way of example, it can be recalled that, concerning the purchase of raw materials, in general accounting, the recording is made at the moment of the arrival of the invoice. In contrast, in analytical accounting, the transaction is recorded when the raw material physically arrives at the company. Analytical accounting can contain only final data. Accounting is defined as final cost accounting, or final values and planned data, in which case the accounting is defined as standard cost accounting.
- The budget and standard system, which identifies the phase focused on company values' analytical and global planning. The identification of standard costs and the drafting of budgets, both analytical and general, concretises the planning phase that managers must necessarily carry out. Management is not entrusted to mere sensations but is based on detailed information. The calculation of standard values, the planning of management actions and the consequent drafting of company budgets will be the subject of in-depth analysis in the following paragraphs. The reader is referred to the following pages for further considerations on this issue.
- The system of variation which is formed by the results deriving from the contrast between actual and planned data. This comparison shows the extent to which the company has achieved the set objectives. The changes affect the company's revenues and costs, and, as will be seen in the following pages, the deviations have characteristic of being analytical knowledge elements. The determination of synthetic variances, such as the variation deriving from the comparison between planned income for the year vs achieved

- result for the year, means identifying a value without any decision-making use. By providing synthetic data, this comparison does not allow the analysis of the causes of the variation and, consequently, does not allow the identification of the corrective actions necessary to achieve the objectives. Therefore, the system of variations is characterised by a set of elementary deviations that identify the analytical causes of each identifiable variation between the goals planned by the company and the actual values.
- On the other hand, the author considers it possible 7) and extremely useful to implement a partial system that, only after a running-in period, can aspire to be completed. For the system to fully achieve the final objectives for which it is implemented, it is, in fact, indispensable that certain phases be subject to considerations and actions of improvement, which can only develop after a period of operation of the partial system. It is, for example, counterproductive to hypothesise the use of variations for performance evaluation purposes if there is no certainty that the entire technical procedure for determining the data is free of errors and "smears". Often, the planning phase can be usefully implemented after management has become 'familiar' with the methods of calculating the set of values constituting management accounting. In this sense, the theory of those who recommend starting with accounting based on actual values, which is only then supplemented by the cost/revenue planning phase, should not be rejected.

It is clear that, given the diversity of businesses, it is impossible to standardise the various time steps. There are, in fact, companies in which it is advisable to run through some phases before others, while there are many companies where the exact opposite can happen.

Therefore, the purpose of these few lines is to highlight the existence of this issue, given the technical impossibility of providing an optimal solution for all companies. It must necessarily carry out in the consultancy phase.

In implementing an integrated /programming/control system, it is possible, or rather advisable, to proceed in stages, the completion of which may also require a relatively long time. All this should not be interpreted as a negative element and defect in the construction of the system but, on the contrary, as an "added value" of the system itself which prevents errors and misunderstandings often attributable precisely to the fact that, to achieve completeness, in many companies the correctness and understanding of the values and objectives of the system itself are sacrificed. There is no need to detail how, in such a situation, the integrated analysis/programming/control system is fatally destined to fail.

Another critical consideration is the title given to this section.

It has been decided to begin the part of the text dealing with planning by stating that "planning does not mean forecasting or being certain of 'producing income".

Many readers will have smiled when reading these words. In reality, however, the choice has been motivated by extensive experience in the field that shows how, in many companies, there is a misconception of the concept of planning and management control.

First of all, it is essential to emphasise that planning does not merely forecast data about the future. As everyone knows, forecasting implies a passive relationship with the external environment, while planning implies proactivity concerning what surrounds the planner.

Being proactive means wanting to impact the environment, refusing to be passive about what happens outside the company.

Those who set themselves the objective of implementing an integrated analysis/programming /control system cannot assume that they will be subjected to what is imposed by the market/external environment and, consequently, must identify actions to intervene directly in the surrounding reality. Foresight prevents planning as it merely imagines what external agents want to impose on the company. Such behaviour does not fit in with the logic of control since being subjected to the actions of others is contrary to the very concept of control. Planning, therefore, means identifying objectives from the point of view of someone aware that he can influence what happens in the market. This does not imply a 'delirium of omnipotence' but, much more simply, it means the will to act from a perspective that rejects the logic of mere adaptation to actions dictated by others and permeates every act with a desire to change what exists.

