Management Control Systems and Balance Score Cards: From the Perspective of the Education Industry

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This paper aims to examine the relationship between management control systems (MCS) and contextual variables such as environment, technology, structure, size, strategy, and culture with the moderating effect of Balance scorecard. The present study discusses contextual variables and management control systems in the uni-dimensional construct. Preliminary findings suggested that management control systems (MCS) and contextual variables are important in designing a management control process for the education industry. In addition, general current study proves that control factors also have great importance in the Malaysian education sector especially in encouraging academic and non-academic staff to achieve organisational goals. The current research provided a conceptual framework for management control systems in the Malaysian Education Sector (i.e., University) and suggested future implications. Moreover, the current study discussed the importance of management control systems (MCS), which help the education sector to determine the most effective way to apply and utilise MCS design in the Malaysian education industry.

Key words: *Management Control system, Balance Score Card, Contextual Variables, Malaysian Education Sector*

Introduction

The 21st century's technological advancement and rapid evolution creates an embargo of several new practices in the business world. Management control systems are now recurrent in the operational management and organisation to evaluate, enhance the efficiency and effectiveness of the organisation. A mManagement control system is defined as a system which gathers and uses information to evaluate the performance of different organisational resources like human, physical, financial and also empower to implement the organisational strategies in organisations as a whole (Armesh, alarzehi, Habibollah,Kord, Baqer 2010). Management control systems (MCS) are based on four components, namely: organisational structure and strategy; corporate culture; management information systems; and core control package. (Herath, Siriyama Kanthi, 2010).

There has been very little explicit theoretical and empirical research on the concept of management control systems despite the existence of the idea in management accounting literature for decades. The education industry has become the most prominent important factor in most economies, especially in Malaysia now., There are 37 private universities, 20 private university colleges, seven foreign university branch campuses and 414 private colleges in Malaysia (Higher education commission, Malaysia 2013). The Malaysian government is investing hugely as the total budget for education is RM54.6 billion USD17 billion (Ministry of education Malaysia, 2013). Prior research has not been conclusive regarding Malaysian Universities utilising the management control system in the premises as a control system. Furthermore, with the intent to enhance the funding cost effectiveness of higher education in Malaysia, the government has also proposed reform concentrated on: (1) strengthening industry and research collaboration; (2) providing greater autonomy to universities; and (3) strengthening their performance cultures in order to encourage teaching and research activities (EPU, 2010a)

Consequently, there has been a need for further research on the education industry and in particular, its relationship to management control systems (MCS) (Chenhall, 2003). In their review of education studies, Hassan and Sheriff (2006) cited the need for more empirical and contextual research on the education industry. As competition in the education industry has increased due too presence of infinite education, private and government institutions in Malaysia there is space for the efficient and effective operation of university management. It has to be observed to be enhancing the decision making capabilities of university management. Additional research should help educationists to design a better control system that will allow them to focus on organisational strategies and achieve organisational goals. All the information plays a critical role whether it is in the form of quantitative or qualitative information in the management and decision making activities. The accounting information importance cannot be denied in the information system, which is prominent in the management process for effective functioning. Horngren, (2004), focused on management control and control activities for

planning. When companies face increasing competition, management frequently reviews and adjusts the company goals and strategies to cope with the changing business climate. Management control systems have been used by mangers as the effective tool achieves the organisational goals and to formalise strategies. This study adopts the view that management controls systems can be conceptualised in terms of a continuum that ranges from traditional to sophisticated. Chenhall (2003) explains six factors that affect the design of management controls systems in contingency based management accounting: environment, technology, structure, size, strategy, and culture.

The organisational environment cannot be predetermed because it's rapid in nature, but management control systems have the capability to cope with uncertain conditions. The management instruments and business process complexity is considered as the technology which ultimately effects the level of management control systems. Organisational structure is the hierarchy of the organisation in order to achieve the organisational goals with help of employee's efforts. The components structure is known as the level of decentralisation. When the environment changes, it directly or indirectly has effects the organisation size and structure because of the complexity; company size changes, management often delegate's decision-making to a lower level. Therefore, the importance of management control systems is required to formulise the highly sophisticated management control system in order to integrate the different activities of many different levels. The impact country's culture has impact on the decision-making and strategies of any company.

