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# FI-CO case Finance controlling module's position in the information system : SAP-SI Management

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**Abstract:**
Recent innovations require investments in information systems IS, which are increasingly being viewed as strategic weapons. Organizations must account for this change in their decision-making and management rationale. For management controllers, information technology has evolved into a valuable instrument. They have become an important source of assistance for the organization's development, particularly SAP, which is the market leader in IS. The goal of this paper is to examine the evolution of the information system and its strategic importance to the organization, as well as the positioning and purpose of the FI-CO finance, management control module in the SAP information system.
**Keywords:** Management control, information system, SAP, FI-CO, positioning.

## 1. Introduction

Internal management issues are causing problems in today's businesses, with these issues arising from management issues. The current economic climate necessitates a review of daily management practices in order to become more efficient and competitive while utilizing new technologies. The latter is becoming increasingly significant as it aids the organization's development. The world's current scientific advancement is assisting in disrupting businesses' daily operations, and they have become more open than ever to the technology environment. To be successful in this transition, the organization must recognize the importance of properly managing its data. However, because information is the foundation for any business's successful operation, better information management is required to meet the goals. In the current setting, the dominant function of information can no longer be justified.

Technology occupies an important place in the improvement and development of any enterprise, several works have shown the existing relationship between technology and organization (Orlikowski, 1992, 200; Markus & Robey, 1988; Kefi and Kalika, 2004). In this regard, the concept of economic intelligence is based on the implementation of information systems to be able to control its environment, its implementation remains a topical issue, since these systems can determine the failure or success of the company. For this it is necessary that the company has an information system. The latter represents a vector of value, as competitiveness becomes increasingly fierce. But today, we cannot manage a company if we do not have reliable and relevant information. Therefore, the management of information systems is essential in order to cope with perpetual changes effectively.

In this regard, management control is commonly viewed as a repository for the company's "financial" data. However, the subject of where the management control function should be located in the information system deserves to be addressed, because the CO module (management control or controlling) has a unique relationship with all other modules. In other words, the management controller ensures that information is consistent and that actions are taken to aid decision-making.

First, we examine the evolution of information systems in the contemporary setting, as well as the numerous changes they bring to the organization, as part of our article. The contribution of information systems to the management control function will be discussed next, followed by the location of the FICO module (Finance controlling) in SAP.

# 2. Information systems at the service of management control

## 2.2. Management control practices in the face of change

Before concentrating on management control and the information system, it is necessary to first examine the idea (management control) in its whole. Several authors discuss its definition and significance. There are numerous definitions of the concept (Gervais, 1996) "Management control is the process by which managers ensure that resources are obtained and used efficiently, effectively, and appropriately in accordance with the organization's objectives, and that current actions are well aligned with the defined strategy. It still refers to the process that ensures that the company's actions are efficient, i.e., that the value of the resources used (which is usually expressed in terms of cost) remains lower than the value created socially recognized by the market (which corresponds to the appreciation in terms of price, quality, and deadlines), which consumers carry for the satisfaction of some of the company's needs "..

Management control can be defined as "the process by which managers receive assurance that resources are collected and used effectively and efficiently to meet the organization's objectives," according to Anthony (1965). While ensuring the implementation of strategies and the effective and efficient use of resources, the author presupposes the presence of earlier objectives reached by managers.

The impact of organizational size on internal management has long been recognized: "the larger an organization is, the more elaborate its structure is: the more specialized the duties are, the more differentiated its units are, and the more developed its administrative component is" (Mintzberg, 1982).

Management control, according to Bouquin (1986), is "a set of processes and devices that steer decisions, actions, and behaviors in organizations to make them consistent with long- and medium-term objectives and that are based on information systems." In this sense, management control is a management tool that is much more commonly employed in large firms, because shareholders want to know how the resources, they give to managers are used to maintain the company's long-term viability. With this in mind, it is critical to demonstrate the importance of the information system in the development of the management control function. This system has become critical within firms because it offers critical information and serves the needs of corporate managers. However, the management controller's responsibility has extended beyond the preparation of accounting and budgetary records to include communication in order to ensure consistency between the information system and the defined objectives. Several techniques, such as activity-based management, the balanced scorecard, zero-based budgeting, the just-in-time method, and benchmarking, according to Zimnovitch (1999) and Naulleau and Rouach (1998), reflect the refoundation of management control for a better measurement of performance.