Planning, therefore, means not accepting what others have decided but, on the contrary, acting in such a way as to impose what one wants others to "undergo" or, at least, it identifies a willingness to interact with third parties and markets that rejects the preconceived idea that management action is irrelevant to what happens outside the company.

A final consideration, again concerning the title given to this paragraph, discusses the possibility that, in itself, an information system produces excellent management results. This represents a distorted idea of the concept of information. Making decisions based on complete, correct and fully comprehensive data does not, of course, imply obtaining satisfactory economic/financial results. Again, many readers will have smiled when reading the title of this paragraph. Experience shows, however, that the opinion that implementing an integrated analysis/programming

/control system necessarily implies the achievement of significant economic objectives is quite widespread. There is no need to detail how such an opinion has its roots in a mistaken belief that improperly links the concept of information to the idea of "solving business problems". Making decisions based on correct and comprehensive data does not guarantee the success of the company. However, the opposite is true. It isn't easy to imagine satisfactory economic results without an integrated analysis/programming/control system.

Counting on such an information structure does not give the certainty of producing income and financial balance, but, as already pointed out, the lack of information undoubtedly creates the basis for making it difficult or even impossible to achieve such results.

4) Analysis of the Final Data of the Financial Year being Planned and Comparison with the Planned Data -Final Check of the Values Achieved in the Analysed Period. Last Step of an Integrated Information System

As already pointed out, while not identifying a verification or inspection system, the control process is characterised by the necessary presence of a phase in which a comparison is made between what was intended to be achieved and what has actually been completed. The concept of control understood as verification is inherent in the very notion of an integrated analysis/programming system. If, on the one hand, this is indisputable, on the other, it is equally valid that this phase does not aim to "criminalise" the work of company management but, on the contrary, aims to provide functional management information to operational managers. The search for any discrepancies between set objectives and actual values, although present in any control system, does not aim to find "faults" or "responsibilities" but should help management improve business performance.

In the context of management control, therefore, a "verification" function is carried out only insofar as this provides essential information so that management can be carried out as efficiently and effectively as possible. The monitoring of the actual achievement of the planned objectives is, therefore, a necessary step to ensure that the management's action allows obtaining satisfactory performance compared to the targets set.

Identifying the reasons why a specific objective has not been achieved or identifying operating procedures to further improve the use of management resources and optimise sales revenues represent the ultimate goals of the phase in which the variations between planned data and values achieved are achieved analysed.

The monitoring of the results achieved and the consequent comparison with the planned values must be carried out by implementing a twofold analysis:

- Comparison between planned and actual figures determined for the entire company;
- Comparison between planned and final analytical cost and revenue figures to identify individual causes of deviation.

As far as the first type of comparison is concerned (analysis of the "variations" between planned and actual global company data), it is necessary to recall the considerations made in the first part of this book. The analysis of income and financial/asset values must be carried out through indices and financial flows. Absolute values can be misleading if not compared with correlated data. For this reason, it must develop an initial study concerning the comparison between planned and actual data through the static and dynamic analysis schemes illustrated above.

The operational phases of this study are as follows:

- a) Technical Operations to be Carried out on Planned
- Drafting of the general company budget, consisting of an economical budget, an asset budget and a financial budget balance sheet and financial budget;
- Reclassification of the economic and asset budgets according to the schemes adopted in the integrated analysis/programming system;
- Determination of all the financial, income and asset ratios illustrated in the first part of this text;
- Drafting of the planned financial statement (the final stage in the drafting of the financial budget) structured according to the structure proposed in the integrated analysis/planning system.
- Technical Operations to be Carried out on the Final Data at the End of the Financial Year
- Preparation of financial reporting for the financial
- Reclassification of the profit and loss account and balance sheet according to the schemes mentioned in the previous points;
- Calculation of all financial, income and asset ratios;
- Preparation of the cash flow statement using the structure mentioned above.
- c) Comparison of Actual and Planned Figures
- Direct comparison of the individual financial ratios, planned and actual (e.g. planned liquidity ratio with exact liquidity ratio, planned availability ratio with the corresponding ratio determined on real data, etc.);
- Direct comparison of all income ratios, both planned and actual (e.g. planned ROE with existing ROE, planned ROI with real ROI, etc.);
- Direct comparison between the results shown by the final financial statement and values identifiable in the financial planning output document.