In short, management control system effectiveness is influenced by the often called contextual variables. This study tests the relationship of management control systems to these contextual factors in the Malaysian education industry (in particular the university). This study extends prior research in several ways. First, our investigation draws on the work of Chenhall (2003) and considers all six contextual factors of the contingency approach for predicting the design of management control systems. This study examines multiple contextual factors at one time to determine the importance of each factor, rather than studying each factor in isolation, in addition to extending prior research on management control systems. By providing insights into the relationship of management control systems and contextual variables, we provide preliminary evidence on the contextual factors that are important in designing a management control system for the education industry in general, and secondly control factors that are important for the Malaysian education sector especially in encouraging Academic and Non-Academic staff to achieve organisational goals. Thirdly, this paper also examines the balance score card as the performance measurement indicator or mediating effect on the formulation of the management control design.

Literature Review

Management accounting is purposively designed to promote the efficiency of the organisation by assisting in decision making and motivation. In this manner the discipline of management accounting takes additional information and knowledge from fields like organisation, behavioural sciences for decision making purposes (Belkaoui, 1980). The relativeness of these fields compelled the researchers to encompass these fields (Hayes, 1977; Merchant, 1981; Dunk, 1989; Durden, 2008).

The question is; what is meant by management control systems and the phenomenon of management control systems? It is matter of attention for most of the research in the field of management controls systems to treat them under the same theme instead of treating this concept uncorrelated (Chenhall, 2003). Fisher (1998) mentioned that if the researcher fails to develop link between various management control systems, the way of research with contingent variables will lead them toward erroneous results.

There are numerous accounts of research on Management control systems individually and on the combination, but it is also questionable how management control systems can be applied in any organisation completely. It is evident that organisations focusing on the combination of mechanisms according to the organisational structure but it's in the hidden that how central control system effects the privilege on the other level of organization or level.

Definition

Fisher, (1998) explains that it is quite difficult to describe what is theexact meaning of Management control systems? There are numerous definitions available on that account: some of the definitions overlap each other and some are comparatively different to each other. (Abernethy and Chua, 1996, Alvesson and Karreman, 2004, Anthony, 1965, Chenhall, 2003, Emmanuel et al., 1990, Fisher, 1998, Flamholtz et al., 1985, Green and Welsh, 1988, Langfield-Smith, 1997, Merchant and Van der Stede, 2007, Ouchi, 1979).

Every, author describes management control systems in a unique way; for example some used that term as the very broad in manner for example Chenhall describe the Management control system as the collection of budgeting or product costing and consider that management control systems is the systematic control used to achieve certain goals and controls. Contradictorily Merchant and Otley (2007) suggested that management control systems is a broader means that depends on the more then managing accounting such as the strategic development, strategic goal and learning process. In that sense over all the functions of an organisation is included in control systems. Merchant and Otley (2007) rather than focusing on the strategic control they define management control systems as dealing with employees. Abernethy and Chua (1996) validated the arguments of Merchant and Van der Stede (2007) and describe management control systems as the combination of different controls implemented by management to

control and systematise the behaviour of employees, to act as the consistent as the objective of the organisation. Flamholtz et al. (1985) define management control systems asit increases the probability of individuals and groups will behave in that way which leads towards the achieving the organisation goal. Moreover, it's a technique and process to achieve the goal for designed the all level of organisation and effects behaviour of all the organisation. The concept of MCS has been adopted broadly in accordance with new contributions (Merchant and Van der Stede, 2003).

Merchant and Stede (2003) concluded that management control systems basically depend on four items: internal process, organisational structure, organisation culture and self control. The process which involves procedures, practices, and rules existing in the organisation to contribute to achieve goals is internal process. Organisational structure is a very vital area of concentration to understand management control system's operations (Ferreira and Otley, 2004) and a feature that influences the process of management control (Anthony et al., 2003).

