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Strategic Evaluation of the Nature and Significance of Managerial Control Systems

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Abstract
Effective management control systems are very essential to organisations both as a safeguard against waste, abuse and fraud and as a means of ensuring that policies laid down by management are properly implemented. The purpose of this study is to consider some strategic issues related to the nature and importance of management control systems in any type of organization. An interpretive study approach was adopted for the design and gathering data for analysis. This approach culminated in the identification, documentation and interpretation of meanings, beliefs, thoughts and general impressions about managerial control systems. The study revealed that the effectiveness of organizational operations largely depends on sound managerial controls. It was also realized that controls are used to set the direction of strategic change and to energize and inspire workforce in the process of growth. Managerial control systems equally help in focusing attention on particular issues; creating dialogue, and stimulating learning, thereby allowing new ideas and strategies to emerge in response to opportunities or threats in the competitive environment.
Keywords: Managerial Control, Diagnostic Systems, Internal Control, Performance Measurement

1. INTRODUCTION

1.1 Background of the Study

The importance of the subject matter of management controls (MCS) has been felt on the collapse of companies such as Tyco, Global crossing, WorldCom, and Enron because of the lapses in controls. CEO and top management compensation in these companies were so heavily tied up with stock options that executives were motivated to manipulate financial statements to their personal gains. The role of management is to organize, plan, integrate and interrelate organizational activities to achieve organizational objectives. The achievement of these activities is facilitated by management control systems. Management control, of course, is a core business function and exists as a separate and well-established discipline within the management field. MCS theory is a useful integrative tool for organizing, explaining, and understanding the concept of performance measurement. MCS consists of all organisation structures, processes and subsystems designed to elicit behaviour that achieves the strategic objectives of an organisation at the highest level of performance with the least amount of unintended consequences and risk to the organisation.

Management controls may be briefly defined as the organisation, policies and procedures used to help ensure that government or organisation programmes achieve their intended results; that the resources used to deliver these programmes are consistent with the stated aims and objectives of the responsible organisations; that programmes and resources are protected from waste, fraud, and mismanagement; and that reliable and timely information is obtained, maintained, reported, and used for decision making. It is important that management controls are viewed, not as separate systems in their own right, but as control mechanisms to be integrated into the systems serving the entire cycle of planning, budgeting, management, accounting, and auditing. The systems should support the effectiveness and integrity of every stage of this cycle and provide continued feedback to managers. 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 organisations achieve their objectives, and for Fisher (1995) control is used for creating the conditions that motivate an organisation to obtain predetermined results. Hence, the concept of control in organisations appears to be related to the existence of certain objectives or ends in all organisations.

2. THEORETICAL FRAMEWORK

According to Simons (1995) management control systems are 'the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities'. This definition is broader than that of Anthony's since it enables us to address the internal and external contexts of firms. Simons' definition also shows how managers control strategy (that is strategy formation and implementation). Moreover, Simons encourages the integration of financial and non-financial performance measures and takes into account the wider participation and empowerment of employees. In this way most of the issues left out in earlier MCS definitions are being covered. He also distinguishes between four control systems relevant in the analysis of the average firm. These control systems are diagnostic systems, beliefs systems, boundary systems, and interactive systems.

Diagnostic systems are the formal information systems that managers use to monitor organizational outcomes and to detect deviations from the objectives set. Examples of diagnostic systems are business plans and budgets. They function as tools for the manager in monitoring and evaluating the business results. Beliefs systems are formal systems used by top managers to define, communicate, and reinforce the basic values, purposes, and direction of the organisation. Belief systems state the organization's core values, the performance level desired, and the way in which the individual workers and staff members are expected to handle relationships both internally and externally. Beliefs systems are conveyed through formal documents, such as credos, mission statements, and business objective statements. In addition, boundary systems are formal systems based on predefined business risks, which are used to set limits on opportunity-seeking behaviour. They set the boundaries of both strategic choice and business conduct. For example, when environmental uncertainty is high or internal trust is low, senior managers may take measures that define business conduct on the basis of these systems. Boundary systems may constrain the degree of freedom of managers, and as a result make creativity more focused. The systems are stated in negative terms, for example sanctions. Also, interactive systems are formal information systems managers use to engage directly into the decision-making of subordinates. The data are provided by underlying systems and available for managers throughout the organisation on a recurring basis.

As McCrindell (1996) points out, one of the main objectives and strengths of an effective MCS should be to enhance the ability of managers to manage, to release their management potential, and to act as a positive force for achieving the aims and objectives of the organisation. Such controls help to make individual managers accountable but should not be regarded as a constraint on their freedom to take decisions in areas for which they have delegated authority. A well-designed MCS supports and coordinates the decision-making process and motivates individuals throughout the organisation to act in concert. It also facilitates forecasting and budgeting. An effective MCS should clearly define and communicate the organization's goals; ensure that managers and employees understand the specific actions required to achieve organizational goals; communicate results of actions across the organisation, and motivate managers and employees to achieve the organization's goals.

