MANAGEMENT CONTROL SYSTEM

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GENERAL OBJECTIVES OF THE SUBJECT
At the end of the course, Individuals will examine the principles of Management Control apply them within the companies need critically reflect Marketing behavior within companies *and* their impact on the development of this course.

8. MANAGEMENT CONTROL SYSTEM

8.1 Introduction of Management Control System MCS
8.2 Development of Management Control Literature
8.3 Mechanistic and Formal Control Systems
8.4 Systems Based on Psychosocial Aspects
8.5 Systems based on Cultural and Anthropological Aspects
8.6 Profit Centers

8.1 Introduction of Management Control System MCS

The aim of this lesson is to introduce the background literature on management control systems in organizations. The concept of management control and the need for control systems in organizations. This lesson will conduct a historical revision of the different trends in the literature on control systems in organizations, in accordance with their common characteristics. As will be seen, the management control concept has evolved with time and with the transformation of the environment and the circumstances in which companies have operated. The earliest studies conducted on control systems saw them as cybernetic and formal systems, focused on the use of financial and accounting information systems, fundamentally through cost accounting and budgets.

There is the 'market sensing process' which includes all activities related to information management, communicating new insights throughout the company and to all relevant parts of the chain which have to act accordingly; second, there is the ***'new offering realization process'*** which consists of market research, development and realizing new products (Kotler an d Keller 2006, 38). R&D belongs to the support activities of the chain where, for example, research has shown that R&D-sales cooperation as well as sales-marketing cooperation during the concept development stage has an overall positive influence on new product development (Ernst et al. 2010). The third and fourth processes Kotler and Keller (2006, 38) describe, are the 'customer acquisition process' and the 'customer relationship management process' which are both related to targeting and understanding of customer needs. In order to be superior in these four processes marketing and sales need to interact properly as stated by Ernst et al. (2010). The last core process Kotler and Keller (2006) describe is the 'fulfillment management process' which is not referring to the marketing and sales relationship but to the order fulfillment and supply chain management process and therefore belongs to the primary activities. Sales people play a key role in a company's value chain as they are creating, communicating and delivering value to the customer by actively managing customer relationships (Ingram et al. 2008). The marketing has a key role as well as it is responsible e.g. for creating customer and brand awareness. Coordination and collaboration as well as the right organizational culture are irreplaceable in order to manage a value chain successfully (Porter 1985).

By driving the mentioned core processes related to cross-functional marketing and sales co-operation to excellence, companies will outperform competition; create added value as well as customer satisfaction. This shows that there is a shift from focusing only on how companies can create competitive advantages through increased productivity within the value chain towards a perspective on how they can increase the quality of their customer relationship via better cross-functional teamwork (Rayport and Jaworski 2004). This is because one of the foundations of each company`s competitive advantage is the creation of "superior customer value through an effective marketing and sales relationship" (Guenzi and Troilo 2007).

Subsequently, this viewpoint was enriched with different contributions which centered on analyzing the influence of psychosocial and cultural aspects as key variables in the control of organizations. These latter studies have stressed the importance of human relationships, leadership, motivation and the organization's culture as less formalized – yet no less relevant – aspects of control systems. As a result, organizational management control today is not conceived as a closed mechanistic system but rather as a system with social connotations and open to the influences of the organization members and its environment.

Taking all this into consideration, this lesson sets out to offer an overall, though synthesized, vision of the different theories and approaches which have been developed on organizational management control.

Management Control - The word ***control*** has numerous meanings and different connotations, many of which are not applicable to the field of management. Within this scope, the term *management control* was introduced by Anthony (1965) who defined it as the process of assuring that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives. More recently, Kloot (1997) also points out that in process terms, management control exists in order to ensure that organizations achieve their objectives, and for Fisher (1995) control is used for creating the conditions that motivate an organization to obtain predetermined results.

Hence, the concept of control in organizations appears to be related to the existence of certain objectives or ends in all organizations.

It is useful to recall a classic definition by Barnard (1938) according to which an organization is a system of consciously coordinated activities or forces of two or more persons. The coordination of these forces or activities is conducted at all times with certain explicit purposes, which can thus be regarded as the body of generic objectives of the organization (Rosanas, 1994). So then, except in trivial cases in which it is possible to verify the degree to which said objectives have been achieved without effort or resource investment, it will be essential to set up some kind of evaluation system in order to check whether or not this explicit aim, which constitutes an organization's rationale, is being achieved.

As Rosanas observes (1994), ***"measuring the achievement"*** of the organization's generic objectives will generally modify the behaviour of the top management. In fact, such a modification of people's performance (in this case, by the organizational management) is the measuring system's very raison d'être: its objective is precisely to orient the performance of the organization's members, in accordance with the data on the real situation which will inform them of the achievements attained. If the objectives defined in strategic planning are not being attained, the management will in theory modify its own performance in order to change the course of things.

