Management Control System

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Abstract
A management control systems (MCS) is a system which gathers and uses information to evaluate the performance of different organizational resources like human, physical, financial, and also the organization as a whole considering the organizational strategies. Finally, MCS influences the behavior of organizational resources to implement organizational strategies.

Keywords: Management, Control, Systems

1. Introduction
To introduce this topic and understanding the importance of management control system we know that in the present globalised world, organisations need to use management control systems that go beyond the strategies that focus on acquisition of technology and logistics which are not sufficient to give the organisation sustained long-term competitive edge over its competitors. Management Control Systems (MCS) as defined by Anthony (cited by Langfield-Smith, 1997) is ‘the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization’s objectives’. MCS is a system used in an organization which collects and uses information to evaluate the performance of the organizational resources that will eventually influence the behavior of the organization to implement organizational strategies. This paper will look into issues within MCS such as transaction cost economics and transfer pricing. Also considered in this paper is a look of MCS tools and techniques, such as budgeting as a powerful control mechanism in organizations, business performance measurement systems as well as balance-scorecard with its implementation issues.

The term “management control systems" means the use of a number of techniques in organisations to observe and evaluate employee performance against certain management
targets. Therefore, conventional management control systems focus on getting better operational efficiency. But as operational efficiency is no longer adequate to create sustainable competitive advantages, management control systems must be expanded to managerial practices that cultivate employee cooperation and creativeness in the discovery and development of new business opportunities. This is especially the case in the high-tech industries that are at the faced with the challenges of globalisation and employee teams must combine efficient communication with creativity. "Project managers and product designers in software and other industries thus need to find ways to divide up products and tasks so that even teams of many of clever people can work and communicate efficiently as well as creatively" (Cusumano, 1997).

Simons (1987 and 1990) argued that control systems is in four categories, namely

i. Diagnostic control systems
ii. Boundary control systems
iii. Interactive systems
iv. Belief systems.

These four different management control systems are identified recently by companies as effective categories of controlling system, companies must apply them in a way that maximizes operational effectiveness without limiting employee creativity. This task can be accomplished by using diagnostic measures as a way to improve operational effectiveness and the other three types of control measures as a way to mitigate its negative effects on employee creativity (Kimura and Mourdoukoutas, 2000).

Here we see the importance of competition as a powerful tool to impact on MCS As competition in global industries intensify, the traditional competitive strategies that are based on operational efficiency and are no longer sufficient to generate sustainable competitive advantage. They must be joined by strategies that cultivate collective entrepreneurship, i.e. strategies that empower employees to discover and exploit new business opportunities. To pursue such strategies successfully, companies must integrate successfully four different control systems, the beliefs system, the interactive system, the diagnostic system, and the boundary system. The beliefs system should be used to define a corporation's character and mission and to set guidelines both for performance targets and for acceptable employee behaviour in pursuing such targets. The interactive system should be used to adjust the organisation guidelines to changing market
conditions, while the diagnostic and the boundary systems should be used to set standards for improving efficiency and creativity.

One of the most important issues in management is controlling. Control is one of the tasks of managers (Fayol, 1949). Management control system (MCS) is use as a tool for controlling in administration. Obviously managers need criteria to determine how well they do and to control their performance. In this case, measuring performance is a important concept in controlling. Therefore a system to provide information for execution is needed. MCS helps managers to find information and ensure them those performances and behaviors of employees’ are consistent with organization objectives. That is both financial and a non-financial measure of performance is necessary. Organizations may use a variety of methods for this purpose like: Balance Scorecard Framework. As a result of dynamism in environment, methods used to measure intangible resources need to be improved especially since assets value has shifted from tangible to intangible, like emergence of knowledge workers. As such, the control system in the knowledge economy has to shift accordingly. In this article, first MCS is defined and explained how performance is measured. In the next part the relationship between accounting and MCS is illustrated and concepts of transaction cost economics, transfer pricing, and budget will be explained.