Organisational structure contains the stepwise procedures meaning the hierarchical structure (including the departments, organisations and their functionality), this connects the several parts of the organisational structure and communicates between them (Dalton and Lawrence, 1971; Merchant and Van der Stede, 2003). Self-control is more related to personal belief, values and personal characteristics (Dalton and Lawrence, 1971; Merchant and Van der Stede, 2003).

A contingency model derived from the modern organisation theory played a vital role in the development and advancement of the MCS, particularly when we discuss the factor significant in organisational performance.

Different control systems and their suitability relay on the business setting in relation to contingency control, although the generalised control system can be developed as per class of business setting. In addition to that, following the contingency framework even one factor can affect the proficiency of the MCS.

Hayes (1977) documented major factors that determine the organisational performance, which include interdependency, internal factors and environment. For the better understanding of the MCS, researchers tend to add new variables such as budgetary aspects and performance and also use as mediating and moderating variables in their models (Merchant, 1981; Abernethy and Brownell, 1999), (Dunk, 1989; Kren, 1992).

The formal part of the system contains information if utilised by an organisation to attain their objectives by encouraging their managers, is called the management control system (Juha-Pekka et al., 2011; Horngrenet al.,2008). It consists of four level of controls including boundary systems, diagnostic systems, belief systems and interactive control systems. Out of these systems, the belief systems are considered as a formal way for the purpose of defining the way

of communication, purpose of organisation, reinforcement of employee and basic values of the organisation.

These kinds of systems are reflected with the formal documentations in the form of mission, vision and purpose statement. The boundary system follows the philosophy to be respected by the employee, it defines the procedures, rules and limits by management. The development of such systems totally depends on the code of conduct for businesses, operational activities and most importantly strategic planning systems. The boundary system prescribes the standards which are minimally required to protect from the identified risks. The diagnostic control system refers to the system that collects formal feedback regarding budgets and business plans to evaluate the effectiveness of the deviation of the system from standard procedures of performance. The interactive control systems are typically formalised systems that are specifically used by upper management be part of the decisions made by the subordinates. These systems develop more focus of management and make it feasible to communicate properly and educate the organisation. The MCS that uses all four kinds of management systems are the system which are recognised as more advance and updated system as compare to those who mainly focus only on the diagnostic control (Mia, 2001).

From the point of the system users, the concept of contingency is considered critical in the development and designing of MCS to make sure that all the content of the system are matched with the requirements of the users. Anshari, 1977; Gordon and Narayanan (1984); tley (2001) has tested the proposition and simultaneously they also use the variables related to the context of research and the uncertainty of the environment with organisational structure in the perspective of management control system. The aggregation and integration of the contextual variables in perspective of three variables external environment, organisational structure and interdependency of the organisation and their relationship with the MCS has been studied with scope and timeliness.

Chenhall (2003) has discussed six contextual variables that impact on the design of the MCS, using a deductive research approach. These variables consist of environment, culture, company size, technology, organisational structure and business strategy. As shown in Figure 1, with the major focus on the education industry, Kosturakis and Eyster (1979) used small hotels as a sample and found the budgets were mainly accounted for the purpose to control.

Cruz's (2007) also studied the usage of budgetary control practices and budgeting techniques in Portugal, particularly in hotel industry. Rusth (1990) found that with more uncertainty in the environment, the control systems with simple procedures are most feasible for small or single-unit organisations but previously Schmidgall and Ninemeier (1987) commented that the more sophisticated system is recommended in multi-unit hotel chains. Harris and Brown (1998) said that most of failure of MCS are due to improper feedback, training, not user friendly for participants and not allowing for effective communication can result in resistance from participants and they can try to manipulate or try to destroy the system.

Environment

The design of the MCS should be based on the surrounding environment where this company operates, because the MCS has been used for the purpose move towards the achievement of objective and implementation of proposed strategies (Chenhall, 2003).Emmanuel et al. (1990), describes that the environmental characteristics that influence the MCS are the its ability of predicting, the magnitude of competition and number of the other products-markets in competition with aggression especially related to price, product, distribution and technological competition. In environmental situation which are more stable it is preferred to use simpler, traditional less sophisticated MCS, to save from complexity and make management decision making easier.