Conversely, if they are being attained with ease, the management will likely insist on the lines of performance followed or foreseen up to that time, perhaps even setting more ambitious objectives than those theretofore proposed. At the lower levels of the organization (···), the need to check whether the different tasks are being performed adequately in order to achieve the organization's objectives is even more vital, for a dual reason: on the one hand, the relationship of the specific tasks being undertaken at these levels with the organization's overall objectives is considerably less precise; and, on the other, the motivation of the person in charge to act for the good of the organization as a whole, may on occasion be less intense". Otley (1999) also coincides in pointing out that the management control system furnishes information intended to be useful to the managers for carrying out their work and helping the organizations to develop and maintain viable behaviour patterns. Moreover, any valuation of the role played by this information requires taking into account the use which managers give to this information. However it should be mentioned that, obviously, control may be applied to different levels of an organization and that, as a result, the requirements for this control to be effective may differ from some organizational levels to others (Fisher, 1995). As Anthony (1990) sees it, the term ***control*** is used in the sense of assuring the strategy's putting into practice.

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The function of management control includes carrying out the plans necessary for ensuring that the strategies are fulfilled as envisaged. Although planning and control are at times described as separate procedures, both contribute to the management control function. Anthony (1990) also emphasizes that it is a process through which the managers exert their influence on other members of the organization in order to put its strategies into practice. Management accounting and management control have long been viewed as practically synonymous concepts, since accounting provides a language capable of including all areas of organization and it has always been attributed with a considerable decision-making orientation, which is especially true in the case of management accounting (Otley, 1999). This is particularly so if we consider that the objectives of an organization's accounting system are centered on the following three aspects (Horngren and Foster, 1991):

1) To produce periodic internal reports for the management, so as to facilitate information and influence people's behaviour, with regard to cost management, planning and the operations control;

2) To provide non-periodic or special information for strategic or tactical decisions in matters such as price policies, product selection, investments in equipment, the formulation of overall company policies and long-term planning;

3) To release information outside the company through financial statements aimed at investors, financial authorities and other people and institutions.

If we restrict ourselves here to the first two aims, those having to do more specifically with management, and in contrast to the rather financial purpose of the third aim, we can verify that the first two tally with the company's purpose of management control. On the one hand, the periodic information referred to in the first point would constitute the basis for the periodic evaluation of the company's regular activities, which corresponds to the more intuitive notion of control, understood as the process that makes it possible to check that the organization's normal routine is as it should be: in other words, that it is operating in accordance with the plans outlined by the organization. On the other hand, special information for strategic decisions would constitute the basis for what today tends to be called strategic control, which would have to do with much more isolated decisions, related to the formulation or revision of the strategy (Rosanas, 1994).

As the history of organizations has developed, the academic world has increasingly reinforced the idea of a growing need for organizational control. We are thus faced with an issue which both academics and professionals, in the fields of both accounting and company organization, tend to consider of major importance. The fact that there are multiple ways of approaching the control concept has lent it a certain ambiguity, with the literature offering alternative definitions and completely different approaches. There are numerous definitions of the control concept, each adding new viewpoints as new elements are seen to be relevant. For Fisher (1995), the fact that *control* has so many definitions has led to a certain ambiguity in the control concept itself, which has supposed one of the greatest difficulties in defining management control systems. According to Rosanas (1994), some focuses occasionally look at problems in all their scope yet with little precision; others, in contrast, treat the problems with the utmost precision, but then reduce them to more manageable simplifications, meaning that "one of management accounting's merits has been to provide the basic substratum in which organizational control takes place, making use of a certain structure that economic-financial data themselves have."

Most of the authors coincide in highlighting the fact that management control is a process which managers use subjectively in order to influence the performance and behaviour of the people forming an organization (Tannebaum, 1967; Collins, 1982; Flamholtz, 1983; Inzerilli and Rosen, 1983; Amat, 1992; Fisher, 1995), in order to put into practice the strategies of the organization so that it may attain its objectives (Anthony, 1990; Collins, 1982), both effectively and efficiently (Anthony and Dearden, 1976), or even surpass them (Blanco, 1984). This process requires the establishment of norms, supervising employee behaviour, measuring the number (although not always the quality) of outputs, and evaluating and correcting behavioural deviations by the members of the organization (Ouchi, 1979), meaning that it has to be linked to a planning process and a supervisory process (Anthony, 1990), which makes it possible to obtain a feedback of the situation of the organization's objectives (Henderson and Lee, 1992; Coates et al., 1993), and thus be able to make timely decisions (Kaplan, 1991; Berry et al.,1995), with the ability to act being the essence of control (Coates et al., 1993). These approaches have an undeniably cybernetic nature, since, as Kloot (1997)) maintains, ***"the majority of management control systems are regarded as cybernetic or closed-cycle models"***.

A ***cybernetic control system is that in which objectives are set, outputs are measurable, outputs attained are compared with objectives set and, if necessary, appropriate corrective actions are taken"***. However, it must be said that cybernetic control models require a predictive model for the organization or system to be controlled, and that when the environment is turbulent and dynamic, the existence of such a predictive model cannot always be easily assumed, so that, if the latter is non-existent or insufficient, the cybernetic control is also insufficient and must be completed with other control models (Kloot, 1997), which is consistent with the proposal by Hopwood (1974), who distinguishes among administrative controls, social controls and self-control.

