ST. MARY'S UNIVERSITY

ASSESSMENT ON THE APPLICATION OF MANAGEMENT CONTROL SYSTEM In Ethiopian Construction Works Corporation

A Thesis submitted to St. Mary's University in partial fulfillment of the requirements for the Degree of Masters of Business Administration in Accounting and Finance

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DECLARATION

I , Siraw Yirdaw, declare that this thesis entitled "**The Assessment on the Application of Management Control System in Ethiopian Construction Works Corporation"** is outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the Research Advisor. This study has not been submitted for any degree in this University or any other Universities. It is offered for the partial fulfillment of the degree of Masters of Business Administration specialization in Accounting and Finance.

By: Siraw Yirdaw Azale

Signature_____

Date_____

ENDORSEMENT

This is to certify that this thesis work, "**The Assessment on the Application of Management Control System in Ethiopian Construction Works Corporation"** conducted by Siraw Yirdaw Azale for the partial fulfillment of Masters of Business Administration [MBA] specialization in Accounting and Finance at St. Mary's University, is an original work and not submitted earlier for any degree either at this University or any other Universities.

Research Advisor

_____ _____

Abebaw Kassie (PhD) Date

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ACRONYMS

ABC- Activity Based Costing

BPR- Business process reengineering

BSC-Balanced Score cards

ERA- Ethiopian Roads Authority

ECWC- Ethiopian Construction Works Corporation

MA - Management Accounting

MCS- Management Control System

PM- Performance Management

TQM- Total quality management

ABSTRACT

This study examined the application of management control system in Ethiopian Construction works Corporation. The application of management control system in organizations is vital to sustain business profitability and competitiveness. Effective management control systems have paramount benefits to the success of the organization by integrating planning, budgeting, performance measurement and rewarding and compensation. Managers play an important role in applying effective management control system so that they can achieve their organizational goals. The objective of the research was to assess the application of management control system in Ethiopian Construction Works Corporation. The descriptive research design was undertaken by using semi-structured questionnaire and purposively conducted interviews. Both quantitative and qualitative data collecting techniques were used in this research. The research had done based on the responses of professionals who are working in the corporation. The data was planned to collect from 301 respondents by using self-administered questionnaire and 5 interviewed managers. The final response rate was 258(85.71%); based on this the analysis was carried out. The findings revealed that the strategic planning and programming practice in the corporation was not satisfactory i.e. it has a mean score values of 2.64. According to the response of the respondents the budgeting system of the Corporation is found at satisfactory i.e. it has a mean score value of 3.26. Besides, the performance measures implemented in the corporation were found at satisfactory i.e.it has a mean score value of 3.09. The application of management control system in the corporation was not satisfactory in the case of rewarding and compensating employees which a mean score value of 2.93. In conclusion, the overall application of management control system in the corporation is found at a mean score value of 2.98 which is not satisfactory and encouraging.

***Key words**: strategic planning, budgeting, performance measurement and rewarding*

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The word control has numerous meanings and different connotations, many of which are not applicable to the field of management. Within this scope, the term management control was introduced by Anthony, 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, also points out that in process terms, management control exists in order to ensure that organizations achieve their objectives, and for control is used for creating the conditions that motivate an organization to obtain predetermined results. Hence, the concept of control in organizations appears to be related to the existence of certain objectives or ends in all organizations (Anthony and Govindarajan, V. 2007).

Management control system (MCS) is a logical integration of techniques to gather and use information to make planning and control decision, to motivate employees' behavior, and to evaluate performance (Horngren et al. 2002). It is the process by which managers assure that resources are used effectively and efficiently in the accomplishment of the organization's objectives' - in other words control using both financial and non-financial objectives. It is specifically concerned with the process by which managers influence other members of the organization to implement the organizational strategies (Anthony and Govindarajan 2002). Central to most MCS is setting behavioral or output standards and employing mechanisms to ensure that these standards are achieved. Most of these mechanisms are diagnostic in nature; meaning that they require assessment of how well performance is achieving objectives and analysis of where problems may exist. Corrective action flowing from diagnosis is aimed at revising behavior, goals, or both in order to sufficiently reduce a perceived performance gap. Many information systems can be employed in a diagnostic control capacity, including profit plans, budgets, project management systems, human resource processes, and systems that measure strategic performance (Merchant, K. A. & Van der Stede, W. (2007).

MCSs have been recognized as important in the formulation and implementation of strategies (Bromwich and Bhimani 1994). The orientation of corporate and business strategy should,

therefore, be reflected in the design and use of the MCSs at the respective organizational levels (Langfield-Smith 1997 cited in Fredrik Nilsson 2002). In coping with the competitive forces, there are three potentially successful generic strategic approaches to outperforming other firms in an industry; overall cost leadership, differentiation and focus (Porter 1998).

Good MCS are essential to a well-run organization. They permit top managers to have confidence that the procedures and processes necessary to the sound management of the organization's resources; financial, personnel, IT equipment, accommodation, capital equipment, and so on are in place and effective and, if they are not, to take corrective action. Top management can then concentrate on the issues for which they should be responsible business strategy and the planning and implementation of operations (OECD, 1996).

Effective management control systems in most organizations start from the expectation that individual managers are responsible and accountable for the quality and timeliness of the operations and programmers they manage, for controlling the cost of the resources they use, and for ensuring that their operations and programmers are managed with integrity and in compliance with legal requirements and with the regulations and guidelines promulgated by the central agencies (OECD, 1996).

A control system is a set of formal and informal systems that designed to asset management in steering the organization towards the achievement of its purpose by bringing unity out of the diverse efforts of subunits and individuals (Marciallo and Kirby 1994). The formal system and informal system are independent but they are highly interrelated, indistinguishable, subdivision of control system.

One explanation for the high proportion of the business to fail is the difficulty of establishing a management control system (MCS) that will suit both for head and branch companies (Harrison et al. 1988). While there are many components that makeup a MCS, the researcher focuses merely on the following key elements: the strategic planning and management ,budgeting system, cash and cost management, decision making, performance measurement, and compensation(rewards). It is also possible that the company’s control system is used for the

purpose of exploiting synergies and implementing the chosen corporate strategy. Goold and Campbell (1997, p.123) suggests that implementation of corporate strategy is facilitated in cases where the corporate strategic planning system is consistent with the system implemented at the business-unit level. If this is the case, it is likely that corporate strategy will be an important driving force influencing the way in which MCSs are designed.

First, researchers have particularly examined the role of contemporary accounting practices in different managerial and changing settings reliance on accounting performance measures (Hartmann 2000), or the influences of more current practices on decision making (Nixon 1995).

Second, studies have revealed many facets or pros and cons emerging about the new managerial and management accounting techniques. Studies have also considered more broadly the application of MCSs. So did this research that the researcher is interested in examining the application of MCS in ECWC to view under the perspective of strategy and programming, budgeting, reward system, and performance measure. The previous studies on this area conducted in other country helps to increase and build the level of understanding on the application of MCS for the area in which this research has been conducted.

1.2 BACKGROUND OF ECWC

ECWC is a public enterprises' established on Dec 18, 2015 based on the councils of ministers regulation no.366/2015, accountable to the ministry of Public Enterprise (MOPE). ECWC has been established by merging Ethiopian Road Construction Corporation (ERCC) and Ethiopian Water Works Construction Enterprise (EWWCE) by transferring the rights and obligations to the corporation following the implementation of institutional reform program.