Management controls guarantee neither the effectiveness of government or organisation programmes nor the absence of waste, fraud, or mismanagement. However, they are a means of managing the risks associated with programmes and operations. Controls should be appropriate and cost-effective and backed up by proper analysis and assessment of risk. Sophisticated risk management techniques have been developed to provide professional support to governments, ministries and agencies in these areas.

Management controls can be viewed as having two aspects: i) the management information systems required by management to steer the work of the organisation, to monitor the progress and quality of operations, and to evaluate the results and performance of the organisation; ii) the policies, systems, procedures, authority delegations, etc., that are built into the organization's processes to provide reasonable assurance that management's objectives are being achieved. Kirby (1996) indicates that the relationship between the two aspects is that the management of operations requires information obtained both from within and from outside of the organisation. Some of this information concerns the use of resources, and some concerns matters such as the delivery of goods and services or changes in the needs of clients. Management information is an integral part of management control, but not all controls require the provision of information in order to be effective. Effective MCS in most organisations start from the expectation that individual managers are responsible and accountable for the quality and timeliness of the operations and programmes they manage, for controlling the cost of the resources they use, and for ensuring that their operations and programmes are managed with integrity and in compliance with legal requirements and with the regulations and guidelines promulgated by the regulatory agencies.

Internal control is a management tool used to provide reasonable assurance that management's objectives are being achieved. Therefore, responsibility for the adequacy and effectiveness of the internal control structure rests with management. The head of every organisation must ensure that a proper internal control structure is instituted, reviewed, and updated to keep it effective. An important part of such a structure should be an effective "early warning" system to help ensure that all managers, both at the top of the organisation and in line positions, are given timely and accurate information when failures occur, and that they are held to account through an appropriate system of controls and, where necessary, through the imposition of sanctions and

penalties. Safeguard procedures of this kind are essential in all organisations, both in the public and private sectors, because, when system failures occur, they can be costly and destructive.

Another essential requirement of well-designed management control systems is that they should provide top management with credible, timely information, including financial data, on key aspects of performance. An important implication of this, as stressed by Kirby, is that management control systems should be developed in an iterative manner starting from the top of the organisation. At the overall level of the organisation, it can fairly and 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 jeopardises 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 organisation's objectives beyond what the organisation itself is capable of inculcating in them. An organisation'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 MCS has to consider the following aspects, both at the level of the organisation as a whole and at that of the different units comprising it (Vázquez-Dodero and Weber, 1997):

- Objectives and goals that reflect those set for the organisation as a whole as a result of the planning carried out, which is equivalent to establishing what has to be done, when and how;
- An internal structure of the unit, including the line of authority and responsibility, which refers to allocating the responsibilities of managerial action;
- A measuring system consistent with the objectives and the structure of responsibility, which includes fundamentally the budgetary system and the information system for control;
- 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.

Below is a list of MCS techniques, including their components i.e. planning and budgeting, internal reporting and decision-making, product costing and pricing, cost control and waste minimization, and performance measurement and evaluation. The list is based on the work of Libby and Waterhouse (1996).

S/N	List of MCS techniques	Components of MCS techniques to be investigated
1.	Planning & Budgeting	1. Budgeting (its uses, process of preparation and level of participation) 2. Profit planning 3. Operations planning (production) 4. Co-ordination of activities 5. Long-term planning (Capital Budgeting) 6. Strategic planning
2.	Product Costing and Pricing	1. Type of costing system: ▪ Actual costing vs. Standard costing; ▪ Absorption vs. Variable costing. 2. Nature of cost accumulation and allocation (e.g., manufacturing overhead, marketing, etc) 3. Type of pricing system and use of MCS information 4. Freedom in product pricing
3.	Internal Reporting and Decision-making	1. Communication of MCS information: ▪ Frequency of reporting information ▪ Timeliness ▪ Accuracy 2. Use of more non-financial measures 3. More detailed exchange of information 4. Use of existing systems but a different interpretation of the results 5. Decision-making responsibility
4.	Cost Control and Waste Minimization	**1.** Quality control methods **2.** Waste minimization techniques
5.	Performance Measurement and Evaluation	1. Individual or team-based performance measures 2. Organizational performance measurements (extent of using financial 3. and non-financial measures) 4. Measurement of performance in terms of quality 5. Measurement of performance in terms of customer satisfaction 6. Measurement of performance in terms of delivery innovations 7. Reward systems (pay for performance plans) 8. Reward systems (bonuses and salary increments) 9. Extent of employee benefits

Effective management control systems are clearly essential to organisations, both as a safeguard

against waste, abuse and fraud, and as a means of ensuring that the policies laid down by management are properly implemented by the organisation. The application to an organisation of mechanistic and formal management control systems involves a series of drawbacks which have been shown by different authors.