The overall level of the organization, it can fairly safely be assumed that top managers are interested in the achievement of its objectives, which on many occasions they themselves have even designed, although at lower levels this does not necessarily have to be so, meaning that, as Rosanas (1994) suggests, delegation cannot exist without adequate control tools, and the lack /of these jeopardizes the chances for the regular development of the company, which requires management methods that go beyond intuition and visual appreciation of the company's true situation.

Further to the above, it may be considered that in the majority of companies, their members may not have a specific interest in pursuing the organization's objectives beyond what the organization itself is capable of inculcating in them. An organization's control system is the fundamental means it has for inculcating its members to pursue its objectives" (Rosanas, 1994). For this process to be satisfactorily conducted, the management control system has to consider the following aspects, both at the level of the organization as a whole and at that of the different units comprising it (Vázquez-Dodero and Weber, 1997):

1) Objectives and goals that reflect those set for the organization as a whole as a result of the planning carried out, which is equivalent to establishing what has to be done, when and how;

2) An internal structure of the unit, including the line of authority and responsibility, which refers to allocating the responsibilities of managerial action;

3) A measuring system consistent with the objectives and the structure of responsibility, which includes fundamentally the budgetary system and the information system for control;
4) A system of material or non-material rewards or penalties, which leads the different people to act in a direction coherent with the organization's objectives. This includes the system of appreciation for performance, and compensation or incentives to motivate the person in charge, linking his personal objectives of all types (i.e. not only financial) with those of the company.

Furthermore, for the control process to be successful, environmental characteristics must be taken into account (Collins, 1982,), and even for Emmanuel et al. (1985), the control system has to adapt on its own to this environment. In other words, self-regulation of the company system, solving both strategic problems (the organization in relation to its environment), and operational problems (the effective application of the plans devised for also achieving overall objectives) (Soldevila, 2000). All this means that the control process must be considered from two dimensions: one that is social and one that is organizational. The former refers to the organization's development within the social determinants of the society to which it belongs, and the latter refers to the organization's expansion, bearing productive and market factors in mind (Neimark and Tinker, 1986).

Moreover, an important point within this context is that in no human organization (or subdivision of same) can the objectives be perfectly defined in a single dimension; or, expressed otherwise, the objectives of an organization are, in general, incompletely defined (Rosanas, 1994). And too, the relevance of the control process increases when an incompatibility arises between the individual objectives of the members of the organization, and when there is a need to make major efforts to redirect them towards the achievement of the organization's overall objectives (Flamholtz, 1983; Amat, 1992), and, furthermore, when there is a desire to maintain the stability of the structure of an organization's internal relations and establish formal or informal mechanisms for regulating the activities of its members (Inzerilli and Rosen, 1983).

The authors introduce the organization's sociocultural factors and distinguish between two types of control dependent on the participation of the individuals, so that they distinguish between external control and internal control. External control is less sensitive to sociocultural factors than internal control, whereas internal control is based on voluntary action and on the individual's own identification with the organization. Amat (1992) also differentiates two control perspectives. In the first place, a limited perspective of the control concept, which can be understood as analysis *a posteriori* and in monetary terms of the effectiveness of the management by the different person in charge of the company, in relation to the results that were expected to be obtained or to the predetermined objectives. In this perspective, control is developed rationally and isolated from its context (people, culture, environment), and it is ensured by comparing the results obtained with those expected.

Within this limited approach, accounting control systems are most habitually used. In the second place, a broader control perspective, which not only considers the financial aspects, but also (and very especially) takes into account the context in which the activities are conducted; and in particular, the aspects related to individual behaviour and with the organizational culture. From this second perspective, control is exerted not only by the management, but also by each of the people forming part of the organization. It is exerted not only *a* ***posteriori*** but also permanently, and is not only limited to the technical aspects of its design, but also has to be adapted both to the culture of the organization and to the people forming part of the company.

Furthermore, it does not have to be focused only on the result, but instead has to be flexible, regarding the control process as a motivation mechanism. Dermer and Lucas

(1986) introduce a political perspective, stating that the definition of control is linked to concepts of authority (the person in charge of the organization has to dominate the behaviour of his subordinates), objectives and strategy (an effort is made to attain the set objectives through the effective and efficient combination of the organization's means and resources), analysis of the current situation, motivation (the organization's components have to be motivated in order to make the individual objectives tally with the overall ones), evaluation (in order to measure the performances), decision-making (once the organization's situation is evaluated with respect to the set objectives, those in charge have to make the most timely corrective decisions) and execution and valuation of these decisions.

All the authors take for granted the importance of control in organizations. ***They see it as a common trait and inevitable in all human organizations*** (Flamholtz, 1983; Amat, 1992), making the control function one of the most basic and indispensable in business management, although in fact, control is only one of the elements that an organization may avail of as a management system, although it is, unquestionably, the system that contributes most greatly to improving organizational performances (Blanco, 1984). At the same time, measuring these performances involves translating the organization's strategy into results, and thus for the organization to know their trajectory (Lingle and Schiemann, 1996). In Lawler and Rhode's view (1976), one of the main reasons for implementing control systems is indeed the difficulty in coordinating the activities of the organization's members.