From the comparison between the various quotients and the multiple dynamic financial data, it is possible to draw valuable observations on the achievement, expressed in global terms, of the overall corporate results set in the planning phase.

The analysis of the variations between the programmed indicators/flows single and corresponding indexes/flows realised provides essential information on the company's capacity, interpreted as a single entity, to achieve the financial, income and asset objectives set.

If, on the one hand, this comparison is beneficial as it allows us to understand the ability of the entire company to achieve the global objectives, on the other hand, it provides few clues on the identification of both the potential causes of any discrepancies between actual data and objectives values and possible solutions to overcome any management problems.

To learn, for example, that the ROI, instead of reaching the programmed value of 15.5%, stopped at 4.3% is helpful but does not explain the analytical causes that may have caused this debacle.

This is true for any profitability index. The comparison between the planned economic quotient and the index determined on actual data offers limited information if carried out on income values.

The considerations are partially different if the focus is on financial ratios and balance sheet data expressed in terms of cash flows. For these types of comparisons, the variation between planned and actual figures provides a sufficiently clear picture of the causes of any deviations.

Therefore, as far as the comparison between financial ratios and cash flow statement values is concerned, it is possible to state that the variation deducible from the comparison between forecast data and actual values is sufficiently clarifying of the analytical causes of any differences between planned ratios/flows and actual dynamic financial ratios/values.

On the contrary, the income side of comparing planned ratios/flows and actual realised ratios/flows appears very poor. While it is true that one must determine this variation to understand the company's overall situation, it is equally valid that such a comparison is not conclusive.

This information gap cannot be filled by a further analysis of the global data of the profit and loss account/budget and balance sheet/budget. The intrinsic and, consequently, unavoidable limitation of the reporting/general budget is financial precisely identifiable in its most peculiar characteristic: the documents in question are summarised schemes that consider the company as a single entity: it is in this specificity that the reason why the analysis of the variations between planned income ratios and financial ratios determined on actual financial reporting values, is, by definition, deficient and in need of in-depth analysis

that can be carried out through the use of tools other than the analysis of the financial reporting/general budget.

A study must accompany the determination of the variations between income ratios carried out with different methodologies from the one on which the logic of the quotients is based.

This analysis must be carried out by comparing analytical data that allows identifying individual causes of variance between planned values and data realised.

## References Références Referencias

- 1. Adelberg A. H., (1979) A Methodology for Measuring the Understandability of Financial Report Messages, Journal of Accounting Research, Vol. 17, No. 2, pages 565-592.
- Adelberg, A. H., (1983) "The accounting syntactic complexity formula: a new instrument for predicting readability of selected accounting communications", Accounting Business and Research, Summer 1983, pages 162-175
- 3. Adelberg, A. H., Razek, J. R, (1984) The Cloze Procedure: A Methodology for Determining the Understandability of Accounting Textbooks, The accounting Review, Vol. 59, no. 1, pages 109-122
- Albrecht W. S., d Sack R. J. (2001) Accounting Education: Charting the Course Through a Perilous Future, Accounting Education Series 16, American **Accounting Association**
- 5. Alexander D., Britton A, Jorissen A., (2007) International financial reporting and analysis, Thomson.
- 6. Alexander D., (1993) A European true and fair view?. European accounting review, vol 2, issue n. 1.
- 7. Alexander, D. and H. R. Schwencke (1997). Accounting changes in Norway: a description and analysis of the transition from a continental towards an anglo-saxon perspective on accounting. 20th Annual Congress of the European Accounting Association. Graz, Austria.
- Alexander, D. and H. R. Schwencke, (2003). Accounting change in Norway, Accounting Review vol. 12, issue 3, p. 549-566.
- Alexander, D., Jermakowicz E, (2006). A true and fair view of the principles/rules debate, Abacus, Vol. 42, n. 2.
- 10. Alexander, D., Nobes C. (2013). Financial accounting: an international introduction, Pearson.
- 11. Ankarath N., KJ Mehta K. J., Ghosh T.P., Alkafaji Y.A., (2010), Understanding IFRS fundamentals: international financial reporting standards, John Wiley and Son.
- 12. Avi M. S, (2017), in Management accounting volume II. Cost analysis, EIF-e. book
- 13. Avi, M. S., (2018), Understandability in Italian Financial Reporting and jail: a link lived