The purpose of its establishment is to carry out construction, upgrading and maintenance of roads ,bridges, works related to dams ,irrigation ,hydropower generation water supply system drainage constructions, maintenance and enhancements works in Ethiopia as well as others neigh*boring countries. The corporation will also provide construction equipments and machineries maintenance & rental services. It was established with authorized capital of Birr 20.313 billion: out of which over 7.74 billion birr is paid up in kind and cash.

ECWC is governed by the public enterprises proclamation No. 25/1992. Its supervising authority is the ministry of public enterprise and its policy making body is the executives board of corporation whose members are higher government officials appointed by the government. As ECWC is an organization that has to apply management control system the researcher is interested to assess how the corporation has applied management control system to achieve its objectives.

1.3 STATEMENT OF THE PROBLEM

Management Control System is a comprehensive process of controlling and managing the behaviors of employees including all actions, policies, resources, and strategies that mangers do to ensure that firm's plans, objectives, and strategies carried out perfectly. MCS differs substantially between organizations and units or areas critical to every company. Managers' control decisions are not unsystematic. They are based on any of numerous factors. Some controls are ineffective or not cost effective in certain circumstances. Certain types of controls are superior to deal with the types of awareness of the problems, and various organizations and different areas within each organization are often quite different combinations of control problems. Certain types of controls have several adverse effects that may primarily hazardous in certain environments. And some controls simply outfit particular managers' styles better than others (Merchant & Van der Stede, 2007).

Despite the importance of organized control systems, there is a lack of adequate understanding of how management control systems work and contribute to the attaining of organization goals, finding out the factors that lead to the well designed and implemented management control system. The factors that enhance efficiency to organization and resources used to attain desired goals are the biggest challenges.

At the other hand the effectiveness which marks accomplishing of tasks that will help fulfill organizational objectives by choosing the right controls. Therefore as management control system developing and work within the organization, their contribution to attain the organization goals and targets are highly valued.

The issue of management control practice still presents unique challenges in terms of effectively addressing the organizational goals and objectives. Therefore, there is a potential challenges in the managerial control practice of Ethiopian Construction Industry and custom of traditional management system (MoT Magazine 2012).

There have been multiple studies encouraging further research of MCSs as a package as they imply that there has been focus towards specific controls instead of how the controls affect each other and work as a package (Chenhall, 2003; Malmi & Brown, 2007; Otley, 1999; Sandelin, 2008). Without this view of controls as a package it could result in incorrect and unclear findings which could result in conflicting conclusions (Chenhall, 2003), if organizations find that the controls work properly independent of each other they can make incorrect conclusions if they not fit well together (Ferriera & Otley, 2009). Malmi & Brown, Otley and Merchant & Van der Stede have all developed frameworks to facilitate empirical research when investigating the complexity of MCS.

Previous research argue that it is hard to make management control work properly, especially in large companies where middle level managers face pressure from other parts of the corporation, which creates a complexity within their MCS (Malmi & Brown, 2007; Siverbo & Åkesson, 2009). Since the middle level managers feel pressure from their superiors they prioritize their directions when choosing which controls to focus on (Ferriera & Otley, 2009). Sandelin (2008) argues; working with MCS as a package will be of support when identifying the managerial challenges of balancing the different controls. I will use Malmi & Browns' model MCSs as a package to facilitate when investigating which controls are being used, how they are structured in a MCS, and how the middle level managers work to handle the complexity within their MCS.
I have chosen middle level managers as they are especially exposed to multiple controls, both controls that they have initiated and controls which are set by higher instances in the corporate group, which creates an increased complexity of management control.

I find this interesting and want to deepen my understanding about this topic, by investigating how a MCS could be structured in an organization within a corporate group, what kinds of problems arise and how a middle management team work to handle these difficulties

Therefore, this study tries to investigate those potential challenges and forward recommendations so as to minimize or avoid such challenges that hinder the application of management control systems in construction industry as the industry needs huge investment cost and capital that the application of management control system in such industry is very vital so as to achieve its objectives specifically in Ethiopian Construction Works Corporation and there are no much research has been conducted in this area. Here is interested in examining the application of MCSs. The other driving force for the researcher is to examine the application of MCS to achieve organizational objectives of the corporation.

1.4 RESEARCH QUESTIONS

- What are the practices of strategic planning and programming of the corporation?
- What are the techniques of budgeting system in corporation?
- What are the methods of performance measurement implemented in the corporation?
- What reward system the corporation have been adopting?

1.5 OBJECTIVES OF THE STUDY

The general objective of this paper is to assess the management control system applied in ECWC.

The specific objectives of this study have the following parts:-

- To assess strategic planning and programming practice of the corporation.
- To assess the budgeting system and application of the corporation.
- To assess the performance measurement of the corporation.
- To assess the reward systems applied in the corporation.

1.6 SCOPE OF THE STUDY

MCS is a generic term and this study will be select specific management control mechanisms. The selected management control mechanisms are performance measurement, strategic planning and management, budgeting system, & different types of motivations applied in the construction industry of ECWC. This is because the performance measurement, strategic planning, budgeting and motivational mechanisms are vital to know whether the corporation's management control systems is good or not. Moreover, the research focused only the application of management control system in the corporation though there are different managerial issues in different organizations.

1.7 SIGNIFICANCE OF THE STUDY

This study is significant as it can provide the management of ECWC about existing practices of management control systems and based on findings the management can establish strong control systems in the corporation to achieve their objectives. Furthermore, this study also does have a paramount importance in providing a better ground for investors and other stakeholders of the corporation, which are keenly concerned with this issue, to take it as a basement rock in their further stride to implement appropriate basic components of MCS and will also incite future research on the subject in connection to enterprise in the country.

1.8 THESIS STRUCTURE

The research paper is organized in five chapters as follow: Chapter one it introduced the research topic with background, statement of problem, objectives, scope, and significance of the study and finally thesis structure of the study. Chapter two will examine the theories & empirical to this study through the literature review as discussed by different scholars. Chapter three will explain most important methods in general and specific research strategy to fulfill the research purposes. Chapter four will present empirical findings of the research. Chapters five will discuss conclusions and implications of the research.

1.9 LIMITATIONS OF THE STUDY

This study faces the following constraints:

Time Constraint: A period set aside to conduct this study was not enough to collect more information.

Financial limitation: Insufficient research fund set aside to facilitate this study was another limitation as it limits the researcher to have research assistants to assist in data collection.

Confidentiality: Most of the public sector organizations have some confidentiality in some areas where they don't want information to be revealed. And also some staff tends to be reluctant in giving out relevant data that seemed to affect their operations. Such a tendency limits this study because some of the officials were not ready to give out information and cooperation needed by the researcher.

Reluctant respondents: Inaccurate answers during interviews as well as incomplete or non response against questionnaires were another limitation. However, a researcher collaborated effectively with staffs of the airline so as to make them feel friendly and easy in the process of data collection especially to the areas with confidentiality.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

The literature review part of this paper will address the main issues raised by different authors and researchers as it is for any research. It mainly focuses on the definition of management control system; its theoretical framework in the areas of strategic planning and programming, performance measurement, budgeting system, and rewards. Moreover, this part of the paper will address the empirical studies conducted by different scholars and practitioners of management control systems.