This is especially true when it grows in size, something next to impossible if one does not possess information on everything that takes place in an organization. For Anthony (1990), implementing a control system in an organization is justified on account of its being the only process through which company management ensures that the organization's objectives are achieved and employed most effectively. Simons (1995) and Merchant (1982) defend the use of control systems as mechanisms for managing organizational change.

In situations involving strategic change, the top management has to use control systems to bring about the ***formalization of the organization's beliefs, and the setting of acceptable limits of strategic behaviour for defining and following up the critical variables in the evaluation of results, in order to foster the debate over strategic uncertainties, to fight against the organization's inertia, to communicate new strategic objectives, to set up calendars for their implementation, and to ensure that due attention is paid to new strategic initiatives.*** Thus, even though control is merely one element in a management system, we may conclude that it is the one that most significantly contributes to improving organizational performance. Therefore, all organizations require the designing of an information system in order to perform control functions, since the control system must be the tool through which the organization strives to ensure that its strategies are carried out.

8.2 Development of Management Control Literature

The growing awareness of organizations of the need to have information systems for management purposes is related to their own need to coexist in a permanently changing environment, not only physically but also technologically, socially and financially (Caplan, 1971). This situation became more accentuated over the 1980s and 1990s, owing to the processes of market internationalization and globalization (Roberts and Hunt, 1991).

In view of this new context, organization managers have had to adapt the structure of their companies to these changes and to plan, control and handle different types of decisions. This means that information systems have to be adapted to each organization's objectives, structure and culture, since, through these systems, ***organizations seek to raise their capacity for coordinating their member's decisions and for pinpointing problems that may arise*** (Lawler and Rhode, 1976). As will be seen, opinions in this respect are enormously varied, since, while it is true that most authors regard accounting control systems as particularly important, certain more critical authors feel that accounting systems are not a definitive solution. While they recognize their usefulness, they do not deem them indispensable and furthermore argue that it is impossible to establish an ideal, perfect system that paves the way for obtaining the information needed for planning and controlling organization management.

The accounting information system is the information system par excellence, since it can be designed to obtain objective (Hopwood, 1972) and quantifiable information (Emmanuel et al., 1985) at all organizational levels. Out of all the accounting control systems, management control research has progressively focused on budgeting as the key system (Birnberg et al. 1983) and because it is the most regularly used for organizational management control (Caplan, 1971). Today, however, budgeting is regarded not as the only control system but rather as one that must be complemented by other control mechanisms, both formal and informal. This is because of the growing recognition of the importance of qualitative variables that are very difficult to measure (Clancy and Collins, 1979). Flamholtz (1983), who analyses the relationship among the organization's accounting, budgeting and control system, concludes that this relationship may be very complex, since budgeting and accounting, as components of the formal control system, are not control systems in themselves, but instead depend on a good relationship and the filling of certain prerequisites by the other control mechanisms for control itself to work.

In a nutshell, the majority of control systems (budgets, information management systems and accounting and financial systems) are management systems that compile information on specific aspects of the organization's performance and release them to the organization members, although, in order to do this, attention has to be paid to which systems each organization has to use and how it has to do so (Camman and Nadler, 1977). According to Kaplan (1991), ***the management control system makes it possible to adapt to changes in the environment, provides feedback in the performances, makes it possible to evaluate the profit of the products and clients, and counsels in capital investment decisions.*** Likewise, its adoption intends to reduce internal tensions and conflicts, as well as to facilitate reports to external groups (Cooper et al., 1981). Although the number of studies and research works on this subject is very extensive, most authors draw attention to the fact that there are still many points pending for establishing an ideal system, especially if the criticisms of the current systems are taken into account (Soldevila, 2000***). In light of the foregoing, we cannot help but observe that, while it is always possible to improve accounting systems for controlling management, often if not always, it is virtually impossible to attain the ideal control system*** (Hopwood, 1972). Similarly, Merchant (1982) notes that "perfect control, which implies the conviction that the fulfillment of the objectives adapts to those set out, will never be possible, since unforeseen events are always likely to take place (...) a good control system should be interpreted in the sense that an informed person can reasonably assume that there will be no unpleasant surprises".

The following paragraphs present a synthesis of the development of the management control concept in the literature. We have pointed out the existence of different trends of thought, which have gradually evolved as organizations and markets have transformed, introducing new variables for building efficient control systems adapted to social changes, to the process of internationalization and to increased market competition (Jaeger and Balinga, 1985; Neimark and Tinker, 1986). Nonetheless, the contributions by the different authors are clearly heterogeneous and there does not appear to be a single predominant paradigm (Flamholtz et al., 1985; Merchant and Simons, 1986; Amat, 1991). Even so, all share the aim of improving organizational performance (Jaeger and Balinga, 1985). Amat (1991) points out that, despite the importance of organized control and control systems, there is a lack of adequate understanding of how control systems work, owing to the fact that the majority of the research works have examined them independently of the organizational context in which they operate. In our exposition we are going to distinguish the three trends that Soldevila (2000) proposes: mechanistic, formal control systems; control systems focused on psychosocial aspects; and control systems focused on the organization's cultural and anthropological aspects.