- dangerously, European Journal of Economics, Finance, & Administrative Science, vol. 99, pagesXXX
- 14. Ballwieser W., G. Bamberg, M. J. Beckmann, H. Bester, M. Blickle, R. Ewert, A. Wagenhofer and M. Gaynor (2012). Agency theory, information, and incentives. Springer Science & Business Media.
- 15. Baines, A., & Langfield-Smith, K. (2003). Antecedents to Management Accounting Change:
- 16. Structural Equation Approach, Accounting, Organizations and Society, vol.28, Issue 7, pages 675-698.
- 17. Barth M.E., (2008)Financial Reporting Transparency, The Journal of Accounting, Auditing, and Finance, Vol 23, Issue 2, pages. 173-190.
- 18. Barth, M. E (2014)., Measurement in Financial Reporting: The Need for Concepts, Accounting Horizons, Vol. 28, No. 2, pages. 331-352.
- 19. Barret, E. and Fraser, L.B., (1977). Conflicting roles in budgeting for operations. Harvard.
- 20. Business Review, July August, pages 137-146.
- 21. Baskerville R.F., Rhys H., (2014), A Research Note on Understandability, Readability and Translatability of IFRS, Accademic Paper.
- 22. Beest F., Braam G., Boelens S., (2009) Quality of Financial Reporting: measuring qualitative characteristics, NiCE Working Paper 09-108, April.
- 23. Benston, G. J., M. Bromwich, R.E. Litan, and A. Wagenhofer, (2006). Worldwide financial reporting: The development and future of accounting standards. Oxford University Press.
- 24. Boer, G. (2000)'Management Accounting Education: Yesterday, Today and Tomorrow', Issues in Accounting Education, Vol 15, Issue 2, pages 313 - 321
- 25. Bunce, P., Fraser, R. and Woodcok, L., (1995), Advanced budgeting: a journey to advanced management system. Management Accounting Research, 6, 253-265.
- 26. Burchell S., C. Clubb, A. Hopwood, J. Hughes, J. Nahapiet. (1980). The roles of accounting. Accounting, organizations and society, Organizations and Society, Vol. 5, issue 1, Pages 5-27.
- 27. Burchell S., C. Clubb A. G. Hopwood (1985). "Accounting in its social context: Towards a history of value added in the United Kingdom", Accounting, Organizations and Society, Vol. 10, issue 4, pages
- 28. Cadez, S., & Guilding, C. (2008a). An Exploratory Investigation of an Integrated Contingency Model of Strategic Management Accounting, Accounting, Organizations and Society, Vol. 33, Isse 7, pages 836-863
- 29. Chenhall, R. H. (2008). Accounting for the Horizontal Organization: A Review Essay. Accounting,

- Organizations and Society, Vom 33, Issue 4, pages 517-550.
- 30. Chloe Y., Kan C., Budget depreciation: when budgeting early increases spending, (2021), Journ of consumer research, vol. 47, issue 6, pages 937-958
- 31. 19) Cristea, S. M. and Saccon, C. (2008) Italy between applying national accounting standards and IAS/IFRS, in Romanian Accounting Profession's Congress (Bucharest: CECCAR).
- 32. Covaleski, M., Dirsmith, M. and Samuel, S. (1996), Managerial Accounting Research: the Contributions of Organizational and Sociological Theories, Journal of Management Accounting Research, Vol. 8, Issue 1, pages 1-35
- 33. Covaleski, M.A., Evans, J.H. III, Luft, J. L. and Schields, M.D., (2003), Budgeting research: Three theorical perspectives and criteria for selective integration., Journal of Management Accounting Research, Vol 15, Issue 1, pages 3-49.
- 34. Deatherage R.H., (2021) Security on a Budget, in Security Operations, Taylor and Francis Group.
- 35. Delvaille, P., Ebbers, G. and Saccon, C. (2005) International financial reporting convergence: evidence from three continental European countries, Accounting in Europe, 2(1), pp. 137–164.14
- 36. De Franco, G., S. P. Kothari and R. S.. Verdi (2011). "The Benefits of Financial Statement Comparability", Journal of Accounting Research, Vol. 49, pages 895-931.
- 37. Di Pietra, R, McLeay S., Riccaboni A., (2001) "Regulating Accounting Within the Political and Legal System", Contemporary Issues in Accounting Regulation, Chapter 3, Pages 59-78, Springer.
- 38. Doxey C.H., (2021), The controller's Toolkit, Wiley
- 39. Ekholm, B. and Wallin, J., (2011). The Impact of Uncertainty and Strategy on the Perceived Usefulness of Fixed and Flexible Budgets. Journal of Business Finance and Accounting, vol 38, Issue 1, pages, 145-164.
- 40. Epstein, M.J., Manzoni, J-F and Dávila, A., (2005). Performance Measurement and Management Control: Innovative Concepts and Practices, vol. 20. Esmerald Books,
- 41. Elstein M. J.; Manzoni J. F, (2010) Performance Measurement and Management Control: Superior Organizational Performance, in Studies Managerial and Financial Accounting, vol. 14, **Emerald Books**
- 42. Ewer. (2007), Transparency Sid R., Understandability, But for Whom? The CPA Journal; New York Vol. 77, Fasc. 2, pages16-18, 20-22.
- 43. Frow, N., Margisson, D. and Odgen, S., 2010. Continuous budgeting: Reconciling flexibility with budgetary control. Accounting, Organizations and Society, vol, 35, pages 444-461