## 2.2. Information systems and organizational performance

Nowadays, the rapid evolution of trades and activities has pushed companies to set up an information system. The latter takes into consideration the technical dimension and that of management and steering for a good use of IT in the company. This field has experienced remarkable and rapid development, given the important

role it plays. However, organizations are invited to take into account any IT evolution in order to facilitate data exchange.

Organizational strategies have undergone significant changes, including the regeneration of competitiveness foundations through product quality, peripheral services, and innovation (Allouche and Schmidt, 1995; Malo and Mathé, 1998). These new competitiveness criteria have naturally resulted in a plethora of internal information requirements, both financial and, more importantly, non-financial (Bescos and Mendoza, 1999). Information and communication are becoming increasingly vital as the level of competition rises. In current era of globalization of trade, when competition is focused on the production of value, the organization cannot ignore the critical requirement to know and communicate. This procedure necessitates a holistic approach to data.

The latter's competence becomes a critical component of a company's administration and control (Corfmat D, Helluy A, Baron P, 2000).

It's worth noting that the relationship between technology and organizations has changed in recent years, as information is now at the center of every decision-making process. It is a critical success factor for the organization in a context marked by a variety of motions.

Within an organization, a traditional information system collects, processes, and distributes data for decision-making, coordination, control, and analysis (Laudon & Laudon, 2002). The information system, according to (Lafitte, 2003), is a complex whole that is often heterogeneous because it is made up of elements that have been juxtaposed over time based on strategic decisions, technological evolutions of the computer systems in place, and the evolution of the organization itself.

The sector of activity, on the other hand, has an impact on management control practice and information system selection. However, not all businesses require the same level of information management. To make good decisions, some people will require more dependable and relevant information than others. The information system will enable the organization to control both the environment and its internal capabilities, resulting in a competitive advantage and a dominant position in its area of activity as well as on its market, allowing it to respond effectively to competition.

## 2.3.The information system: a strategic challenge for the organization

Today's leaders must be aware of technology advances as well as economic challenges, and the IT tool is viewed as a solution for the firm. The latter, which aims to manage risk and anticipate uncertainty in order to succeed in all interactions with the environment and maintain activity coherence.

In order to make the best judgments, the company's activities must evolve, which necessitates the control of a vast amount of data, some of which is sensitive. The information system has moved to the center of any organization and has become a vital tool for the majority of industries. It is, in fact, a vital process of management control since it is capable of managing the company's activities and meeting the various needs of the function.

The information system is critical to the organization's performance since it assures the right flow of information as well as the timely completion of activities, as well as the storage and efficient processing of data. To address the complexity and uncertainty of the environment, the information system is the company's nervous system, and it demands all of the considerations and, in particular, the personal attention of the leaders. This necessitates the coherence of strategic decisions through communicating the relevant data.

Its adoption is a key factor and a key to the company's success since it represents a significant shift in management and a necessary prerequisite for achieving goals.

The goal of information systems is to model the available resources in order to understand how each service actually works. Companies, according to Corniou, work in a dynamic world and must detect concerns and dangers immediately. As a result, having an information system implies having a tool that allows you to give trustworthy and consistent information at the correct moment, plan the

company's future, and keep track of the environment's evolution. A good information system, on the other hand, can help you save money and improve your procedures.

Assuring a fit between the organization's needs and the information system chosen remains an equation that must be solved in order to meet expectations and work properly. To accomplish so, a balance must be struck between the company's requirements and the information system's solutions, taking into account numerous factors such as the size of the organization, its sector of activity, and its culture. Several studies imply that information systems have a strategic dimension (Porter and Millar, 1985; Kettinger et al., 1994; Bernasconi, 1996), in the sense that they can produce a long-term competitive advantage.

To effectively govern and use the organization's assets, it is required to express the objectives in a transparent manner, identify and involve the players involved by building teams, and convey the objectives in a transparent manner. This vision will ensure the system's effective deployment and confirm the freedom of choice. To better manage the company's activities, simplify and increase the reliability of internal and external operations, predict failures, and improve the quality of information.

## 3. The information system: a key impact on management control missions?

### 3.1. The information system: A potential for change for the management control function

According to most authors, the notion of management control evolved into a modern form within General Motors, one of the largest American automobile firms, which saw the need to strengthen its structure and have accurate information for job execution. "The management of a company must verify that the actions conducted are in compliance with the programs adopted and the directions issued," Fayol explained in 1916. Within the organization, the flow of information must be formalized. Information, according to P. Lauzel and R. Teller, is a critical component of the management process and hence a critical component of the management control system.