8.3 Mechanistic and Formal Control Systems

This category includes the early contributions on the subject of management control and is characterized by the control system as a technical and formal system that coordinates human performances with the sole purpose of producing goods and services (Soldevila, 2000). According to this conception, management control systems are formally explicit tools and they themselves make it possible to bring about the organization's effectiveness and the efficiency (Amat, 1991). For Amat (1991), the different contributions to this trend of thought are sustained by mechanistic theories and have the following common points:

1) The organization's objectives are perfectly defined, clear and tend to be in relation to the maximization of profit;
2) The management plans and controls the efforts by the organization's members;
3) Behaviour is managed through the design of formal organizational mechanisms (hierarchy of authority, rules, behavioural norms and defined procedures, centralization of the decision process);
4) Control of the efforts by the organization's members can be achieved through the use of logic and qualitative techniques;
5) Control can be exerted through the design of formal systems and based on the principle of control by exception;
6) Motivation is largely extrinsic and incentive systems have to be fundamentally based on monetary payment.

Within this trend of thought: we can distinguish on the one hand, classic or traditional organization theory and, on the other, contingency theory. The first contribution in this line of thought is what corresponds to the classic school represented by Fayol (1949) and Taylor (1911), who bequeathed a scientific, rational vision of company and management systems. In the same trend of thought one can include the works by Anthony (1965) and Anthony and Vancil (1972), who introduce a broader vision of the organization, suggesting the influence of company policy on the design of the control system, although solely in the formal aspects related to strategic planning carried out by the top management. For this reason, the classic focus has been criticised for devoting its attention to formal aspects alone, without taking into consideration the effects of other informal or more complex factors (Soldevila, 2000).

In this mechanistic and formal trend we could also include what is known as contingency theory, which, according to Amat (1991), is a simplification of systems theory. This approach maintains that no control system is ideal for all organizations, but instead depends on the circumstances in which it finds itself (Amat, 1991). It is thought to have been developed by Burns and Stalker (1961), Thomson (1967), Woodward (1965), Lawrence and Lorsch (1967), and Gordon and Miller (1975).

Attention has been drawn to the existence of three fundamental contingency factors in the design of control systems:

1) Technology
2) Dimension
3) Environment, meaning that the effectiveness of a control system

Depends on the adjustment to the organization's characteristics and, especially on the three foregoing variables (Berry et al., 1995). For Amat(1992), the limitations of the contingency theory are specified in that "the relations between the variables are not sufficiently clear, this research has tended not to study the relation between control system and effectiveness and, furthermore, the tendency has been to associate effectiveness with profitability; the prescriptions proposed by this approach have obtained insufficient empirical verification; and the close relation between the different components of a control system invalidates the isolated study of control systems with respect to their broader context which, moreover, is much more complex and multidimensional than what this trend has indicated".

The application to an organization of mechanistic and formal management control systems involves a series of drawbacks which have been shown by different authors. The following are the most relevant:

1) They present important limitations when adapting to changes in the conditions, circumstances and situations in the organizations owing to change in the environment, since, according to Amat (1991) and Neimark and Tinker (1986), they do not take the environment into account or fail to sufficiently specify its influence on the control system;

2) For Ouchi (1977) control and structure are not sufficiently differentiated, and in some cases are even confused with one another;

3) They only work satisfactorily when the activities to be developed are specific and repetitive, or else when high pressure is exerted by the management for people to submissively accept specific tasks, and furthermore, when the environment is

stable (Amat, 1991); • They lack a socio-historic perspective on the social origin of control systems (Neimark and Tinker, 1986);

4) They can take on a bureaucratic nature which can hinder creativity and innovation (Amat, 1991);

5) They can have unforeseen and undesirable consequences; for example, the objectives of the organization's members can take precedence over the objectives of the organization (Morgan, 1986);

6) Ongoing feedback mechanisms, through which the organization can be made more dynamic, are forgotten and focus is preferentially on control at specific times (Neimark and Tinker, 1986);

7) They can prompt demoralizing effects on the employees, especially those at the lower levels of the hierarchical scale (Morgan, 1986);

8) Performance by the organization's members is not clearly specified, since the main objective of analysis of this trend is the organization itself (Neimark and Tinker, 1986). Thus, while on the one hand it can be concluded that mechanistic control systems are seen to be overly structured and lacking a capacity for innovation in the face of environmental change which alters the initial conditions, on the other, many of the paradigms (profit maximization, emphasis on formal aspects) and many of the management techniques currently in use (cost accounting, budgetary control...) are based on this mechanistic approach.

8.4 Systems Based on Psychosocial Aspects

As a formula for surpassing the limitations of mechanistic approaches, Amat (1991) points out that the management control concept was enriched by the incorporation of more complete approaches, in which people's passive and rational behaviour was substituted by a greater consideration of the motivational factors that influence behaviour and it began to be accepted that the crucial aspects for the design and implementation of a control system were not limited solely to formal ones. Pérez López (1993) stresses that the research works conducted using this approach regard the organization as a social body in which people take part not only to obtain the incentives offered by the company but to satisfy other needs as well.