To survive in more dynamic and uncertain environment the more complex nature and a sophisticated MCS system would be preferred to make more efficient and effective decisions by keeping in mind nature and environmental requirements.

It is recommended that to handle a more dynamic situation, comprising of more uncertainty the interactive control system will be more preferable. As uncertainty in the external environment tends to increase, we should focus on openness and external environmental factors should be key focus of the MCS. The association of the uncertainty of the environment and the system complexity has been confirmed by this study. Inconsistency with prior research, we formulated the following hypothesis**:**

H1: Higher levels of environmental uncertainty will be associated with more sophisticated MCS.

Technology

Though technology has many meanings in the context of organisational behaviour, it generally refers to how the organisation transforms input into output, including hardware, materials, people, software, and knowledge (Chenhall, 2003). Literature has defined technology in terms of five different dimensions: technical complexity, operations technology and variability (Hickson, Pugh and Pheysey, 1969), interdependence (Hrebiniak, 1974), routine and non-routine (Perrow, 1967 and 1970), and manageability of raw material(Mohr, 1971).Bell (1965) found that the components of technology can be a predictor of Misusing interdependence as a dimension of technology and MCS as defined by operating budgets and statistical reports, Macintosh and Daft (1987) found that interdependence activities highly relied on operating budgets and statisticreports. By extending the technology concept to include automation, Abernethy and Lillis (1995) found that flexible machine systems also affected the MCS design. Chenhall (2003) notes that organisations producing highly specialised, on-standard, or differentiated products require controls to encourage flexible responses, higher levels of open communications and a MCS that can manage the interdependencies. Abernethy, Bouwens, and

Van Lent (2004) went on to prove that companies having advanced technologies, characterised by high levels of interdependence, have more informal controls of MCS. Based upon prior research, we would expect that technology will affect MCS and formulated the following hypothesis:

H2: Higher levels of organisational technology will be associated with more sophisticated MCS.

Structure

Structure is concerned with the official of roles of an organisation's members, designed to ensure that organisational activities are carried out (Chenhall, 2003). Employee motivation, efficiency of work, information flow, and control systems are affected by the structural arrangement. The general typology of structure frequently cited in literature is the one developed by Pugh et al. (1969aand 1969b). This typology structure includes the dimensions of integration, formalisation, specialisation, and decentralisation. Using the decentralisation dimension in their case study approach for a Finland company setting, Haldma and Laats (2002) found support for the relationship between structure and MCS.

In general, high levels of structures are associated with more sophisticated MCS, which enables organisations to cope with the complexities involved. However, Abernethy and Stoelwinder (1990) found that in a public hospital setting, structure did not affect the choice of the MCS. As the majority of previous research supports the relationship between structure and MCS (see Chenhall, 2003), we proposed the following hypothesis:

H3: Higher levels of organisational structure will be associated with a more sophisticated MCS.

Size

Firm efficiency seems to improve with the growth of a company as there is more opportunity for specialisation and division of labour. As an organisation becomes larger, it also begins to increase controls, in order to handle greater quantities of information (Chenhall, 2003). This argument is consistent with that of Merchant (1981), who defined size as a complexity in business and concluded that when complexity is increased, the use of budgeting as a control tool will also grow. Except for the studies summarised by Fisher (1995) and Chenhall (2003), few studies have explicitly examined the relationship between the contextual variable of size and MCS design. Chenhall (2003) argued that the larger the size of an organisation, the greater the emphasis on and participation in budgets and sophisticated controls. These propositions lead to the conclusion that MCS design will be contingent on size. This leads us to the following hypothesis:

H4: Size of an organisation will be positively associated with sophisticated MCS.

Strategy

Strategy is the means through which managers can influence the nature of an organisation's culture, external environment, technologies, structural arrangements, and the MCS (Chenhall, 2003). Prior research has noted relationship between strategy and MCS (Merchant, 1981). When organisations are faced with changing or highly competitive environments, strategy becomes more intense and more sophisticated levels of MCS are employed. Chenhall (2003) notes that more formal and traditional MCS are associated with strategies of conservatism, defender orientation, and cost leadership. Prior research led to the formulation of the following hypothesis:

H5: Higher levels of strategy will be associated with more sophisticated MCS.