2. Management Control Systems

Management Control Systems (MCS) as defined by Anthony (cited by Langfield-Smith, 1997) is ‘the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization’s objectives’. MCS is a system used in an organization which collects and uses information to evaluate the performance of the organizational resources that will eventually influence the behaviour of the organization to implement organizational strategies. This paper will look into issues within MCS such as transaction cost economics and transfer pricing. Also considered in this paper is a look of MCS tools and techniques, such as budgeting as a powerful control mechanism in organizations, business performance measurement systems as well as balance-scorecard with its implementation issues.

Management control system (MCS) is a system that provides useful information for managers to do their duties. This information helps organization in performance. (Otley. 1999) MCS was first described by Anthony (1965). In his study, he distinguished the management control system
from strategic planning and operational control. Management control (MC) itself is defined in many ways such as: a combination of tools and process that influence on actors behaviors within an organization to achieve organizational objectives (Spekle, 2001). According to Malmi et al (2005) management control system consists of devices and systems that managers use to ensure that their employees’ decisions and behaviors are consistent with organization strategies and objectives with excluding decision-support system. He argued that MCS is an integrated system and needs to assess organization from every angle therefore controlling organization actors’ behaviors from accounting or managing aspect cannot obtain a comprehensive system. A perfect MCS has to monitor not only the internal environment but also has to be sensitive to external changes. Information technology (IT) play a central role in this process. Since, there is no complete and comprehensive system for all organizations. Indeed, every organization needs their own system, which is unique for them, and is adjustable with structure and strategy. This article tries to illuminate an integrated form of elements of MCS in a package conceptual framework.

Management control systems (MCS) include techniques and mechanisms which organisations use to pursue objectives, accomplish goals and successfully pursue strategies. Management control systems help to integrate, motivate, support in decision making, communicate objectives, give feedback, etc. Management controls (MC) can be sub-divided into two most important sub-categories. The first category involves output controls or results controls, in which specific outcomes are measured, monitored and compared against expectations. This will enable corrective action to be undertaken as and when needed. This category also includes administrative controls or action controls that involve formal rules, standard procedures and manuals and monitoring compliance. The second category involves behaviour controls, personnel controls and social contracts. This category involves controls such as values and norms, along with group interaction to maintain them, selection and placement of personnel with the required skills and attitudes, work design and allocation, and observation of the work behaviour of personnel. These two categories are not mutually exclusive, and may complement and reinforce each other in an effective management control system (Cunningham, 1992). In addition, management accounting systems are also an integral part of management control systems. Management accounting is associated with output or administrative controls because of the emphasis on measurements and outputs, especially in the budgeting process. Management accounting systems provide a language and communication system that can also play an
important role in behavioural and social controls (Cunningham, 1992). Here, both internal audit and external audit play an important role. While external audit has developed significantly, Boyle (1993) stated that internal audit has no theory to guide academic research and practice. In addition, the academic literature on internal audit is limited. He attributed this to the lack of a theory for the use of internal audit as an organisational control. Despite its strong acceptance in professional practice, researchers and practitioners have largely ignored internal audit as an organizational control function. As such, the lack of research interest has impeded the establishment of a collective theory (or theories) for the use of internal audit.

To understand the role of MCS in accounting principles, contribution of accounting in management control system could be discussed from every angle of subject. Traditionally, and in somehow till now, accounting and finance play a significant role in management control system (Mouritsen, 1996) by contribution in decision making especially in the field of strategy. However by emerging new issues like intangible property and knowledge, the centrality of accounting is not as it was before. It means that intangibles are powerful rival for accounting and finance in the case of centrality. The role of accounting in MCS highly depends on structure and strategy of organization. In traditional form of governance with centrality of budget especially in public and governmental sector, the affects of accounting is important but in privet sector with new approaches to governance and control system, the other elements like ownership and leadership has significant impact on control system. In family-led business, accounting is not important as it is in non-family business and owners play more important role in establishing and improving MCS. (Moilanen, 2008) This role could play by powerful individuals in delegation or agency form of owner.