MCS present important limitations when adapting to changes in the conditions, circumstances and situations in the organisations 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. However, continuing vigilance is required, because changing circumstances and operating procedures can render ineffective even the most carefully designed control system.

For Ouchi (1977) control and structure are not sufficiently differentiated, and in some cases are even confused with one another; According to Havens, such systems are intended to give reasonable assurance to top managers that all levels of the organisation are following management's policies and safeguarding the financial interests of the organisation. But although they allow top managers to control the organisation, they do not control the top managers themselves.

Also, MCS 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); Havens cites the example of the U.S. Medicare programme. Because of its size and complexity, with tens of millions of transactions each year, it has proved impossible to develop cost-effective management controls and auditing procedures that reliably prevent or detect abuse. Military defense procurement and contracting systems are similarly difficult to control.

MCS lack a socio-historic perspective on the social origin of control systems (Neimark and Tinker, 1986). In Canada, Kirby gives two examples of federal agencies. The Canadian International Development Agency and the National Capital Commission, where fresh management was brought in to tackle serious problems of fraud and inefficiency by implementing new management control systems.

In addition, MCS can take on a bureaucratic nature which can hinder creativity and innovation (Amat, 1991); Notwithstanding, Havens (1996) points out that even well-designed management controls serve their purpose only if personnel comply with the requirements of the control system and management responds to reports of alleged deficiencies. It is easy for controls to lead to a false sense of security. This is true in both the public and private sectors. In the widely publicized recent case of the Singapore branch of Barings Bank, for example, it appears that supervisors took no corrective action in the face of reports that one of the bank's traders was operating beyond the limits set by the bank. In a relatively short period of time, the enormous losses incurred by the trader, running to several hundred millions of pounds sterling, resulted in the bank's insolvency.

Furthermore, MCS can have unforeseen and undesirable consequences; for example, the objectives of the organization's members can take precedence over the objectives of the organisation (Morgan, 1986); Lashmar (1996) study of the United Kingdom gives some recent examples of areas where MCS were found to be inadequate, resulting in heavy losses to the national budget. These include the Ministry of Defense's works programme, customs and import controls designed to regulate cross-border shopping, and employment termination payments made by the Department of Health.

There are other limitations to the effectiveness of management controls. Management controls can be bypassed or defeated with relative ease by top managers who are inclined to do so. The private sector has seen many instances in which top managers have misappropriated large sums of the company's assets. In some cases, this has only been brought to light when the company was declared insolvent. There are well-documented cases in the public sector as well. Havens describes the example of the "HUD scandal" in the United States, exposed in the late 1980s, where corruption in the Department of Housing and Urban Development (HUD) reached the highest levels of management. In German, for example, Sparberg (1996) shows the importance of developing strong management controls to deal with a number of problems in the road construction area, where effective control has proved difficult to achieve in practice: price fixing, where bidders for a government contract decide among themselves who is to submit the lowest tender and at which (higher) prices the others will submit their bids; flaws in contract procurement procedures where, for example, after expiry of the tendering period but before contract awarding, bidders may try to change their bid to their own advantage; collusion, where the responsible civil servant within the contract awarding department or agency and the bidder secretly co-operate to secure for one company a competitive advantage in the award procedure.

In spite the short-comings MCS is a significant management tool without which most reported control lapses would have been worse. Below is some of MCS's significance.

Management theory has maintained that the successful implementation of a firm's strategy requires an appropriately designed MCS (Simons, 1987). Such an MCS entails formal (written and standardized) information-based procedures, protocols, and routines used by most large firms to align the behaviors and decisions of their employees with the organization's strategic goals (Merchant & Van der Stede, 2007). This alignment helps employees make decisions or fulfill their responsibilities, and avoids the loss of control due to a lack of monitoring (Simons, 1994).

Also, formal policies and procedures, budget controls and strategic planning help enhance managerial decision making, contribute to reducing decision errors, and help coordinate resources and capacity utilization (O'Connor et al., 2004). Budget controls help managers to seek and monitor organizational efficiency targets, promote cost control, assign and delegate responsibilities, and motivate personnel (Dyson & Foster, 1982). Learning Orientation (LO) capability was defined as the development of ideas, knowledge and relations among past actions and future actions (Fiol & Lyles, 1985), and is considered to be an important facilitator of competitive advantage by improving a firm's information processing activities at a faster rate than rivals do (Baker & Sinkula, 1999), but is necessary to have frequently updated information. Some studies reports that high performing firms rely on the information provided by frequently updated formal control systems to drive organizational learning and argue that MCS has a significant positive impact on staff perceptions about learn capability (Simons 1990). The use of MCS supports a holistic view at all the strategic processes, resulting in organizational learning.