Culture

Countries possess different cultural characteristics, which in turn predisposes individuals within different cultures to respond to MCS in distinctive ways (Chenhall, 2003). Though previous research on the relationship of culture to MCS has tested culture through social controls (Hopwood, 1976) and boundary systems, the most frequently used typology of culture is national culture, as developed by Hofstede (1991). National culture includes the five dimensions of power and distance, individualism and collectivism, masculinity and femininity, uncertainty avoidance, and Confucian dynamism. Previous research has found a relationship between culture and MCS (Chenhall, Hall and Smith, 2010). Harrison and McKinnon (1999) identified twenty studies over the past ten years that support the relationship between culture and MCS. Chow, Shields and Wu (1999), using the Hofstede typology of culture and seven dimensions of MCS, found the importance of culture on MCS design. The findings suggest that when organisational culture stresses openness, transparency, equality, and sound values, there is more reliance on traditional MCS, while organisations with highly unsettled cultures rely more on sophisticated MCS. The following hypothesis was formulated based on prior research:

H6: Higher levels of organisational culture will be associated with more sophisticated MCS.

Balance score card

This gap has been identified by authors calling for research on BSC implementation approaches/ways (Hoque and James, 2000; Kasurinen, 2002) and on organisational factors that contributed to the success (or otherwise) of particular implementations of the BSC (de Waal, 2003; Kasurinen, 2002). Hoqueand James (2000), for instance, pointed out the need to explore limitations that companies face in BSC adoption. Olve et al. (2003) (see also Gautreau and

Kleiner, 2001) note the importance of preparing for potential problems before they emerge. This is in line with Ahn (2001), who notes that managers when considering the implementation of a BSC should analyse the limitations and possible benefits connected to their decision. Yet issues regarding the application in practice of the BSC concept seem relatively unexplored. In more specific terms, Kaplan in an interview to De Waal (2003) calls for analyses of how management control systems explain the success or failure of BSC implementations. In Mooraj et al. (1999:487) terms:

"The adoption of the Balanced Score card will have a direct impact on the other management control systems of the organization and vice versa". This research using Balance Score cards as the mediating variable between management control system and planning, administrative, cultural, reward and compensation cybernetics .Balance Score cards introduced by Kaplan and Norton as a tool for a performance measurement system that combines both financial and non-financial performance measures. The system describes the casual relation between the four perspectives: financial, internal business, innovation and learning, and customer. The invention of this system take place due to the traditional financial measure is not providing the adequate knowledge for economic times. Some other research validated the arguments of Kaplan and Norton i.e. performance management (Radnor and Lovell, 2003b), Gautreau and Kleiner, 2001; Walker, 1996), a performance management system (de Waal, 2003).

In this research we regard the Basic score card a tool that is integrated with other elements in the Management control system of an organisation.

The four perspectives

The 1st generation design method proposed by Kaplan and Norton was based on Four "perspectives":

- Financial: This system identifies the measure related to financial performance. In particular to address "How do we look to shareholders?" It includes relation to cash flow, sales growth, operating income, and return on equity.
- Customer: In this perspective, the customer encourages the improvement in the MCS and to answer "How do customers see us?" product rank improvement, time to delivery.
- Internal business processes: This perspective deals and addresses the question "What must we excel at? It includes the calculation of per unit cost and processing cycle time.
- Learning and growth: "How can we continue to improve, create value and innovate?" This encourages finding the answer of the above mentioned question. The time frame related matters such as time requirement for new product development, product life cycle especially time to maturity and new business entrant are addressed in this perspective.

Control System

The control system has been incorporated in between contextual variables and management control system. These control system consists of the following components.