- 44. Ghandour D., (2021) Analytical review of the current and future directions of management accounti and control system, in European Journal of Accounting, Auditing and Fncance Research, vol 9, Issue 3, page 42-53
- 45. Gharairi A. M. (2020) Management control and performance, International Journal of Management, vol 11, Issue 10, page 2013-2023
- 46. Godfrey, J. M., Chalmers K., (2007) Globalisation of Accounting Standards, Edgar Elgar.
- 47. Haller, A. (2002) Financial accounting developments in the European Union: past events and future European Accounting Review vol 11 prospects, issue 1, pages 153-190.
- 48. Haller A, P. Walton and B. Raffournier B. (2003). International accounting. Cengage Learning EMEA.
- 49. Haller, A., B. Eierle (2004). The adaptation of German accounting rules to IFRS: a legislative balancing act, Accounting in Europe Vol. 1, Issue 1, pages 27-50
- 50. Hope, J. and Fraser, R., (1997). budgeting... Breaking through the barrier to the third wave. Management Accounting, Vol. 75, Issue 11, pages 20-23.
- 51. Hope, J. and Fraser, R., 2000. Beyond budgeting. Strategic Finance, Vol.82, Issue 4, pages 30-35.
- 52. Hope, J. and Fraser, R., 2003. Who needs budgets? Harvard Business Review, Vol.81, Issue 2, pages 108-115.
- 53. Hopwood, A.G. (1972). "An Empirical Study of the of Accounting Data in Performance Evaluation", Journal of Accounting Research, Vol. 10, pages 156-182.
- 54. Hopwood, A. G. (1973). An accounting system and managerial behaviour. Lexington Books.
- 55. Hopwood, A.G. (1974). Leadership Climate and the Use of Accounting Data in Performance Evaluation, The Accounting Review, Vol. 49, No. 3, pages 485-
- 56. Hopwood, A. G. (1976). Accounting and human behavior. Prentice Hall.
- 57. Hopwood, A. (1987). "The archeology of accounting systems", Accounting, organizations and society, vol. 12, issue 3, pages 207-234.
- 58. Hopwood, A. G. and Peter Miller (1994). Accounting as social and institutional practice. Vol. 24. Cambridge University Press.
- 59. Hopwood, A. G., (1999). "Situating the practice of management accounting in its cultural context: an introduction". Accounting Organizations Society, Vol. 24, Issue 5-6, pages 377-378.
- 60. Hopwood, A. G. (1983). "On trying to study accounting in the context in which operates". Accounting, Organizations and Society, Vol. 8, No. 213, pages. 287-305.
- 61. Hopwood, A. G., (1990). "Ambiguity, Knowledge and Territorial Claims: Some Observations on the