3. MCS and decentralization

According to Peter Drucker, “In todays organizational structure, managers’ use more flattered structured, to increase both efficiency and effectiveness. Flattered organizations are more agile to environment changes and are more flexible. The responsibility in the case of decision making is spread across the organization. The decentralization cause departments are more effective and measuring performance based on organization objectives is easier. Decentralization by increasing motivation cause increase in performance. In conclusion, although the decentralization may cause loss of control; however by emerging new technologies and knowledge like knowledge workers cause increase in performance.
4. Transaction-Cost Economics

In this context, transaction cost economics (TCE), as an economic theory of organisation, advocated by Williamson (1975; 1985), argues the superiority of internal audit for cost economizing, and outlines the advantages, especially for hierarchical organisations. Williamson states that internal audit provides managers with more useful information for cost economising than the financial accounting information provided by external audit to owners and creditors. Williamson bases his argument on the premise that internal audit can pursue operational information and not just financial accounting information. However, the reason that TCE is not commonly used is unclear although it is a well accepted method. Penno (1990) used TCE, a variation of agency theory, in arguing that internal audit assists managers in cost economizing (Spaarkman, 1997).

Management control systems aim at influencing actors in order to enhance the efficiency in transactional relationships (of which transactions are a part) (Vosselman & Van der Meer-Kooistra, 2006). Transaction cost economics studies organization from a comparative point of view in which different institutional arrangements are considered alternative ways to organize economic activity (Spekle, 2001). Spekle (2001) went on explaining that transaction cost economics’ central aim is to explain why some transactions are more likely to be executed within one form of organization, whereas other transactions tend to be associated with different organizational modes.

5. Transfer Pricing

Another important aspect of management control systems is transfer pricing. It is one of the most important issues in the strategic and operational management practices of large business organisations. According to Seed (1970), ``there is possibly no single accounting topic that consumes more management time and energy ... than the business of establishing acceptable transfer prices". A number of empirical surveys have been carried out on transfer pricing practices in the non-services sector, and these studies sought to establish the methods used for pricing transfers in the manufacturing industry. However, despite of the importance of the services sector, the transfer pricing practices in the services sector have not been studied enough (Oyelere & Turner, 2000).

Transfer pricing is used by decentralised transnational corporations as a strategic instrument to tackle the issues of brand proliferation. The strategic objectives of international transfer pricing
fall into three areas: taxation-related objectives, internal management-oriented objectives, and international or operational objectives which were surveyed by Cravens (1997). The pricing of internal transactions undertaken by multi-national enterprise (MNE) headquarters is a tax issue that tax authorities are concerned about, but it is also a strategic concern of MNEs in supporting its local subsidiaries on brand proliferation and output decision, as the MNEs have the incentive to manipulate their transfer prices in order to shift profit cross-border. Besides a purely tax-driven mechanism, transfer pricing is often used by the enterprise in achieving competitive advantage and other strategic objectives as well.

According to Cravens (1997), transfer price is the internal value placed on a raw material, good, or service as it moves from one related organizational entity to another within a consolidated corporate group. Transfer price models assist in rational allocation of shared costs when goods and services are exchanged between independent segments within a decentralized organization. According to Cravens (1997) as well as Gupta and Gunasekaran (2004), transfer pricing mechanism can also be abused by shifting profits in case of organizations operating under differing tax jurisdictions. Some even believe that transfer price is more of a strategy rather than a procedure (Eccles, Spicer, as cited in Cravens, 1997).

6. Budgeting as a Control Mechanism

One of the traditional management control systems is the budgeting process, which has served as the primary internal measurement of performance. Traditional budgetary control is proving increasingly unsuitable for the rapidly changing environment of the modern business world. Budgets become rapidly out-dated during the course of a budget year. Many organisations state the budget is already out-of-date at the start of the budget period because of the time taken to put it together. Although there have been attempts to keep budgets up-to-date by more frequent revisions (e.g. rolling budgets) the general experience is that it is difficult to keep the focus on annual financial targets during the revision processes. Budgeting is proving to be a very limited management tool, and is sometimes made more rigid by tying performance bonuses to budget achievement (Otley, 2007).

Traditional budgeting has served as means of emphasizing boundary systems that focus on financial limits and diagnostic controls. Budgets indicate the limits of spending on certain categories and variance reporting serves to indicate conformance with these standards. As such, budgeting serves as a tool of corporate governance. Top management sets forth spending guide
lines. Individual/group evaluations are based on cost control and adherence with standards. In order for employees to be better aligned with the organisation’s strategic goals, budgets are used to emphasise the organisation’s core beliefs and critical interactive controls.