Planning controls

According to Flamholtz et al., (1985) planning is old form of control. Firstly, the goals of the practical areas of the organisation are set out by directing effort and behaviour. Secondly, it stipulates the standards to be attained in relation to the goals, and makes clear the expected level of effort and behaviour from organisational members. Additionally, enables co-ordination through planning and aligning for a set of goals along the functional areas of an organization, by controlling groups wise and individual's activities to assure to get the organizational desired outcomes. Planning has two main approaches. The first one is action planning, in which future goals and actions are established which is usually a 12-month period or less. The second one is long-range planning, in this approach the actions and goals are established for the long time.

Merchant and Van der Stede (2007) noted that planning and budgeting are both financial results control systems. Although, planning can be made by a little amount of finance. In strategic planning management can build strategic projects and other management initiatives by which people may do their tasks effectively. Likewise, operational planning frequently comprises task lists, which provide counsel for what to do, maybe without clear linking to finance and accounting. Planning may have played a major role in address employee behaviour; we consider it sometime another part of system in MCS typology. It is important thing for the researcher to understand the worth of planning for future activities and process by which employees' should be committed with future plan.

Cybernetic controls

Cybernetic principles and the concept of control have had a long relation (Arrow, 1964, Daft, 1983, Koontz and O'Donnel, 1968, Mintzberg, 1979 and Strank, 1983). According to Green and Welsh (1988) cybernetic control is defined as "a process in which a feedback loop is represented by using standards of performance, measuring systems performance, comparing that performance to standards, feeding back information about unwanted variances in the systems, and modifying the system's comportment" (p. 289). Cybernetic system can be used as information system or control system in an organisation depending on how to use it. A cybernetic system can be used as an information and decision-support system if managers themselves perceive unwanted variant and diversify their fundamental behaviour or activity that affect the variant (for instance in a production process) without anyone elses involvement. Although, a cybernetic system is an information system to support decisions to a MCS by linking between behaviour to targets, and the setup of accountability for fluctuation in performance.

In MCS four essential cybernetic systems have been identified which are, financial measures (Ittner and Larcker, 1998); budgets (Bunce et al., 1995 and Hansen et al., 2003);non-financial measures; and finally hybrids that contain both financial and non-financial measures e.g., the Balanced Scorecard (BSC) (Greenwood, 1981, Ittner and Larcker, 1998, Kaplan and Norton, 1992, Kaplan and Norton, 1996a, Kaplan and Norton, 1996b, Kaplan and Norton, 2001a, Kaplan and Norton, 2001b, Kondrasuk, 1981 and Malina and Selto, 2001).

Budgeting is the central part of MCS in most of the organisations and is used almost all over the world (Bunce et al., 1995). Is has an "ability to braid together all the different threads of any organisation hooked on a comprehensive plan that assists many purposes, especially performance planning and ex post valuation of real performance vis a vis the plan" (Hansen et al., 2003; p. 96). While budgeting can be uses in many ways, resource allocation decisions and integration of processes, as a working control mechanism, its concentrate has on the planning accepted levels of behaviour and valuates performance against all those plans.

In contemporary organisations non-financial measures are considered an important part of MCS and it is used to overcome and detect limitation in financial measures and also used to classify the drivers of performance. It is also used for management like TQM (Ittner and Larcker, 1998). Although, hybrid performance measurement systems together consist of financial and non-financial measures. Sometime hybrid forms have been used at the initial level for performance measurement with such systems of management by objectives (MBO) (Greenwood, 1981 and Kondrasuk, 1981). Now a days the BSC, which is an inclusive MCS with both together financial and non-financial performance measures, has become absolutely dominant (Ittner and Larcker, 1998, Kaplan and Norton, 1992, Kaplan and Norton, 1996a, Kaplan and Norton, 1996b, Kaplan and Norton, 2001a, Kaplan and Norton, 2001b and Malina and Selto, 2001).

Reward and compensation controls

Reward and compensation systems are used for motivating and increasing the performance an individual's levels and groups vision the organisations by accomplishing resemblance between organisational goals and activities (Bonner and Sprinkle, 2002). The basic purpose of rewards and compensation conduct to increased effort (Bonner and Sprinkle, 2002).