According to Caplan (1971) the increased complexity of organizations requires the incorporation of new control techniques oriented towards motivational factors, in order to persuade organization members to cease passive attitudes or behaviours, rendering it necessary to accept that, for control systems to be implemented, it is not enough to consider the formal aspects but rather one must include the individuals' behavioural aspects. Three trends of thought: can be distinguished: the human relations school, the trend based on human information processing, and open systems theory. These trends of thought share several common traits, which, according to Amat (1991), can be expressed in the following points:

- Formal systems both influence and are influenced by the people that form part of the organization; individual behaviour not only depends on the system's formal design, but also is influenced by the individual and organizational context in which it acts;
- Man is limitedly rational and does not attempt to completely maximize, but rather is satisfied with a lower level;
- The organization's objectives are not always clear and furthermore can create conflicts with the individual objectives;
- Control of individual behaviour may not only be achieved through the use of quantitative techniques but also responds to psychosocial conditions, so that control can be taken not only through both results and behaviour;

Motivation is conditioned not only by extrinsic factors but also by intrinsic factors. The most relevant aspects of each of these three trends are as follows: The trend based on human relationships focuses its analysis on the effects on the behaviour of the individuals in the control systems, since this behaviour is thought to be conditioned, among other factors, by individual objectives, by the relationship which each individual has with the job he performs in the organization, by the motivation and participation of each individual, and, in short, by all human relationships which occur within the organization.

Within this trend, it is deemed that the employee no longer has merely financial needs but also pursues his own personal satisfaction in the organization, which, according to Ansari (1977), involves the appearance of the manager-leader who will provide the impetus necessary for the employees to improve their performances and their satisfaction. This body of research, linked to the development of social psychology and sociology and to the impact of the human relations school, is centred on the study of people's influence on the exercise of organizational control. Amat (1991), points out that the basic aspect of these lines of research is the belief that having a company conception that places higher emphasis on its people helps make individual objectives coherent with organizational objectives and, therefore, can increase intrinsic motivation and the capacity for self-control.

The literature pinpoints two major lines of research within the trend of human relationships. The first has been focused on the analysis of the effects of employee behaviour in the design of the control system (Ridgway, 1956; Argyris, 1952, 1964, 1977, 1990; Stedry, 1960; Becker and Green, 1962; Hofstede, 1968; Schiff and Lewin, 1970; Lawler and Rhode, 1976: Ivancevic, 1976; Searfoss, 1976; Steers, 1977). In the second line we see the introduction of the effect of leadership styles on individual behaviour and on the design of the control system (De Coster and Fertakis, 1968; Hopwood, 1972; Swieringa and Moncur, 1974; Seiler and Bartlett, 1982).
The trend based on human information processing adds managerial decision-making to the design of the control systems, valuating the organization's psychosocial aspects- The research works in this line share the introduction of the principles of behavioural and cognitive psychology for analyzing the factors that affect the quality of individual decisions. The factors that influence the quality of decisions have been classified into three: those linked to inputs, which measure the information properties (type of measurement, degree of trust, method and order of presentation), those linked to the process that uses the individual employees when making decisions (personality, intelligence, decision rules used, etc), and those linked to final outputs (speed, quality and degree of trust in the reasoning .

The most significant contributions have been those made by Driver and Mock (1975); Hopwood (1978); Prakash and Rappaport (1977); Macintosh (1981); Libby and Lewis (1982) and Nutt (1986). The literature on human information processing, despite the fact that it regards organizations as coalitions of decision-making individuals, each with different aspirations, expectations, feelings and specific individual psychological variables and a capacity to process information, treats the organizational context superficially by placing too great an emphasis on the individual aspects (Amat, 1991).
In the approaches addressed up to this point, organizations have been treated as a closed system, in which it is believed that control is attainable by regulating the internal organizational variables; on the contrary, within the trend of the open systems theory, the organization is regarded as an open system.

The approach known as open systems is based on bearing in mind the close relationship between the organization and the environment, in addition to, owing to the influence of the human relations school, a broader consideration of the aspects tied to human behaviour. Along this line of research and within the scope of control systems, the most outstanding works are those by Argyris (1964); Katz and Kahn (1966); Thomson (1967); Hofstede (1968); Lowe and Tinker (1977); Ansari (1977, 1979) and

Amey (1979a, 1979b). It is worth observing that with the introduction of the open systems trend, organizations begin to be characterised by a body of actions by individuals and groups that try to attain their own objectives. The organizational dynamic is no longer the result of existing formal action, but instead is the complex combination of formal and informal factors, both internal and external, to the organization itself. Organizations, insofar as they are systems, begin to be studied with the characteristics typical of a system: internal interdependence, capacity for developing feedback, the ongoing search for balance, acceptance of equifinality in the means chosen, and capacity for adaptation.

The three trends or theories that take into account the psychosocial aspects in control systems introduce the effect of the individual and overall behaviours of the members of the organization and of the relationships among them, to the extent that these elements condition the design of the control system . Although progress has been made in the study of the control systems, they have been criticized by different researchers (Colville, 1981; Cooper, 1983; Chua, 1986; Dermer and Lucas (1986); Bhagat and McQuaid, 1982), who consider that, given the changes which organizations have undergone since the mid-1970s, the foregoing models cannot in themselves explain the reality of the organizational structure. A new research trend thus appears which no longer focuses solely on the organization's formal and psychosocial aspects, but rather incorporates analysis of the anthropological aspects, and very especially, of the culture of organizations and the individuals comprising them.