It is critical for any organization to invest adequately in information technology nowadays. It is critical for management to establish a formal and decisive commitment to introducing change and instrumenting its internal management in order to achieve positive change.

The approach's effectiveness is built on a clear desire communicated by management and delegated internally by managers, primarily management controllers.

However, according to (Bernoux, 2010), there can be no change without the will of the actors, because success cannot be achieved if the information system is not embraced by the personnel.

Management control contributes to the development of the management information system by providing performance evaluation frameworks that aid in the creation of dashboards for the firm (Rober Teller, 1999). This system must assure data correctness and reliability while minimizing errors.

According to Anthony (1995), the link between information processing and management control functions is similar to that of an economic network with its users. The network's designers and operators strive to distribute communications swiftly, consistently, and unambiguously. In this regard, the information system's contribution to the development of management control has gained traction and continues to be one of the most talked-about topics, as it meets a variety of needs in the company and generates management information and indicators to ensure the management and management of the organization's activities.

The implementation of a new system surely results in new working practices and conditions for employees, which might alter or transform the company's business and strategy, as well as its culture. "Corporate culture generally characterizes all behaviors and uses existent in the organization without being described or managed in any formal way whatsoever," as Mout & Autissier (2010) put it.

To grasp the scope of the issue, consider these new waves of adoption of management software packages, which are at the heart of systems known as ERP (or Enterprise Resource Planning) as proposed by SAP. Designed specifically for businesses, the SAP application provides a fully integrated, affordable, and unique solution to manage the entire organization. Financial, sales, and customer relationship management tasks are all included in the SAP solution. It streamlines processes, gives you rapid access to detailed data, and helps you develop faster while staying profitable.

Furthermore, many of the functions previously handled by the management controller have been automated and are now carried out by the software package. According to (Scapens & Jazayeri, 2003), ERP allows for four management control evolutions.

Elimination of routine tasks (part of budgeting)

Transfer of accounting knowledge to managers

The use of more leading indicators

A broader role for management controllers.

ERPs, according to (Besson, 1999), cause a shift in the management control role, resulting in the emergence of two professions: an engineering profession focused on the management information system and an analyst profession focused on the interpretation and transmission of management data.

### 3.2. Management of management control in SAP: Case of the FICO module

With information technology, the management controller spends less time collecting data, easier access to external information to save more time for more in-depth analysis and interpretation (Siegel, 1999). These technologies represent today a main challenge for a better management of the company. According to the author, the management controller therefore takes care of the processing, analysis and presentation of information in order to achieve the objectives according to a simplified representation of reality in order to update dashboards and transmit them more quickly to the various actors concerned in order to guide strategic decision-making. In other words, he is the navigator of the company, he designs and maintains the budget system while being the economic advisor of all the managers of the company and not only of the general management (Bouin, Simon, 2004).

According to (Malo & Mathé, 1998), the information system is the main instrument of organizational control. It has a role of participation in decisions (evolution, monitoring, correction) in order to promote a coordinated and finalized functioning of the organization. For the management control function, the information system gives rise to the rapid production of reports. The latter concern most of the activities of the organization, namely the evolution of sales, material balance sheets, the calculation of costs and the selling price as well as the state of budgets. This guarantees and facilitates the change from ordinary to analytical work. Management controllers will have more time to carry out value-added activities related to management control and decision-making. (Granlund & Malmi 2002; Scapens & Jazayeri, 2003; De Ronge, 2000). SAP (Software Application Product) is a management software package composed of several modules. Each module deals with a profession in the company. It allows the organization to secure and unify the flows of the different functions that compose it (Figure 1).

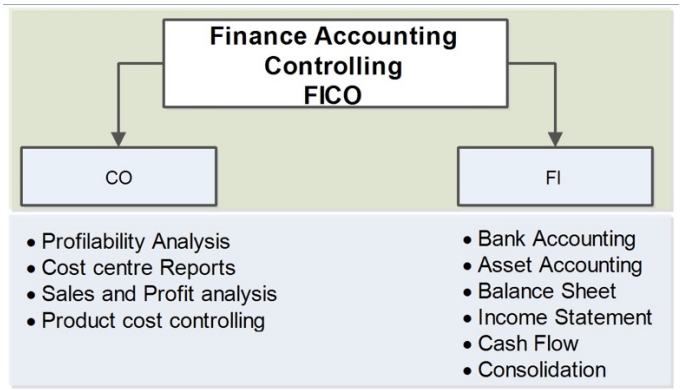


Fig. 1. Mode of operation where the company uses three different systems

SAP makes it possible to gather the financial flows of a company from the different departments namely production, accounting, management control. With the help of the movements translate by the operations of each service namely the state and valuation of stocks, the cost of production, the turnover.