2.2 THEORETICAL FRAMEWORK

The theoretical relevance of this study deals about the theoretical framework supported by different authors regarding the MCS. It is composed of definition of MCS, strategic planning and performing, budgeting system, performance measurement, and rewards and compensation.

2.2.1 MANAGEMENT CONTROL SYSTEM

Management control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives (Anthony et al. 2007). MCS is thus the process that links strategic planning and operational control. MCSs have the purpose of providing information useful in decision-making, planning and evaluation (Brickley et al.2007). The focus of MCS is not only on one form of control like performance measures but on multiple control systems working together (Widener 2007). Simons (2000) argues that "MCS are the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities. Whereas strategic control assesses the question whether the strategy chosen by the organization is valid, management control according to Merchant and Van der Steede (2003) addresses the question whether employees behave appropriately or not. MCS are therefore intended to help the organization to motivate employees to make decisions and to take actions which are in the organization's best interest. MCS thus have two main purposes: providing information useful to management and helping to ensure viable patterns of employee behavior in order to achieve organizational objectives.

MCS is referred to as a formal (cybernetic) control system with an overall aim of regulating behaviors within the organization. So far, research in MCS has been restricted to the relationships between managers and their superiors, and thus does not consider the effects/consequences/effectiveness of control systems on non-managerial staff. Hence, MCS aims at ensuring that mid-level managers carry out organizational objectives and strategies. In contrast to this traditional view of the cybernetic control model where targets (budget or standards) are compared to actual output as a basis for corrective action or performance evaluation, contend that management control must take a more flexible perspective and would, in fact, involve all managerial activities. This has allowed for a gradual inclusion of non-financial based measures/controls made a more recent attempt at defining MCS but argued that MCS is a broader term that encompasses MAS and also includes other controls such as personal or clan controls, and perceives MCS as "passive tools" providing information to assist managers. This is in contrast to Anthony & Govindarajan's, perspective since they consider MCS to be an "active tool" for managerial activities (Anthony & Govindarajan,1998; Chenhall,2003; Fisher,1995; Merchant's, 1989 & Shields et al.'s,2000).

In aggregate, Malmi & Brown (2008) define MCS as it includes all the devices and systems managers use to ensure that the behaviors and decisions of their employees are consistent with the organization's objectives and strategies. Any system, such as planning, budgeting, responsibility centers, cost management, decision making, management control, performance measurement, and compensation categorized as MCS (Anthony and Govindarajan 2001). MCS also have many characteristics which influence their use. For example, management controls may be formal or informal (Langfield-Smith 2007). In any case, the presence, use or absence of MCSs significantly influences the actions and decisions carried out within an organization (Anthony and Govindarajan 2001). In addition; Anthony & Govindarajan (2003) expand the definition of MCS as the process by which managers of all levels ensure that the people they supervise implement their intended strategies. This definition, according to Berry et al. (2005), reflects Anthony‟s current views on MCSs, which have some continuity with his original approach, but abandon some elements like; management control is primarily a process for motivating and inspiring people to perform organization activities that will further the

organization's goal. It is also a process for detecting and correcting unintentional performance errors and intentional irregularities, such as theft or misuse of resources (Joni 2009).

MCS also reviews the conceptualization of control systems in the context of strategy implementation. Simons argues that MCS are in fact information-based systems that 'become' control systems when they are used to maintain or alter patterns in organizational activities. To some extent, he sought to transcend the various previously used distinctions i.e. active/passive, formal/informal and financial/non-financial and posits that the control of business strategy is achieved by the combined use and integration of four levers of control, namely belief systems, boundary systems, diagnostic control systems and interactive control systems. More crucially however, he argues that the power of these levers in implementing strategy does not lie in how each is used alone, but rather in how the forces create a 'dynamic tension'. As a result of this dynamic tension, it is argued that control features can be complementary i.e. increasing the emphasis on one control component increases the benefit received from other control components. However, the focus of Simon's conceptualizations of controls is more generic, focusing more on strategy-controls linkages and how these are collectively used rather than on the nature, feature or characteristics of management controls system and how they each individually influence behavior (Simons,1995,2000; Tuomela, 2005 & Widener, 2007).

(Simons, 1995, 2000), developed a generic and broader conceptualization of control systems by referring to belief systems (used to inspire and direct the search for new opportunities), boundary systems (used to set limits on opportunity seeking behavior), diagnostic controls (used to motivate, monitor, and reward achievement of specified goals), and interactive controls (used to Stimulate organizational learning, and the emergence of new ideas and strategies). For example, a mission statement could be seen a belief system whilst a standard operating procedure could be an example of a boundary system. However, the budgetary participation could have both interactive features (i.e. stimulate learning and new ideas/strategies) as well as a diagnostic ones (used to motivate and monitor). Furthermore, according to (Simons, 1995), these four levers create opposing forces of effective strategy implementation. Whilst belief systems and interactive control systems create positive and inspirational forces, the other two levers create constraints and ensure compliance with orders. It is this interplay of forces – operated by senior

managers – that creates a dynamic tension. For example, one can consider that belief systems motivate managers towards exploring new opportunities but at the same time, boundary systems seek to constrain the exploration spurred on by the belief systems. The notion that these two opposing forces are complementary has been empirically investigated recently (Simons, 1995, 2001; & Widener, 2007).

According to Simons, 1995, 2001), management control systems are the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities and also enable to address the internal and external contexts of firms. Simons' definition also shows how managers control strategy (that is strategy formation and implementation). It also encourages the integration of financial and non-financial performance measures and takes into account the wider participation and empowerment of employees. It 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. 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 organizations. They are based on performance variables, such as effectiveness and efficiency.
However, these performance variables may change when organizations alter their business strategy.

Beliefs Systems: are formal systems used by top managers to define, communicate, and reinforce the basic values, purposes, and direction of the organization. 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. They 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.

Boundary Systems: are formal systems based on predefined business risks, which are used to set limits on opportunity-seeking behavior. 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. Boundary systems are stated in negative terms, for example sanctions. 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.

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 organization on a recurring basis. 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. 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.

In general, beliefs and interactive control systems stimulate inventive and innovative action, whereas diagnostic and boundary control systems serve to constrain decision-making and ensure

compliance with particular rules and measures. Diagnostic control systems monitor the business results and facilitate 'single loop' learning, whereas interactive control systems focus on processes and facilitate 'double loop' learning. Beliefs and boundary systems are important when opportunities expand and the pressure to increase business performance grows. Simons argues that an effective strategy implementation requires a balance between the four control systems. In this way a strategy can be approached from several perspectives; its planning stage, its structure and pattern, and its position within the context as a whole.

In addition, the control of business strategy is achieved by integrating the forces of belief systems, boundary systems, diagnostic control systems and interactive control systems. Beliefs systems are the explicit set of organizational definitions that senior managers communicate formally and reinforce Always to provide basic values, purpose, and direction for the organization. Boundary systems are explicit statement embedded in formal information systems that define and communicate specific risks to be avoided. Diagnostic control systems are the formal information systems that managers use to monitor organizational outcomes and correct deviations from preset standards of performance. Interactive control systems are the formal information systems that managers use to personally involve themselves in the decision activities of subordinates (Simons, 1995).