- Doctrine of Substance Over Form", British Accounting Review, Vol. I. pages 79-87.
- 62. Hopwood, A. G. (1990). "Accounting and the pursuit of efficiency", Accounting, Auditing & Accountability Journal, Vol I, pages 238-249.
- 63. Hopwood, A. G. (2000). "Understanding financial accounting practice", Accounting, Organizations and Society Volume 25, Issue 8, pages 763-766.
- 64. Hopwood, A. G., (2007). Whither accounting research?, The Accounting Review vol. 82, issue 5, p. 1365-1374.
- 65. Hopwood, A. G., Chapman C. S., Shields M. D. (2007a). Handbook of management accounting research. Volume 1, Elsevier.
- 66. Hopwood, A. G., Chapman C. S., Shields M. D. (2007b). Handbook of management accounting research. Volume 2, Elsevier.
- 67. Hopwood, A. G., (2008). "Changing Pressures on the Research Process: On Trying to Research in an Age when Curiosity is not Enough", European Accounting Review, Vol. 17, Issue 1, pages 87-96.
- 68. Hopwood, A. G., (2009). "Accounting and the environment", Accounting, Organizations and Society, Vol. 34, Issues 3-4, pages 433-439
- 69. Hopwood, A. G., (2009). "The economic crisis and accounting: **Implications** for the research community", Accounting, Organizations and Society, Vol. 34, Issues 6-7, pages 797-802.
- 70. Hopper A., Burns J, Yazdifar M., (2004). Management accounting education and training: putting management in and taking accounting out, Qualitative Research in Accounting Management, 2004, vol 1, Issue 1, pages 1-29.
- 71. Horngren, C. T., Sundem, G.L. and Stratton, W. O., (2013). Introduction to Management Accounting, Pearson.
- 72. Jonas, G.J., Blanchet J. (2000), Assessing Quality of Financial Reporting, Accounting Horizons, Volume 14, Issue 3, pages 353-363
- 73. Jensen, M. C., 2001. Corporate budgeting is broken - let's fix it. Harvard Business Review, vol. 89, Issue 10, pages. 94-101.
- 74. Johannessen J. A., (2021), Continuous change and communication in knowledge management. Emerald Publishing.
- 75. Jones, M., Smith M., (2014) Traditional and methods measuring alternative of the understandability of accounting narratives, Accounting, Auditing & Accountability Journal, Volume: 27 Issue: 1, pages 183-208
- 76. Kaplan R. S., Anderson S. (2007) Time-driven activity-based costing. A simpler and more powerful path to higher profits, Harvard business school press
- 77. Lewandoski R., Goncharuk A. G., Deforowsky J. J., (2020), Ideology, trust, and spirituality: A framework for management control research in industry 4.0

- era, The futur of Management Industriy 4.0 and Digitalization, issue 1, pages 72-91
- 78. Libby, T. and Lindsay, M., (2010), Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. Management Accounting Research, vol. 21, Issue 1, pages 56-75.
- 79. Katz B., (2019) The Acquisition Budget, Routledge
- 80. Kuhnle A., Kaiser J. P., Theiss F., Stricker NN., Lanza G., (2021) Desigingin and adattive production control system using reiforcement learning,, Journal of Intelligent Manufacturing volume 32, issue 3, pages 855-876
- 81. Miller G. J., Hildreth W.B., Rabin J., (2019) Performance-Based Budgeting, Routledge
- 82. Mintzberg H, Qatrs J. A., (1985) of strategies, deliberate and emergent, Strategic Management Studies Jouurnal, vol. 6, issue 1, pages 157-172
- 83. Moisello A. M., (2021) ABC: evolution, problems of implementation and organizational variable, American Journal od instrial and business Management, Vol 2, issue 2, page. 55-63
- 84. Morton, J. R., (1974) Qualitative Objectives of Financial Accounting: A Comment on Relevance and Understandability, Journal of Accounting Research, Vol. 12, No. 2, pages 288-298.
- 85. Mouritsen, J., K. Kreiner (2016). Accounting, decisions and promises", Accounting, Organizations and Society, Vol 49, pages 21-31.
- 86. Morrel J, (2018) How to Forecast: a Guide for Business. Routledge
- 87. Nillson, S., (1997) Understandability of Narratives in Annual Reports, Journal of Technical Writing and Communication, Vol 27, Issue 4, pages 361-384
- 88. Nobes, C. W., Aisbitt S. (2001). "The True and Fair Requirement in Recent National Implementations", Vol. 31, No. 2, pages 83-90.
- 89. Nobes, C. W., M. Gee and A. Haller (2010). 'The Influence of Tax on IFRS Consolidated Statements', Australian Accounting Review, Vol. 7, No. 1, pages 97-122.
- 90. Nobes, C. W., (2013). "The continued survival of international differences under IFRS", Accounting and Business Research, Vol.43, No. 2, pages 83-111.
- 91. Nobes C. (2016). Towards an Assessment of Country Effects on IFRS Recognition Decisions and Measurement Estimations, Paper, Venezia.
- 92. Nobes C., Parker R., (2016), Comparative International Accounting, Pearson.
- 93. Nobes C. W., Stadler C. (2015), The Qualitative Characteristics of Financial Information, and Managers' Accounting Decisions: Evidence from IFRS Policy Changes, Accounting and Business Research, Vol 45, Issue 5, pages 572-601
- 94. Obaidat, A. N., (2007) Accounting Information Qualitative Characteristics Gap: Evidence from