8.5 <u>Systems based on Cultural and Anthropological Aspects</u>

According to Pérez López (1993), these models regard the organization as ***"a social body with specific values that must permeate its entire activity"***. The different contributions made in this line of research share the organization's anthropological and social viewpoint as well as the different cultural properties, meanings, values and beliefs seen in organizations, which are nourished by myths, legends and stories and carry out celebrations through rituals, rites and ceremonies (Allaire and Firsirotu, 1984). As Berry culture cannot be described as a limited concept, but in rather broad terms, in other words, as the norms, values and symbols which enable members of a society or organization to understand and interpret everything that takes place in a like manner.

We can affirm that, although no consensus is found on the definition of culture in this trend of research (since it is a very extensive variable and difficult to delimit) all contributions see culture as a key factor for attaining the efficacy of control systems, since it is the variable that makes it possible to improve the relationships and wellbeing of its members and their identification with the organization's objectives, and thus attain overall objectives more easily. Amat (1991) also maintains that, through anthropology, it has been observed that the organizations' members share a series of rituals, myths, stories, ceremonies and other informal practices that can help or hinder the achievement of organizational objectives. Given the need to surpass the limitations of existing models, the introduction of culture has gained relevance as the environment has become more multinational and multicultural through the process of business internationalization, even though, the relative novelty of the subject explains the heterogeneity of trends and the confusion which the concept has come to have. Amat (1991) distinguishes between:

1) Culture as a key factor in control systems, understood either as one of the internal variables of the organization or as a metaphor that emerges from a subjective interpretation of social interactions between individuals,
2) The "cross cultural-cross national" perspective, which analyses the effects of each nation's culture in the organizational control system.

The investigative trend that has deemed culture to be the key variable in control systems is very broad. The research works carried out have focused on analyzing how to design an efficient control system, taking into account the different effects and cultural relationships of the organization and its members (Ouchi, 1979; Collins, 1982; Kerr and Slocum, 1987; Fisher, 1995), taking culture as an internal variable of the organization (Young, 1979; Inzerilli and Rosen, 1983; Wilkins and Ouchi, 1983; Flamholtz, 1983; Schein, 1984; Flamholtz et al., 1985), or else on analyzing the effects of culture on control systems when it is considered to be a metaphor within the organization (Pondy and Mitroff, 1979; Cooper et al. 1981; Smirich, 1983; Allaire and Firsirotu, 1984; Schein, 1984; Langfield-Smith, 1995).

According to Amat (1991) these objectives can be achieved in two ways:

1) By regarding culture as an internal variable of the organization, since the design and implementation of control systems must be carried out depending, not so much on the technical aspects, but rather on the context, and within this context, on the organizational culture in which the organization and the people forming part of it are found. Thus, culture is understood to be an internal variable that incorporates the social factors of the organization, which conditions the behaviour of its members, the relationships between them and which, in short, marks its behavioural motivation;

2) By regarding culture as a metaphor, since it is inevitable that subjective interpretations are made of any performance, behaviour or movement which is carried out, in the interactions among organization members. In this case, culture is regarded as a language or as an ideology to be transmitted and communicated

to individuals. Thus, formal control systems inevitably involve the creation of subjective meanings which emerge from individuals' social interaction, meaning that in this conception the control system has a clearly symbolic nature.

To the foregoing one might add the approach which, in addition to culture as an internal variable or as a metaphor, is centred on analyzing culture as a broader variable, which goes beyond the organization and its most immediate environment, introducing the nations' culture (cross cultural-cross national perspective) as one of the conditioning elements of control systems (Inzerilli and Rosen, 1983; Ronen, 1986; Nath, 1988; Shin et al, 1990; Lachman et al., 1994).

Despite the progress made by taking into account the cultural and anthropological aspects of control systems, this line of research is not without its critics. One of the main limitations of the trend focusing on cultural and anthropological aspects is that it only takes into account the possible beneficial effects of culture on control systems, while disregarding any dysfunctions it might cause (Soldevila 2000). The following criticism can also be added with regard to the former:

1) Many managers, swayed by the idea that a strong organizational culture is an indispensable prerequisite for success, that there are good cultures and bad ones, that cultural modification can cause employees to feel more motivated and to work harder, can develop a control process oriented towards bringing about an ideological manipulation of the organization's members, to which the latter can respond with resistance, resentment and distrust, since they will perceive culture as a means of control more than as a form of human expression (Morgan, 1986);
2) Many management theoreticians view culture as a body of different variables, such as norms, beliefs and rituals, which suppose a mechanist perception which implies that culture is easily manipulated and usable as a way of solving management problems (Morgan, 1986);

3) Culture can be a drawback when shared values do not tally with those favouring the organization's progress, which can occur when the organizational environment is dynamic. In other words, in cases where the environment is undergoing a rapid transformation, organizational culture may cease to be adequate (Robbins, 1987);

4) There is little empirical evidence of the success and the effects of leaders on the transformation of an ineffective culture, or their capacity to create a new culture (Langfield-Smith, 1995).