2.2.2 STRATEGIC PLANNING AND PROGRAMMING

In coping with the competitive forces, there are three potentially successful generic strategic approaches to outperforming other firms in an industry; overall cost leadership, differentiation and focus (Porter 1998). According to Chandler (1962,), strategy is "defined as the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals". Langfield-Smith (1997) states that, "the MCS should be tailored explicitly to support the strategy of the business". For example, Young and Selto (1991) observe that strategy influences the method of accounting practices and techniques used. Ittner et al. (2003) explored that, a basic assumption in the strategic control literature is the need to form specific control practices with the company`s selected strategy. Therefore, strategy is an important factor in the design and use of MCS.

Accounting scholars have argued that MCS have to be modified in accordance with the strategy of a company (Simons 2000). Otley (1999), notes that the strategy and objectives that a company decides to pursue represent a central contingency variable. Strategy is somewhat different from other contingency variables. In a sense it is not an element of context, rather it is the means whereby managers can influence technologies, the structural arrangements and the MCS (Chenhall 2003).

Miles and Snow (1986) pointed that the strategy selected by the company will affect its MCS, meaning that different types of organizational plans and strategies will tend to cause different control system configurations. As per the scholar (Whittington 1995) suggest that there is an important link between strategy and MCS and that a congruent match of the two variables is essential to performance. According to performance measurement literature, the appropriate performance measurement system encourages actions that are congruent with organizational strategy (Simons 2000).

Strategic planning involves long-term planning, and is usually undertaken by the top management. Strategic planning is the process of deciding on the programs that the organization will undertake and the amount of resources that will be allocated to each program in the next few years. For strategic planning to be effective, it should be accompanied by an appropriate organizational structure, an effective management information system, a budgeting system and a reward system. Decisions regarding strategic planning influence the physical, financial and organizational framework within which the relevant operations are carried out. The programming process is an organizational process for making long-term resource allocation decisions (ICFAI, 2006).

There are four elements of strategy domain sought, differential advantage, strategic thrusts and targeted results. The domain sought relates to analyzing the environment in which the organization is functioning. It addresses issues related to the changing needs of the business activity, the changes in the business environment, changes in the customer's perception regarding the company's products and best practices to deal with competition. All these relate to the domain in which the organization operates. Benchmarking is considered an important tool for comparing the company's products with those of its competitors. Differential advantage relates

to identifying the strengths and weaknesses of different businesses, improving upon the strengths and overcoming the weaknesses. After an organization analyzes the domain and differential advantage, the next step is to plan the strategies required to achieve the goals. This involves issues related to costs, marketing new products and services, planning the training and development strategies required for the staff to work in congruence with the organizational goals. The last stage involves analyzing performance. To know whether an organization is moving in the right direction, it is important to measure at regular intervals the actual results against expected results (Yavitz & Newman, 1982).

The process of programming includes allocating long-term resources. Programming involves all the responsibility centers of the organization that draw plans for achieving the strategic goals of an organization. An important aspect of the programming process is that organizations make decisions about resource allocations, which require expenditure in the present, in anticipation of returns in the future. The programming process includes defining, evaluating and implementing new programs in order to achieve long term goals. As part of the planning process, long-term goals are identified and assigned to responsibility centers. These goals are compared with the expected future performance and the gaps in planning are identified. This helps in designing and implementing programs to close these gaps (ICFAI, 2006).

Strategy selected by the company will affect its MCS, meaning that different types of organizational plans and strategies will tend to cause different control system configurations. As per the scholar's suggest that there is an important link between strategy and MCS and that a congruent match of the two variables is essential to performance. According to performance measurement literature, the appropriate performance measurement system encourages actions that are congruent with organizational strategy (Miles & Snow, 1986; Simons, 2000; &Whittington, 1995).

2.2.3 BUDGETING SYSTEM

Organizations prepare plans for the successful execution of strategies. A budget is a financial and quantitative statement, prepared and approved prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective. Budgeting refers to

the process of designing, implementing and operating budgets. The budgeting process starts with the dissemination of guidelines approved by senior management (David O.1999).

Budgetary control refers to the establishment of budgets that relate the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of the policy or to provide a basis for its revision. Managers should participate in the budgeting process to ensure consistency in the overall adherence to the corporate goals. (David O. 1999).

In order to develop a budget there is a need for an underlying plan by which the organization's objectives are expected to be achieved and which serves as the basis for the cost structure underlying the budget. Target setting has long been seen as an important part of budgeting, with both the process e.g. participation, and the outcome e.g. target difficulty being the subject of behavioral accounting research. However, clearly much of the influence of performance evaluation is driven by the desire of managers to please their superiors and thus gain some form of reward financial or otherwise. Finally, feedback loops are assumed to exist because of the regular reporting of typically monthly. The virtue of the budgetary control process is that it provides an encompassing framework by means of which all aspects of an organization's activity are encapsulated into a single set of financial statements against which actual outcomes can be monitored (David O. 1999).

2.2.4 PERFORMANCE MEASUREMENT

According to Anthony & Govindarajan (2003) states that MCS comprises those performance measures or KPIs (key performance indicators) which enable top management to monitor organizational performance against important dimensions of a given strategy. Previously restricted to largely accounting-based measures, such as ROI(return on investment) and ROE (return on equity) , firms‟ performance measurement systems now often encompass a broad range of „metrics,‟ many of which are aimed at establishing minimum performance standards in key areas of the business. These include finance, customer service, internal operations, and innovation (Peljhan 2005).

Simons (1995) argues that formal performance measurement systems may be used in either a diagnostic or interactive manner. The difference lies in the amount of personal attention they receive from top managers. Interactive control systems are systems which top managers use to involve themselves regularly and personally in the decision activities of subordinates (Simons 1995). By contrast, diagnostic controls systems operate simply as feedback or 'error based' controls, and are monitored by subordinates or staff personnel, such as the accounting function. The purpose of interactive controls is to direct managers" attention towards current strategic uncertainties (Simons, 2000). The purpose of diagnostic control systems is to ensure the implementation of existing or intended strategies (Simons, 1995). From this viewpoint and also taking into account the recent developments of MCS, (Peljhan 2005), the proposition is that the use of more comprehensive MCS practices and information results in improved company performance.

Chenhall (2003) states that measurement systems have to contribute to the implementation of the strategic orientations in guiding the action by ensuring short- and long-term performance evaluation. Therefore, strategy, actions and measures have to continuously work in harmony. Looking for consistency between strategy-actions-measures implies the use of financial and non-financial performance measures. If quality and time become essential strategic criteria, financial performance measures are less effective to manage a company in the long run. This does not mean that accounting data are not useful, but they have to be complemented by nonfinancial performance measures.