- Jordan, International Management Review Vol. 3 No. 2, pages 26-32
- 95. Oderlheide, D. (2001). Transnational Accounting, Macmillan, London.
- 96. Onushchenko S. V., Berezhna A. Y., Filonych, Budget Mechanism: Methodological Approach to and the Practice of Budget Decentralization, The Problems of Economy, Vol 47, Issue 1, pages 107-122
- 97. Patel C, Day R., (1996) The influence of cognitive style on the undersandability of a professional accounting pronunciement of by accounting students, The British Accounting Review, Volume 28, Issue 2, Pages 139-154
- 98. Rankin, M., Stanton, P., McGowan, S., Ferlauto, K., & Tilling, M. (2012). Contemporary Issues in Accounting. Milton, Qld.: Wiley & Sons.
- 99. Samuelson, L.A., 1986. Discrepancies between the roles of budgeting. Accounting, Organizations and Society, Vol. 11, Issue 1, pages 35-45.
- 100. Schien, W. (2004) International accounting standards - a 'starting point' for a common European taxbase? European Taxation, vol 44, issue 10, Pages. 426-440.
- 101. Schorck E. M., Lefebre H. L., (2021), The good and the bad news about quality, CRC Press
- 102. Simons, R.S., 1995. Levers of Control, Harvard Business School Press.
- 103. Slighy N., Taffurelli V., Iber M. m Doyle A. S, (2021) Budgeting Lesson and Stories, in Growth, Creativity and Collaboration: Great Vision on a Great Lake. Routledae
- 104. Smith, M., Taffler, R., (1992) Readability and Understandability: Different Measures of the Textual Complexity of Accounting Narrative, Accounting, Auditing & Accountability Journal, Vol. 5, Issue 4.
- 105. Smith M., (2021), Who controls the past... controls the future', Public History Review, vol. 28, page 90-
- 106. Steven, M., FloryT., Phillips, J., Maurice Jr., Tassin F., 1992 Measuring readability: A comparison of accounting textbooks. Journal of Accounting Education, Volume 10, Issue 1, Spring, pages 151-161
- 107. Schwaiger, W.S.A., (2015) The REA Accounting Model: Enhancing Understandability International Conference Applicability, Conceptual Modeling, Conceptual Modeling pages 566-573, Part of the Lecture Notes in Computer Science book series (LNCS, volume 9381)
- 108. Van der Stede, W.A., 2000. The relationship between two consequences of budgetary controls, budgetary slack creation and managerial short term orientation. Accounting, Organizations and Society, vol. 25, Issue 6, pages 609-622
- 109. Wagenhofer, (2003)."Accrual-based compensation, depreciation investment and

- decisions." European Accounting Review, Vol. 12, Issue 2, pages 287-309
- 110. Wagenhofer, A. (2006). "Management accounting research in German-speaking countries", Journal of Management Accounting Research vol. 18, Issue1, pages 1-19.
- 111. Wagenhoferb, A., Göxa R. F. (2009). "Optimal impairment rules", Journal of Accounting and Economics, Vol. 48, Issue 1, pages 2-16.
- 112. Wagner J., Petera P., Popesko B., Novák P., Šafr K., (2021) Usefulness of the budget: the, mediating effect of participative budgeting and budget-based evaluation and rewarding, Baltic Journal of Management, June 2021.
- 113. Webster T., Yee G., Web based energy information and control systems, (2021), River Publisher
- 114. Wildavsky A, (2017) Budgeting and Governing, Routledge
- 115. Zeff S.A., (2013), The objectives of financial reporting: a historical survey and analysis, Journal of Accounting and Business Research, Volume 43, - Issue 4, pages 262-327.
- 116. Yuthas K., Rogers R., Dillard J. F., (2002) Communicative Action and Corporate Annual Reports, Journal of Business Ethics, Volume 41, Issue 1–2, pages 141–157.