Reward systems can be extent from extrinsic to intrinsic (Flamholtz et al., 1985). In management accounting there has been great emphasis on extrinsic rewards (Ittner and Larcker, 2001). Reward and compensation systems are two separate parts in the typology. While, there is a positive link between rewards and cybernetic controls, some organisations provide rewards and compensation for some reason, including retaining employees and encouraging cultural control, via group rewards. Consequently, there is still need for researcher to make some schemes of reward and compensation, for their contemplate purposes, and their links to several controls.

Administrative Control

Administrative controls system provides the direction of employee behaviour towards organizing the individuals and monitoring; behaviour, accountable, performance or non-performed. They administrative control can be divided into the; organisation design and structure (Abernethy and Chua, 1996; Alvesson and Karreman, 2004; Emmanuel et al., 1990; Abernethy and Chua, 1996; Macintosh and Daft, 1987).

Organisation design has the important role to use as the control device and with using specific type of organisation promotes the contact and relationship (Abernethy and Chua, 1996, Alvesson and Karreman, 2004 and Emmanuel et al., 1990). Flamholtz (1983) Claims that organisational structure contributes via control which come across the specialisation control system facilitate diminishing inconsistency of human behaviour and on the other hand increase the predictability. Prior research concluded neither the organisational structure as the contextual viable but nor considering as the organisational control.

The governance renown and has the board's structure and its composition; various management and projects teams. It describes the authority and accountability at the formal level. (Abernethy and Chua, 1996). The governance term also ensures as the different organization units and functions have in the alignment with horizontally and vertically.

The policies and procedures has been using as the significant tool in the bureaucratic form of administration to standardize the behaviour of employee within an organisation.

The policy and procedure comprise the approach of standard operating procedure and practices (Macintosh and Daft, 1987) and rules and policies. Merchant and Van der Stede (2007) describes as the call action controls, i.e. behavioural constraints, pre-action reviews, and action accountability. As Merchant and Van der Stede's (2007)

Action is the part of administrative control which describes the complete concept of administrative control to control the behaviour according to achieve the control framework.

Cultural controls

The set of values, beliefs and social norms which tend to be shared by its members and, in turn, influence their thoughts and action Flamholtz et al. (1985) (Birnberg and Snodgrass, 1988, Dent, 1991 and Pratt and Beaulieu, 1992). Cultures are beyond the range of managers in the time context (Clegg et al., 2005), culture is sometimes used as the control behaviour of employees.They are three aspects of cultural control observed such as the symbol-based control, clan control and values base control (Schein, 1997; Ouchi, 1979). The development of the concept of value controls on the eye of belief systems. The explicit set of organisational

definitions that senior managers communicate formally and reinforce systematically to provide basic values, purpose, and direction for the organization.

Previous research on the cultural aspect, Dent (1991) argues every organisation contains a sub culture (Clegg et al., 2005). Theses sub-culture known as the clan culture Ouchi (1979) developed the concept of a clan in control research. He explains the idea in the socialisation process, where the individual is exposed and preserves the set of skills and values.

This process may narrate to the any group such finance mangers, doctors or engineers' etc in the organisation which build the some specific groups on the basis of organisational unit or division. Clan controls can be explained as the values and beliefs through the ceremonies and rituals of the clan. Merchant and Van der Stede, (2007) discuss personnel controls. The selection control comes in under cultural control. Conversely, placement can be associated with organisational, and occasionally with governance structure.

Training also is the part of cultural control because training can visualised as the way to manage the culture of the organisation. Cultural control can be considered a control system, whereas the provision of the necessary resources is not really a control mechanism; it is just a precondition for proper work and does not provide direction as such but as the control agent. The provision of resources can be linked back to providing sufficient information to allow proper decision-making.