Trimo (2002) measures its performance with respect to the key elements of its strategy. Therefore, it uses a strategic performance management system (Ittneret al. 2003). Trimo began implementing strategic performance management in the prospector period when it realized the importance of aligning all levers of control in the company, so that what is critical to the company's success is regularly evaluated and rewarded by using key performance indicators (KPIs). KPIs are used by top management to monitor organizational performance in key strategic areas, as defined by key processes in the company. The importance of identifying an organization's performance is evident throughout the world-wide markets, the results of which are to attract future investment, increase share value and attract high caliber employees. Therefore, it is important to consider how an organization's performance is measured and how it

can be communicated to the wider market i.e. how can it be understood and interpreted by the potential investors, employees and customers. The basis of formulating performance indicators that achieve the latter have been in operation as early as the beginning of our century. Those performance indicators have traditionally concentrated on finances e.g. return on investment, sales per employee, profit per unit production, which as suggests "…financial measures are useful - but they tend to measure the past - and they tend to measure the easily-measurable." The apparent inadequacy of financial measures for contemporary businesses has been identified by a number of authors. It was identified that the reasons why these types of measures are criticized is because they:- Encourage short-termism, lack strategic focus and fail to provide data on quality, responsiveness and flexibility, encourage local optimization & do not encourage continuous improvement(Chandler, 1997; Neely,1999 &Sanger, 1998).

The main reason for the above failings of financial measures is they are 'lagging metrics' in that they report on results and decisions made in the past and therefore of little use in improving current performance. In effect, they are reporting on the organization's past performance rather its current performance. A simplistic analogy to illustrate this point can be drawn from the field of sports, and in particular football, where knowing the result of a match offers you an indication of how the team performed but it does little to suggest future improvements, identify mistakes and wrong strategies, assess individual performance or identify weaknesses. Financial measures alone can identify their past performance but not what contributed to achieve that performance. Therefore, in addition to measuring 'what' the performance of an organization was, the 'how' that performance was achieved should also be identified on an on-going basis. It is only by understanding how the organization arrives to a particular performance, and designing metrics (leading as opposed to lagging) to measure the 'how' that an organization might start to improve and increase market share. This has been the focus of research since the late 80's when increased globalised competition has forced companies to consider nontraditional measures provide an interesting comparison of traditional and non-traditional measures. As a result of this a new field of study has emerged which aims to identify the right number and type of performance metrics, in an integrated, to the organization, manner. One of the tools created to do that is the balanced scorecard (Ghalayini & Noble, 1996).

2.2.4.1 PM IN THE CONSTRUCTION INDUSTRY

The construction industry's core business is undertaking projects in generating new dams, buildings or roads, & maintaining existing ones for a variety of clients. Therefore, it is not a surprise to find that traditionally performance measurement in construction is approached in two ways: In relation to the product as a facility and In relation to the creation of the product. In particular, the latter of the two has been the prime performance assessment (in terms of success or failure) of construction projects. Others also describe how & when assessing the success or failure of construction projects "a common approach is to evaluate performance on the extent to which client objectives like cost, time and quality were achieved". Indeed, those are seen as the 'three traditional indicators of performance' used in the UK construction industry (Mohsini & Davidson, 1992).

Although the 'three measures' provide an indication as to the success or failure of a project they do not, in isolation, provide a balanced view of the project's performance. Furthermore, their implementation in construction projects is usually apparent at the end of the project, and therefore they can be classified as 'lagging' rather than 'leading' indicators of performance. Ward et al, also suggest that "Looking back on the conduct of a project, what sticks in the mind is often not so much financial success or early completion, but memories of other people involved and abiding impressions of harmony, goodwill and trust or, conversely, of arguments, distrust and conflict. The client's willingness to pursue a given procurement route to achieve a future project is likely to be strongly influenced by these factors" (Ward et al,1991).

Therefore, it is clear to see that the traditional measures of the performance of construction projects are not enough to assess their 'true' performance. It can be argued that the methods used to measure performance in construction projects fall into the three main categories of the BSC:
Financial Perspective: how do the project's financial stakeholders view the project? For example cash flow forecasting and cost benefit analysis.
The Internal Business Process Perspective – how are we performing in our key process activities? For example critical path analysis
The Customer Perspective – how do our existing and potential customers see us? For example quality assurance

However, during the 1990s there has been some interest in 'emerging' techniques and philosophies such as TQM, benchmarking, BPR and business process management that have shifted the focus from 'lagging' towards 'leading' indicators of performance. The majority of those concepts have been imported to construction from the manufacturing industry. Furthermore, these measures have tended to concentrate on construction productivity and those factors that influence it, with the aim being to achieve continuous improvement. Therefore, the fourth perspective of the BSC was also introduced in the 'organizational learning.' This however can be problematic since the participants of construction projects are 'joined' temporarily until the completion of the project where the aim is to achieve consistency of application by the integration of 'traditional' and 'matured' practices (Motwani et al, 1995).

The (Sinclair & Zairi, 1995b) suggested that the first level of a performance measurement system model is the development of the organizational strategy. Indeed the importance of strategy in performance management has been identified by a number of authors. The development of strategy for an organization is one of the most fundamental management activities that provide a vision of where the organization wants to be in the short and long term future. It is inevitable therefore, that any performance management system will need to have strategy as the main input, so that any results coming out of the system could be used to evaluate the extent to which the organization has met its strategic goals(Neely et al, 1997).

The Process refers to a process as "any activity or group of activities that takes an input, adds value to it and provides output to an internal or external customer. Processes use an organization's resources to provide definitive results." Therefore, a performance process framework will take strategy as an input deploy the strategy so that it can derive a number of measures which are effectively activities; add value to the strategy by examining its validity and implementation; and deliver the performance results to the organization or its shareholders and customers. This is in essence the approach followed by the balanced score card (BSC) through Performance Management and Measurement the deployment of strategy to a number of goals and the development of measures to measure the effectiveness of those goals.

However, as described the above paragraph the construction industry is involved with undertaking projects, utilizing the involvement of usually a complex supply chain. These two additions to the BSC ensure that the prime function of construction companies can be considered in detail and that the 'internal' customers to the projects i.e. the suppliers are considered as an integral part of the project. This is illustrated widely in the area of supply chain management and provides a framework for selecting appropriate supply chain performance measures. (Harrington, 1991; & Michail Kagioglou, 2001)

2.2.5 REWARD AND COMPENSATION CONTROLS

Reward and compensation controls intended to stimulate and increase the performance of individuals and groups within organizations by linking rewards to the achievement of objectives. It has been said that the reward and compensation controls are of help in controlling the direction of staff effort (individuals focus on the tasks), and duration of effort (how long individuals can devote themselves to the task), and the intensity of effort (the amount of attention individuals devote to the task) Rewards and incentives are clearly important, but organizations also need to set boundaries when deciding the rewards. The more the culture and rewards drive ambition and goal-seeking behavior, the more the need for a system of boundaries and constraints (Berglund & Rapp, 2010, Bonner & Sprinkle, 2002; & Malmi & Brown, 2008 ;).

2.2.5.1 PURPOSE OF REWARD SYSTEMS

Reward systems are a major motivational tool to secure the participation of individuals to achieve organizational goals. It is a common notion that only the employees of an organization are entitled to rewards. Organizations however, also reward their stakeholders -customers, stockholders, creditors, and the public for their contribution. Reward systems are an important source of communication and feedback. They communicate what the firm values of an individual. Rewards create a sense of belonging which makes an individual feel more committed towards his work. Reward systems harmonize the interests of stakeholders and managers. (ICAFI, 2006)

2.2.5.2 COMPONENTS OF INCENTIVE & COMPENSATION PLANS

A manager's total compensation package is made up of three components: Salary, benefits and incentives. Salaries are usually paid every month. Employees progress through a clearly defined

career hierarchy based on factors such as age, qualifications, experience and performance. Factors which affect the administration of salaries in various organizations are included that:- Remuneration in comparable industries, firm's ability to pay, cost of living, productivity, union pressure and strategies and government legislation.