The focus of budget has shifted away from a mere governance mechanism towards a strong tool for creating value. Corporate value creation is dependent on the organisation’s ability to cultivate and grow vital resources. The management must impart core strategic values and develop an integrated set of financial and non-financial measures to evaluate progress. The role of finance has changed over the past decade. Financial managers are attempting to move away from score keeping and variance analysis towards risk analysis and integration, thereby changing the nature of budgeting. In current times, several multinational firms have integrated non-financial factors into the planning process and are doing away with annual budgeting and instead are adopting rolling budgets (Barsky & Bremser, 1999).

Chandra et al. (2007) mentioned in their article the issue facing managers is to design budgets that balance organizational goals and limitations with objectives and constraints of sub-units. At the same time, Yuen (2004) also explained that budgetary slack remains as one of the major concerns in practise, referring to the practice of intentional underestimation of revenues and/or overestimation of expenses. His research explores the direct relationship of goal characteristics and the propensity of divisional managers to create budgetary slack. Yuan (2004) concluded that goal clarity reduces managerial dysfunctional behaviour in budgeting activities. His research however did not find any significant relationship with goal difficulties and propensity to create budgetary slack. In general, Yuen’s research found that clear communication and reward systems can result in goal clarity and can help to solve budgeting problems under difficult goal situations (Yuen, 2004). Subramaniam and Mia (2001) on their study on managers’ value orientation towards innovation, tried to understand the relationship between decentralised structure, budgetary participation and organizational commitment. They believe that the managers’ value orientation towards innovation has an effect and can influence organizational commitment. They concluded in this study that the impact of increasing decentralisation as well as budgetary participation on organizational commitment is significantly stronger for managers with high value orientation towards innovation. It is therefore important for organisation to consider the characteristics of the managers’ value orientations, the organisation’s structure and its core control system when thinking of designing a control system in an organization.
7. Business performance management

To understand the concept of Performance measurement systems we can say that PM are known as collections of financial and/or non-financial performance indicators that managers use to evaluate their own or their unit’s performance or the performance of their subordinates (Tuomela, 2005). Examples of well known performance measurement systems are such as balanced scorecard (as explored in next segment) as well as the performance pyramid system. The purpose of the PPS is to link an organization’s strategy with its operations by translating objectives from the top down (based on customer priorities) and measures from the bottom up (Laitinen, 2002).

Mettanen (2005) explored the design and implementation of a performance measurement system for a research organization. Even though her research was based on a case study, Mettanen managed to highlight the challenges related to designing and implementing the performance measurement system. She pointed out that the case organization is entirely knowledge work and that the people in the organization are the greatest importance for the success of the organization. Mettanen (2005) acknowledges that even though the nature of the work in this case organization in more on intellectual capital, the challenges in implementation in this case organization and in a traditional service or manufacturing organization seem to be the same. The main difference was in the design where the case organization emphasizes the importance of its employees as well as their involvement. Chiesa, Frattini, Lazzarotti and Manzini (2008) also had a research similar to Mettanen’s (2005) – designing a performance measurement system for research activities. Their paper aims at making a step further in the understanding of the problems to be faced when defining a system for performance measurement in R&D units. Their research included an elaborated framework to design an effective performance management system in real context within a biotech company. Tuomela (2005) in his research provide information on how interactive use of performance measures is apt to improve the quality of strategic management and to increase commitment to strategic targets. Laitinen (2002) in his paper explored the use of performance measurement systems for service industries. He discussed that performance measurement often focuses narrowly on easily quantifiable aspects such as cost and productivity, whilst neglecting other criteria that are important to competitive success, which includes competitive performance, financial performance, quality of service, flexibility, resource utilization and innovation.
8. Balanced Scorecard

One of the most important ways to control and measure the performance of an organization is the Balanced Scorecard (BSC) that was first introduced by Kaplan and Norton in 1992, as a model for implementing strategy. The main thrust of the BSC is that it is generally inappropriate to try to manage using financial measures of performance alone. Financial measures need to be supplemented by other non-financial performance measures and also by a range of leading indicators of future potential performance, which are usually non-financial in nature (Otley, 2007). The BSC is designed to be a strategic management tool that enables organizations to translate strategic goals into relevant measures of performance. Financial and non-financial measures are indicators of the extent that strategies are successfully being implemented throughout the organization and whether strategic goals are being achieved (Barsky & Bremser, 1999).