The financial ERP solution (SAP FI-CO module) provides the company with all the necessary tools to achieve the objectives. In terms of financial accounting and cost accounting, it is the most complete solution available today. To achieve all this, the financial ERP solution is divided into two modules: the financial accounting module and controlling module. Cost control (SAP CO) and financial accounting (SAP FI) are independent components that regularly exchange data, so that all cost-related data created in financial accounting is automatically transferred to cost control. Some sensitive elements of financial accounting are managed as types of cost accounting or types of income accounting in Controlling. This makes it possible to compare and coordinate the value of management control and financial accounting.

Finance and controlling takes a crucial place in the information system since it receives financial information from all the functions of the company; Marketing, Production and human resources, in order to carry out the necessary treatments.

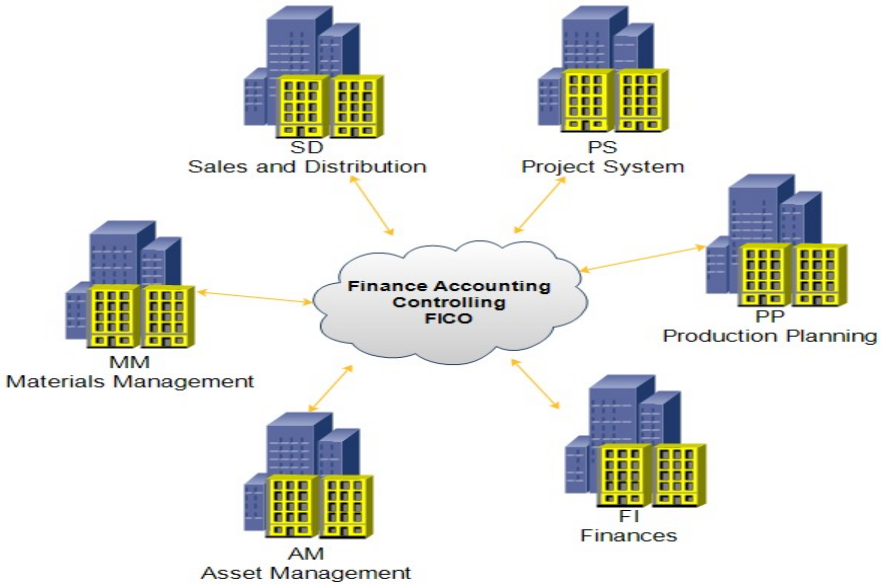


Fig. 2. Representation of information processing in SAP

Management control includes all the functions necessary for product and cost control. It offers a series of tools that can be used by preparing farm data for analysis and decision-making. Budgeting remains the most important part of the organization's activities, as it simplifies the analysis and control of business transactions and provides a basic measure to compare actual results. Thus, pre-budgeting methods take several forms and vary according to the organization to be able to determine the discrepancies between the achievements and the pre-budgeted data, which implies the control of management flows.

The transfer of accounting accounts to management control in order to enhance collaborative work between the actors involved explains the direct relationship between the management control and accounting modules.

### 2.3. The FI-CO : Finance controlling module

In this digital age, we are rapidly experiencing many technological advancements, so all businesses need to use effective IT solutions to accelerate their growth.Information systems are a valuable solution for the controller in the performance of his missions. This allows the controller to guarantee information consistency and data reliability.

The main objective of SAP FI-CO is to establish a system to promote the generation and management of financial statements to help companies perform financial analysis, reporting, planning and decision making. It is the most complete solution available today. The controlling module CO consists, in a first point, in processing and analyzing all financial flows with the aim of making a budget comparison in order to be able to communicate them, since the budget remains central in most companies and occupies a main place in the management control process. SAP CO makes it possible to closely monitor costs, various expense items and the profitability of the company.

It also provides information needed for management decision-making, namely product tracking and margin status. Module FI-CO includes sub-modules related to finance and management control function, presented in (Figure 3), and provides information on management decision-making in a way that facilitates coordination.