Figure 1- Theoretical framework for Management control system in the education sector (i.e University)
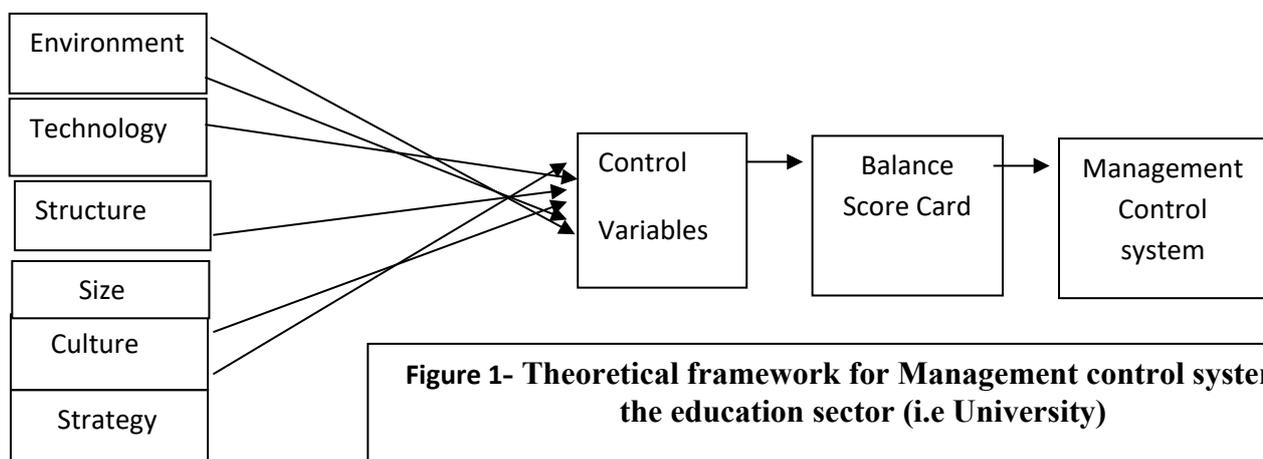
Summary and Conclusion

The purpose of this study is to contribute to and extend the body of knowledge regarding management control systems in the education industry and provides basic management control system design. According to Chenhall (2003), the management control system of an organisation is a broad concept and thus it is important to consider many different elements of control. Thus, this study provides insights into the how multiple contextual variables impact the structure of management control systems in the Malaysian education industry (I.e

University) and how the control variables provides the basic theoretical structure to control contextual variables and Management control systems. Furthermore how the balance score card can be used as the measurement tool to examine the performance of any university's acadamic and non academic staff. As predicted by the conceptual debate that the relationship between Management control systems and technology, structure, and culture were positively related, indicating that higher levels of technology, structure, and culture are related to more sophisticated Management control system. If the hypothesis persists this can be applied and used in the university background to evaluate the performance of academic and non academic staff. It would be expected that the education industry (i.e. University) would encourage flexible response and higher levels of communication with students and, consequently, with upper management. The sophisticated management control system that would enable and leverage the organisation to cope with different complexities and issues that arise from dealing with their varied students and between the management of university. In particular, these results can help provide an educationist with clear views of their organisation and how to manage them in different ways**.**

Contribution of Research

The balance score card has not been researched in any theoretical model as the performance indicator in the organisation strategy at the education sector of Malaysia.

Using as the performance measurement and indicator added the theoretical and practical knowledge about the Balance Score card.

This research considers the Management control system as the broader aspect of strategic performance and balance score card as the performance measurement and other five variable to control variable planning, administrative, cultural, reward and compensation cybernetics which not been in the part of any research as the in theoretical framework.

Future research

Future research could examine different settings (i.e. country, industry, etc.) and investigate the effect of each contextual variable on the relationships between management control systems and organization performance. Future research should be applied in the practical way and examine the practical implication above the conceptual research and provide the vulnerability of management control systems in the education system or any other organisation or firm.

Limitations

Several limitations of the current study are acknowledged. First this conceptual research discusses the contextual variables, control variables, measurement variables and management control systems design in conceptual debate and it needs practical implication to prove the

authenticity of the arguments. Secondly, the research considers several assumptions of the theoretical prospect like contextual variables have taken all demission not only in one dimension in isolation, thirdly the balance score card has been researched by the researcher in a different aspect, we have used it as the performance measurement and finally this research only provides a glimpse of future management control system implication and several other factor can be involved which are not within the scope of this research.

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