8.6 <u>Profit Centers</u>

MANAGEMENT CONTROL SYSTEM

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In the mid-1960s, three Harvard Business School faculty members, Robert Anthony, John Dearden, and Richard Vancil, authored a classic contribution to management control, *Management Control Systems* (MCS). Among many insights, contained an important taxonomy to describe the structure and systems used by different decentralized organization units. The taxonomy explored the relationship between the design of decentralized organizations and the motivations of and incentives for those who manage them. MCS identified five different types of decentralized organizational units.

The Profit Center. Many operating unit managers have responsibility and authority for both production and sales. They make decisions about what products and services to produce, how to produce them, their quality level, price, sales and distribution systems. But these managers may not have the authority to determine the level of capital investment in their facilities. In these cases, operating profit may be the single best (shortterm) performance measure for how well the managers are creating value from the resources the company has put at their disposal. Such a unit, in which the manager has almost complete operational decision-making responsibility and is evaluated by a straightforward profit measure, is called a **profit center.**

The Investment Center. When a local manager has all the responsibilities described above as well as the responsibility and authority for his or her center's working capital and physical assets, the manager is running an investment center. The performance of such a unit is best measured with a metric that relates profits earned to the level of physical and financial assets employed in the center. Investment center managers are evaluated with metrics as return on investment (ROI) and economic value-added.

The Standard Cost Center. A standard cost center is a production or operating unit in which someone other than the local manager determines the outputs that will be produced as well as the expected inputs required to produce each unit of output. Industrial engineers and cost accountants specify the quantity and price standards for the materials, labor, energy, and machine time required to produce each widget, the generic term for a manufactured good, . The cost center manager's job is to produce the demanded quantity and mix of widgets in an efficient manner, as determined by the standard cost system. Standard cost centers are also found in service industries, such as the fast-food business, banking, and health care, where cost accountants establish standard costs for producing hamburgers and milk shakes, processing checks and deposits, or performing laboratory and radiological tests. The performance of a cost center manager is evaluated by a complex system of cost variances that compare actual to budgeted cost performance.

4. The Revenue Center. A revenue center, typically a market or sales unit, has responsibility for selling the finished goods produced by a manufacturing division (a cost center) or the products offered by a service organization. Because a revenue center typically has discretion in setting the selling price (or in negotiating discounts off the list price), it is held accountable for generating targeted levels of gross revenues. It often compensates its sales force with commissions based on the gross revenues they generate.

5. The Discretionary Expense Center. Staff units, including general and administrative (G&A) departments, such as finance, human resources, and legal; research and development (R&D) departments; and marketing units such as those performing advertising and promotion, are usually treated as discretionary expense centers. The output from these units is not easily measured in financial terms, and the relationship between the resources they expend (inputs) and the outcomes they produce is weak. Companies control these discretionary expense centers by negotiating and eventually authorizing an annual budget and then monitoring whether their actual spending remains within the budgeted amounts.

The Balanced Scorecard Revolution

When Dave Norton and I introduced the Balanced Scorecard in the 1990s, we described the limitations of financial metrics, such as profits and ROI, for motivating and evaluating the performance of profit and investment centers. We claimed that financial metrics were no longer sufficient for measuring the annual performance of the managers of these units in creating long-term value.

Transforming the Cost Center

Empire Glass was one of the most provocative cases in the MCS text and case book. The Empire Glass company treated a manufacturing plant, which had no authority for pricing, marketing, or sales activities, as a profit center, not a cost center. Class discussions always started with students actively criticizing this choice. Treating this manufacturing unit as a profit center violated all the rules they had just learned about what constituted a profit center.

In the customer perspective, we would include the metrics that capture the performance desired by Empire's most important customers; for example, short lead times, on-time delivery, and zero defect rates. For the process perspective, we would not only include metrics for manufacturing cost improvements, but also metrics for process cycle times, defect rates, and yields. We could also introduce metrics of flexibility and ease of introducing new product varieties into large-scale manufacturing. For the learning and growth perspective, we would measure the percentage of employees trained in Six Sigma and employees' awareness of how the plant's production and delivery performance influences customer satisfaction. What a revolution in thinking and in practice! The plant is neither a cost nor a profit center; it is a strategic operating unit whose alignment with company strategy can now be comprehensively but succinctly visualized, measured, motivated, and evaluated.

Revisiting the Revenue Center

Let's next consider revenue centers, which have historically been measured by the dollar volume and mix of products sold. In building a Balanced Scorecard for a revenue center, we specify, in the customer perspective, objectives for market and account share, and for customer satisfaction, loyalty, and growth in targeted customer segments, accounts, and channels. These customer metrics provide more specificity and guidance for marketing and sales units.

The New Discretionary Expense Center

Perhaps the greatest breakthrough in measuring, motivating, and evaluating the performance of decentralized units occurs in discretionary expense centers — corporate overhead departments—which have historically been controlled only by comparing their actual spending to somewhat arbitrarily determined budgets. Activity-based costing and the Balanced Scorecard enable discretionary expense units to be evaluated by the same tools as those used for profit, revenue, and cost centers.