**SAP FI** : Used to generate and control financial statements, primarily for external reporting requirements.

It includes the following tools:

- The balance sheet summarizes the assets, liabilities and capital of the business over a period of time.
- Cash flow used to forecast liquidity to pay payment obligations.
- The income statement analyzes expenses and income for a given period.

**SAP CO** : it allows to plan and take effective decisions mainly for internal needs at the level of management control.

It includes the following tools:

- The cost center report provides expense and revenue information to get the cost center financial position.
- Examine sales and profits to analyze profitability by department, market or industry.

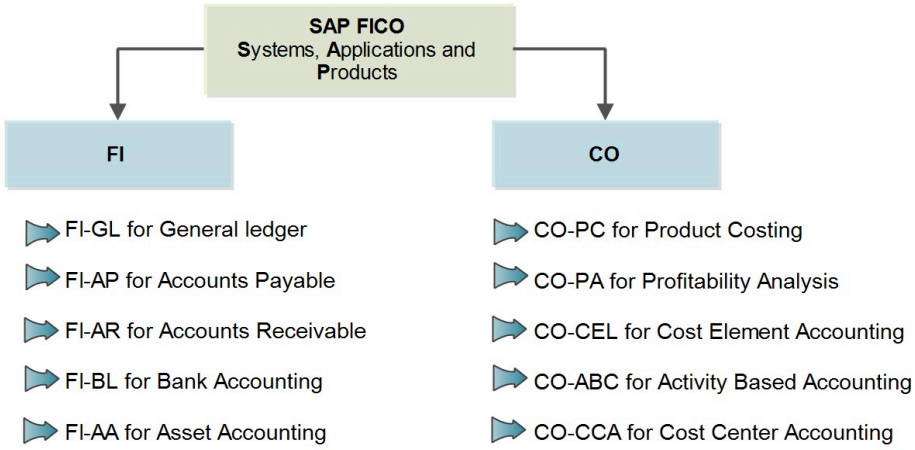


Fig 3. Components of the Management Control (CO) Module

Furthermore, because the module cannot be developed by a single party, managers must collaborate in its development by specifying the manager's level of influence or involvement in the budgeting process. In a second point, SAP's management control, which is presented as a module CO (Controlling), enables efficient cost management, allows for income statement analysis, and determines costs according to product.

This will make it easier for the performers to get access to it and work together on projects. In order for the new managerial context to be able to integrate an interactive dimension with the goal of encouraging all actors on strategic uncertainty, this presupposes in particular that the new managerial context insists on a decentralization of the management control system, in order to promote the emergence of proposals and innovation (Aminats, 1999). "Defining a relevant and coherent network of the organization would involve fostering both vertical and transversal coordination, and therefore thinking ahead about an adaptive organizational structure," according to (Fabienne Oriot, 1999). In terms of performance, (Delone & McLean, 1995) point out that an information system's performance can be measured in a variety of ways, including:

- The quality of the information produced: reliable, exhaustive, accessible...
- The level of use: real time of use
- User satisfaction: which reflects the user's attitude towards the product or tool.
- The impact on individual performance: productivity gains, decision quality
- The impact on organizational performance: general efficiency, financial performance, competitive advantage, value creation.

## Acknowledgements

The management of information through a computer tool allows an organization to improve its performance because the information system allows, first and foremost, to collect and process information from all of the company's functions and return it in a synthetic form, allowing decision-makers to respond effectively to future uncertainties. In a second point, provide management options, master the organization, and make reporting easier using dashboards and management ratios. The deployment of a reliable information system is required for decision-making and the attainment of strategic objectives; this requires, in particular, that it is a key component for managers and a true competitive advantage lever. However, the proper operation of the information system necessitates managerial willingness, as well as investments in terms of human and financial resources, as well as employee motivation.

These investments are intended to achieve two goals: first, a positive result based on cost reduction, and second, to add value to the business through the gains obtained.

It is critical to prepare for this new transition in addition to the successful installation of the information system. In the current situation, technology has taken on a unique and significant role. The attitude of senior management and the behavior of management control are critical variables in the implementation process's effectiveness. Because the information system is a tool for better management and decision-making, it is a key factor in the advancement of the management control function.

Our paper intends to demonstrate the function of the information system as a means for organizational change, which is tied to individual will and purpose, and which must be articulated by all company actors: leaders, managers, and operations. This study also shows that any business must properly describe its information system in order for it to be well-suited to its structure and strategic decisions. As a result, it is critical that the organization specify the attributes and talents of the management controller, as his abilities will determine the business's value generation.

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