Salary administration must follow a systematic approach to ensure that employees are paid in a logical, equitable and fair manner. The objectives of salary administration are: To acquire qualified and competent personnel, to retain present employees, to reinforce desired behavior-good performance, loyalty, willingness to take additional responsibilities etc. and to pay the employees in accordance with their efforts and merit.

Benefits help employees to deal with certain contingencies and meet certain social obligations. They satisfy an employee's economic, social and psychological needs. Benefits include safety measures, health benefits, pension, perquisites etc. In short, benefits lessen the economic problems of the employee. The objectives of providing benefits are: To boost employee morale, to improve the quality of the work environment and work life, to motivate employees by identifying and satisfying their needs, to create a sense of belonging among employees and retain them, and to protect the health of employees and to ensure their safety.

It is the duty of the senior management to devise the best incentive plan possible for its employees. Incentive plans should be approved by the board of directors before they are implemented. Corporate by-laws and security regulators also make it mandatory for all organization's to get their incentive plans approved by their shareholders. Incentive compensation plans can be classified as:

(a) Short-term incentive plans;- Short-term incentive plans are usually based on the performance of employees in the current year, while long-term incentive plans relate compensation to long-term accomplishments. A manager can earn a bonus under both the plans. In short- term incentive plans, bonus is paid in cash while in long term incentive plans, the employees are provided with an option of buying the company's common stock.

(b) Long-term incentive plans:-Long-term incentive plans are designed to reward the performance of an employee over a longer period. The types and characteristics of long-term incentive plans have become increasingly complex over the past several years. Organizations

today design and implement plans that are responsive to the needs of both the enterprise as well as their employees. The different types of long-term incentive plans are:-Stock options, Stock appreciation rights, Phantom stock plans & Performance shares (ICAFI, 2006).

2.3 EMPIRICAL EVIDENCE

This section deals with the empirical framework supported by different researchers regarding the management control system. It is composed of the practical application, methods adopted and findings of MCS, strategic issue, budgeting system, cost accounting and service pricing, decision making, performance measurement, and rewards and compensation.

2.3.1 MANAGEMENT CONTROL SYSTEM

According to Auzair and Langfield-Smith (2005) using quantitative method helps to study the impact of service process type, business strategy and life cycle stage on MCSs. The scholars scope their efforts by investigating service organizations. Dimensions of MCSs under investigation are action versus result control, formal versus informal control, tight versus lose control, restricted versus flexible control, impersonal versus interpersonal control, mass versus professional depicts the dimension of service process type. Dimensions of strategy are depicted by low or high emphasis on cost leadership strategy and a low or high emphasis on differentiation strategy. The dimension of life cycle stage is envisioned by growth versus mature stage. A high emphasize on a cost leadership strategy and a mature strategy is hypothesized to individually lead to forms of bureaucratic management control.

High emphasis on a differentiation strategy and a professional service process type are expected to lead to forms of non-bureaucratic management control. The hypotheses are based on the assumption that a certain strategy is always linked to management controls with a fixed set of characteristics. The argument is furthermore grounded in the notion that not all companies apply management controls to strategy have highest performance (Channell and Langfield-Smith 1998). The results provide support for three conclusions: (1) with regard to the service process type results indicate that mass service organizations apply more bureaucratic management controls than professional service organizations, (2) cost leaders apply more bureaucratic management controls than differentiators, and (3) for the life cycle stage the results indicate that

organizations in the mature stage of their life cycle apply more bureaucratic management controls than organizations in the growth stage of their life cycle.

2.3.2 STRATEGIC PLANNING AND MANAGEMENT

According to Doan (2008) using qualitative methods study, the company called Electra results from the merger in 2001 of four competitors which were established in the 1920s. According to the results from interviewees (Holding management controller, Electra's director, and Tertiary director), the main strategic issue at that time was to conquer the market. The volume strategy was dominant, while the profit was nearly ignored. Moreover, both for motivation and for commercial reasons, the choice had been made to keep the historic brand names of the different companies, often considered as their precious goodwill.

According to Metkaet.al (2006), the role of strategy is dynamic, involving managers in continually assessing the way combinations of environmental conditions, technologies and structures enhance performance. MCS has the potential to aid managers in this process by assisting them in formulating a strategy related to markets and products, required technologies and appropriate structures. This study' basic conclusion is that MCS influence the implementation and monitoring of strategies, providing feedback for learning and information to be used interactively to formulate strategy further. Few studies in MCS have investigated these issues (Simons, 1995, 2000), rather, most have been restricted to identifying MCS that are appropriate for different strategic models (Chenhall 2003). Therefore, the findings of the paper fill this void. This study upgrades the existing theory in that it not just establishes a relationship between contextual (in our case strategy) and MCS variables, but also considers how this relationship impacts organizational performance. The research shows that the combination of performance-driven behavior and regular use of MCS leads to improved results.

Directions for future research stem from the paper's findings as well as from missed opportunities that indicate opportunities for future research. It would be worthwhile to conduct a longitudinal study on a wider sample of companies to study how and why they change their strategic orientation and the use of MCS and how this has impacted their decision-making, actions and performance management. This study can combine case-study as well as survey

methods. The advantage of the present study is that it provides an impetus for future researchers to address these issues and to move beyond existing models of control and begin to always explore the different roles served by accounting in the management of change.
According to Joni (2009) using mixed methods study of several findings emerge from the study. First, the control packages of the business units were found to be virtually akin to each other but, however, equally functional in the face of different contingencies. Second, the packages seemed to rely more on informal and "organic" controls as opposed to formal and "mechanistic" controls. Third, whilst cultural controls were argued to provide a contextual frame for other controls, reward and compensation controls were asserted to remain relatively separate from other package elements. Planning, cybernetic, and administrative controls, on the other hand, appeared to be tightly linked in practice. Finally, the business units" MCSs packages were argued to be of assistance in fostering organizational ambidexterity.

According to Sinikka (2007), using mixed methods of study for achieving the objective of MCS in small business context found that strategic-oriented information relating to long-run planning, monitoring of external environment, more sophisticated cost accounting as well as capital budgeting practices (i.e. capital investment calculations and analyses, long-run budgets, market surveys and analyses, scenarios and forecasts relating to strategies, innovations and environment, ABC (Activity based costing), target costing, customer costing, life-cycle costing) are not so commonly adopted, even though over 50% of firms state that they are involved somehow in that kind of planning and analyses. These kinds of lower adoption rates are also in line with the findings of Laitinen (2001a) on the adoption and use of sophisticated costing techniques in technology firms.