In addition, MCS are comprised of multiple control systems that work together (Widener 2007), for example, Performance Measurement Systems (PMS) are one important aspect of MCS and represent the process and the set of metrics used to quantify both the efficiency and effectiveness of actions (Neely et al. 1994) by providing the information necessary to challenge the content and validity of the strategy (Ittner et al. 2003). It is argued that the evaluation of business processes and results improves the allocation of resources and stimulates managerial motivation. The data produced by diagnostic systems are expected to be accurate. The systems are also used to measure the output variables, or performance levels, of business strategies adopted by organisations. They are based on performance variables, such as effectiveness and efficiency. However, these performance variables may change when organisations alter their business strategy (Simons, 1995).

3. METHODOLOGY

An interpretive study was adopted to design and gather data for analysis. This method allowed the identification, documentation and interpretation of meanings, beliefs, thoughts and general impressions about managerial control. It allowed for an interpretation of managerial control as fully as possible.

4. DISCUSSION

In general, the literature in MCS used an explicitly or implicitly RBT approach (Barney, 1991) and together with levers of control framework (Simons, 1995), shows that MCS influence the strategic capabilities in organisations through the routines they stimulate. Based on the RBV we can see the MCS as available resources in an organisation, which generate a competitive advantage in terms of the use made for them (Lengnick-Hall & Wolff, 1999). Therefore, understanding how these systems can be used in a better way, generate a source of sustainable competitive advantage. Most research findings are aligned with Simons' (1990) arguments in terms of raising the contribution of MCS over a tool for monitoring and evaluation, and offer them as a catalyst for the complete strategic process, which supports and encourages the creation and execution of strategies across the organisation. The four MCS uses contribute positively to capabilities and highlight a positive impact of diagnostic use (Monitoring and Legitimizing) on capabilities, contrary to the expected direction identified in previous studies (Henri, 2006). We can identify positions for and against this relationship. Some authors (Grafton, Lillis, & Widener, 2010) argues that diagnostic use of MCS facilitates exploitation of existing capabilities and in the same line, Vandenbosch (1999) argued that the discussion triggered by the diagnostic use leads to corrective action as a way of learning, but Henri (2006) argues that corrective actions are not sufficient to sustain such capabilities. This would mean that in theory, even if diagnostic use works against the deployment of capabilities, it may contribute to performance through organizational capabilities. Therefore by providing the necessary information, diagnostic use of MCS could help to increase the positive effects of an interactive use on capabilities.

5. CONCLUSION

The effectiveness of organisation operations depends on a number control of factors. One of them is an efficiently functioning management control systems taking into account e.g. various forms of control like e.g. budgeting, strategic planning etc. However, it should be emphasized that the diversity of control forms does not constitute a cure-all for all irregularities of an organisation.

It is also noticeable that controls are used to set the direction of strategic change, and to energize and inspire the workforce in the process of entrepreneurial growth. Beliefs systems are generally used to empower and commit the individual workers to the organization's objectives and to its direct search for new opportunities. However, they serve as an instrument to curtail high costs resulting from commercial experiments and they allow managers to delegate decision-making. If improperly set though, boundaries may hinder the adaptation to changing product, market, technological, and environmental conditions.

These control systems help in focusing attention on particular issues, creating dialogue, and stimulating learning, thereby allowing new ideas and strategies to emerge in response to opportunities or threats

in the competitive environment (Simons, 1995). However, this requires a climate that values openness and accepts constructive criticism and debate. Interactive systems are highly useful in case of strategic uncertainty, when inventive change and opportunity seeking is required. Examples of strategic uncertainty are changes in technology and customers' tastes, government regulations and industrial competition. The design of interactive systems is based on the analysis of these uncertainties, and their aim is to facilitate pro-active decision-making.

6. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study cannot be said to be without bias from the researchers in their interpretation of the data, as explored in the literature review. Although the researchers made every effort to obtain applicable and relevant international research indicating the evaluation of relevant issues about managerial control, it is possible that some data were missed. The impact of this limitation is somewhat reduced by the fact that a good amount of relevant research data pertaining to the key issues about the topic were found. The researchers drew comfort from this fact and consider it unlikely that research on some of the other salient themes about managerial control systems would reveal better criteria for the evaluation of its importance than those discussed in this paper.

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