The BSC assess performance from four perspectives, namely the

- Financial perspective, the
- Customer perspective, the
- Internal business process perspective and the
- Learning and growth perspective.

The BSC translates the organization’s performance measures that cut across traditional functional areas. Progress towards achieving short-term and long-term goals is measured by outcome-based and leading indicator driver-oriented indicators. BSC implementation represents a way that organizations attempt to satisfy the demands of the capital markets. The underlying goals of the BSC is to communicate top management’s strategic vision. An integrated set of measures guides managers towards producing favourable outcomes for implementing strategy. This integration ultimately helps managers develop a model for understanding the firm within its environment.

The development of the BSC began to stress the development of “strategy maps” which require a detailed causal understanding of the factors which a manager can control and their inter-relationships. What was being constructed here is essentially a predictive model of the situation being controlled. Although management accountants know quite a lot about the construction, use and reporting of financial performance measures from their experience with budgetary control.
systems, they have often also been given the role of developing the systems required to support BSC use. However, there are many new challenges in collecting and reporting non-financial data. Very often, it is difficult to design robust information gathering systems that are not susceptible to manipulation by the managers whose performance will be assessed by reference to the reported results.

The BSC approach may require some substantial changes in culture within the organisation. It requires understanding, commitment and support from the very top of the organisation, right down to the operational levels. The balanced scorecard needs to evolve over time according to the organisation involved. As culture changes and develops to accept the new approach and members of the organisation mature within the new culture, the organisation will find new things to measure, new goals in different areas, to make the balanced scorecard even more balanced and effective in supporting a living, growing, viable organisation. Different organisations have quite different needs, market areas, people, products and services, and will end up with significantly different balanced scorecards. It is an evolving tool and is difficult to implement within the organisation as well (Chavan, 2007).

There are many issues surrounding the use of balanced-scorecards in organizations. One issue that seems to be of a big concern especially when an organization decides to adopt this model usually occurs during the implementation stage. Smith (2006) in his online article mentioned that the main problem with BSC is that it does not provide practical guidance for deployment, and some executives view it as a "quick fix" that can easily be installed in their organizations. He went on to explain that implementing BSC is an evolutionary process and not a one-time task with efforts to commit for the long term. Johnsen (2001) looked into adopting BSC in public management and concluded that has three main managerial applications. Firstly as a versatile tool for developing discussing and selecting the most decision relevant performance indicators in complex organizations. Secondly, BSC allows management to judge and think through carefully which performance indicator that can be discarded and which should retain in the system. Lastly, BSC helps educate stakeholders, managers and employees in management control in a complex organization. Smith (2006) listed a few key issues that can cause BSC to fail. This includes poorly defined metrics, lack of efficient data collection and reporting, lack of formal review structure, no process improvement methodology and lastly, too much internal focus. Fernandes, Raja and Whalley (2006) in their research of BSC implemented in small medium enterprises
(SMEs) identified several critical management challenges, especially in the implementation stage of BSC. These may include processes owners not being ready, resistance to change, lack of training, lack of co-ordination between departments and lack of funds. Fernandes et al. (2006) also emphasizes that the robustness of a structured methodological approach is of utmost importance to SMEs with limited resources.

9. Conclusion

To conclude, we see that management control systems and management accounting are constantly evolving in designing and using information and performance management systems for organizational control. The change and evolution is inevitable as the world moves forward into the knowledge economy, thereby integrating new ways and means to enhance performance and competition of organisation, in the 21 century.

All in all, management control system can be summed up as an integrated technique for collecting and using information to motivate employee behaviour and to evaluate performance. This paper explores the issues surrounding management control systems. In specific, this paper looked into transaction cost economics and transfer pricing as well as looking into budgeting as a technique in management control systems. On top of that a comparative analysis of business performance management systems was looked into. Lastly, a section of balanced-scorecard as well as its implementation issue was deliberated upon.
References


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