While there are numerous business strategies, Langfield-Smith (2007) suggests that there are only two primary business strategies: firstly, business strategy A (harvest, cost leadership and defender) and secondly business strategy B (build, differentiation and prospector). Business strategy research aims to identify the MCSs that fit (or match) these two business strategies (or at least one component of each business strategy).These findings highlight two relationships between business strategy and MCSs. The reliability of these findings is questionable because the studies used to compile these findings were based on qualitative and quantitative research

methods, carried out in different time periods and conducted in different countries. As a result, Otley (1999) advocate that studies should examine organizations holistically that are simultaneously examine the three aspects of business strategy, multiple MCSs categories, and performance.

According to the findings of Fredrik Nilsson (2002) shows that the classification of the business strategy of the acquired companies just before the acquisition and after it indicates, there were differences, though relatively minor, in the overall average scores of the four business units. However, both interview and the archival data showed significant differences in the business strategies of the four firms. In view of the differences in the quantitative and qualitative data, additional interviews were conducted to gain a better understanding of the empirical manifestations of the variable under study. The additional interviews showed tended to underestimate the differences between the firms with a differentiation strategy and those with a cost-leadership strategy.

2.3.3 BUDGETING SYSTEM

Abernethy and Brownell (1999) study the moderating role of style of budget use on the relation between strategic change and performance. The intensive role of accounting practices during strategic organizational changes is explored. Based on the recognition accounting as a vehicle for interaction and learning ,the researchers hypothesize a reduction of disruptive performance effects caused by organizational changes of budgeting is used interactively. The theoretical assumption is that when people interact by discussing budgets, they create a shared vision which in turn can improve performance. Survey data is obtained from 63 Australian hospitals. In order to support the hypothesis, analysis should show that organizations with a greater emphasis on interactive use of budgets perform better. The construct of strategic change is operationalized using the definitions of strategy introduced by Miles and Snow (1978). Styles of budget use are classified according to Simons (2000) budget system use classification. Multiple dimensions of all three constructs are measured.

The analysis reveals that style of budget use in a moderating factor of the relation between strategic change and performance. This leads to the conclusion that the relation between strategic

change and performance is more positive when the style of budget use is interactive compared to when it is diagnostic.

According to the scholar Hartmann (2000) using quantitative study method the result of budget that there is positive relations between emphasis (on pressure of managers) and managers` budgetary performance whereas Hopwood (2002) using similar method that is quantitative argued that too much budget emphasis would not only cause disagreement and conflict, but would also be ineffective. In fact, although a number of debates on the impacts of top managers" involvement on organization performance have been initiated a long time ago, the results are often contradictory (Bassoon et al. 2004).

2.3.4 PERFORMANCE MEASUREMENT

The researcher, Saroj (2006), using quantitative method study with descriptive statistics by taking a variable Performance Measurement found that all commercial banks in Nepal by comparing actual performance with predetermined target of their branches showed that 65.4 percent respondents feel their actual performance is compared with predetermined target and remaining do not know whether their actual performance is compared with standard or not. The managers of different commercial banks still desire to evaluate the performance of their banks and branches on the basis of net profit margin. After net profit margin they tend to support ROE, ROI, EVA and others (including the degree of Non-performing assets/NPA) respectively.

Malina and Selto (2004) describe a case study using qualitative and quantitative approaches at a large U.S. equipment manufacturer, focusing on efforts of the organization to model drivers for performance of its distribution system. To this end a framework of performance measurement attributes, based on prior research is created. Eight desirable attributes of performance measures are identified; diverse and complementary, objective and accurate, informative, more beneficial than costly, causally related, strategic communication devices, incentives for improvement, and supportive of improved decisions(Malina and Selto 2004).

The study is structured around four research questions, addressing the role of measure attributes and their relations to management control and strategy. Empirical data for qualitative analysis is

collected through interviewees, company documents and performance data. Company documents serve as data for quantitative analysis. Results of the study indicate that adoption of performance measures depends on the organizations strategic orientation, as it influences the importance of individual attributes. The study reveals that the organization adopting a conservative strategy only abandon a performance measure that fits the strategy when it has an abundant amount of negative attributes.

The findings of Saroj (2006) using quantitative methods of study through descriptive statistics explored that the degree of competition in Nepalese commercial banking sector is very high. The majority (76.9 percent) managers of the branches of the commercial banks of Nepal feel intense competition. The commercial banks of Nepal are competing mainly on service followed by the cost and other factors respectively.

2.3.5 COMPENSATION AND REWARDS

According to the findings of Saroj (2006) by applying quantitative methods of study shows that the compensation and rewards such as salary/benefit/promotion given to Nepalese commercial banking sector, is mostly determined by performance followed by education, experience, relationship, and other factors respectively. Regarding additional benefit for better performance (performance higher than the standard), 53.8 percent responded they get additional benefit for better performance. Seventeen percent respondents say they don't get any additional benefit for better performance and 28.2 percent did not provide any comment on this dimension.

Majority of commercial banks are providing bonus to their employees out of profit. The amount of bonus is based on the amount of salary the employees are getting. It indicates that the bonus is not based on the outstanding performance of an employee or a group of employees. Side by side the bank encourages employees to learn new skills. As per the researcher, at present all commercial banks are encouraging their employees to discharge better performance and enhance educational qualification and attain trainings. It is supported by the response provided by managers and employees of such commercial banks .The majority of employees (77.3 percent) working in Nepalese commercial banks responded that they generally get leave/deputation

sanctioned from their bank to attain training related to their job. It also supports that the commercial banks are encouraging employees to learn new skill and knowledge.

From the finding of Doan (2007) by using qualitative methods of study and purposive sampling technique, the result of compensation systems were purely objective- and formula based. The delegation directors and profit center managers had an annual bonus equally based on their annual sales and margins. A bonus was given when the performance was above 100 percent of the targets and maximum when 120 percent of the targets were achieved. The targets were based on those inscribed in the annual budget.

2.4 KNOWLEDGE GAPS

The internal management system in construction industry of Ethiopia is inebriated from traditional management system of government. The traditional management theory could not completely fit the operational environment in construction business in Ethiopia. In this context, this paper attempts to find some hints from the well-developed theory to get some new ideas.

The accounting literature emphasizes the role of MCS as an organizational mechanism that supports strategic change (Simons 1995), but empirical studies have not addressed the way in which management uses the MCS to engage in strategic change directly. A reason for this lack of evidence is that studies on the MCS-strategy relationship have typically modeled strategy as a determinant of management accounting system, rather than as consequence of the management accounting system (Naranjo-Gil & Hartmann 2006). However, Luft and Shields (2003) point out that management accounting is not easily classified as only a dependent or only an independent variable – it tends to be implicated in a more complex way in the unfolding of events as both cause and effect of changes.

So far various researchers tried to examine on this particular topic. However, there is a gap in the literature due to the absence of studies, specifically in the Ethiopian context, of the application of MCS. In order to fill the identified gap knowledge concerning the application of MCS in general, and in particular concerning study of major management control component not studied yet together with the specified topic, the researcher ties to undertake the study to replicate

knowledge by using mixed methods of study which the previous researcher Saroj 2006 only considers qualitative method and provide additional information by considering of the missed components MCS not studied together with the topic by the previous researcher so as to increase the level of understanding about the application of MCS here in Ethiopia by focusing on construction industry.

The researcher will focus on the assessment of management control practices in Ethiopian construction industry specifically in Ethiopian Construction Works Corporation.

CHAPTER THREE

DESCRIPTION OF THE STUDY & RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

The research methodology has fundamental role for guiding the entire research process. This chapter covers the research approach and research design with the justification of selecting and deselecting specific methods. In this paper the descriptive research design is used as the researcher is interested to assess the management control practice of ECWC. The descriptive research which is aimed at assessing the case on management control system environment based on the research questions and directly handled by the quantitative research approach and best for this type of research. Research methods enlighten to a systematic approach for data collection, which can be considered as ways or tools to solve or answer a particular research problems or questions. They play several roles such as: "logic or ways of reasoning to arrive at solutions; rules for communication, which explain how the findings have been achieved; rules of inter subjectivity, by which outsiders have the opportunity to examine and evaluate research findings". Research Method bespeaks to the collection of data through analysis, historical reviews, experiments, observations and case study for the purpose to solve research problem. In addition, they can be elaborated as a systematic, orderly, and focused ways of data collection for the objective of obtaining information from them to answer a particular research question or problem (Ghuari & Gronhuag, 2005).

3.2 SAMPLE SELECTION

This paper is assessing the application of management control system in ECWC. Currently ECWC hold a total of 5,129 permanent and 8,473 temporary workers who are working in its construction and maintenance projects in the territory of Ethiopia. Among the total number of employees about 1,219 are professionals, 718 semiprofessionals, 4,347 are technically skilled staff and 7,318 are non-skilled employees. The corporation currently has 10 road maintenance projects 6 construction dams and 8 road construction projects in the whole territory of the country.

There are several approaches to determine the sample size. These include using a census for small populations, imitating a sample size of similar studies, using published tables and applying

formulas to calculate a sample size. Even if there are a large numbers of employees at maintenance and construction projects in the corporation, the researcher focused the sample on professionals as they are more aware about management control systems currently operating in the corporation. Using a simplified formula of (Yamane, 1967:886), 301 respondents in a survey study to give an acceptable degree of accuracy. In this research convenient sampling technique was used to obtain fairly and easily the required sample size of 301.The researcher did not go beyond this sample size because of the assumption that increasing the number of sample size more than the specified amount doesn't increase additional information rather it is duplication of information and leads unmanageable. Furthermore, for determination of the above sample size the researcher is restricted by time and money.

Using a simplified formula of (Yamane, 1967:886):-

$$n = \frac{N}{1 + N(e)2} \qquad n = \frac{1{,}219}{1 + 1{,}219\ (0.05)2} \qquad n = 301 \text{ respondents}$$

Where;- n= required respondents

N= sample size

e2= error limit

3.3 SOURCES OF DATA

- To obtain facts/evidence the application of MCS, the researcher used both primary and secondary data sources for the study. Primary data was collected from the study area through personal observation and questionnaire. The researcher designed the questionnaires by using different literatures as a source to get the quantitative data from sampled respondents. More specifically the questionnaires in this research are extracted from Sinikka Jänkälä 2007. Those extracted questions can help the researcher to assess how the corporation is implementing the management control systems and what its practices. Questionnaires were distributed to the employees and managers selected in a sample. Questionnaires are close ended and distribute to the selected sample so as to collect information in relation to the specific mechanisms to collect about the application of MCS. Moreover, to triangulate the application of management control system in the Corporation interview was conducted.

3.4 DATA ANALYSIS

The researcher had examined the collected data in order to find and construct, themes and patterns that can be used to describe and explain the phenomenon being studied.

The researcher used a descriptive statistics analysis for the presentation, interpretation and discussion parts on various dimensions of the evaluation system such as mean, frequency tables, charts, graphs, figures and percentages as appropriate to analyze, interpret, tabulate and present the result of the study. The data gathered through questionnaires was coded, entered into computer and analyzed and presented in the form of charts, diagrams, and tables by using SPSS Statics version 20. The results of the interview questions were integrated to the responses of union members through questionnaires and were analyzed accordingly.

To rate the results of the analysis, the researcher uses different decision rules used by different authors. According to Best, (1977) the score from 1-1.80 is lowest, from 1.81-2.61 is lower, from 2.62-3.41 is average/moderate, from 3.42-4.21 is good/high, and 4.22-5 is considered very good. Besides, the decision rules used in the analysis was average mean less than 3 was considered as low, average mean equal to 3 was considered as medium and average mean greater than 3 was considered as high throughout the study (Best and khan 1995).

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

The preceding chapter presented some principles of research methodology and the adopted research method for the study along with its rationale. This chapter discusses the analysis of data collected from various sources related with the application of MCS in ECWC. The data were presented and analyzed about the background of the respondents and major components of management control system and its applications.

To achieve this objective a total of 301 questionnaires were distributed, of these 269 are collected. The collected questionnaires are carefully checked, and those with excessive missing data were discarded, resulting in 258 usable and properly responded. The response rate is 85.55 percent. Such a response rate is considered sufficient for statistical reliability and generalization (Gerrard & Cunningham, 2001). This relatively good response rate was attributed to the self-administered and mailed approach undertaken in distributing questionnaires.

To analyze the collected data, the investigator first used descriptive statistics to make sure about the practice of Strategic Planning & programming, Budgeting System, performance & Rewarding and Compensation Control.

4.1 PROFILE OF RESPONDENTS.

A summary of findings on respondents profile along four variables: gender, age, educational background and work experience has been presented in table 4.1. An analysis of the profile of the respondents indicates that195 (75.58%) are males and 63 (24.42%) are females. The educational background of the respondents show that majority are bachelor degree 206(80%) and master's degree and above 52(20%).

The profiles of the respondents show that majority are males. This implies that females are few in number in the organization in contrast to males. Moreover, the age, educational background, and work experience of the respondents show that the majority are youngsters in their age, bachelors in their educational background, and have few years of work experience as they are mostly youngsters.

Table 4.1 Summary of respondent's profile

Variable	Categories	Frequenc	Percent	Valid Percent	Cumulative Percent
Gender	Male	195	75.58	75.58	75.58
	Female	63	24.42	24.42	100.0
	Total	**258**	**100.00**	**100.0**	
Age	18-25Years	21	8.10	8.1	8.10
	26-35years	159	61.60	61.60	69.70
	36-45Years	42	16.30	16.30	86.0
	Above 45years	36	14.00	14.0	**100.0**
	Total	**258**	**100.00**	**100.0**	
Education Background	Master and Above	52	20.00	20.00	20.00
	Bachelor Degree	206	80.00	80.00	**100.00**
	Total	**258**	**100.00**	**100.0**	
Work Experience	Less than 5Years	72	27.90	27.90	27.90
	5-10 Years	89	34.50	34.50	62.40
	11-15Years	30	11.60	11.60	74.00
	16-20years	15	5.80	5.80	79.80
	More than 20 years	52	20.20	20.20	**100.00**
	Total	**258**	**100.00**	**100.0**	

Source: Survey 2017 by the researcher

4.2 QUESTIONS RELATED TO MCS

This section just deals with the following basic elements of MCS such as; strategic planning and programming, budgeting system, performance measurement, rewarding and compensation control practice of Ethiopian Construction Works Corporation.

4.2.1 STRATEGIC PLANNING AND PROGRAM ANALYSIS

Table 4.2 Strategic Planning & Programming

Criteria	Total Respondents	Minimum	Maximum	Sum	Mean	Rank
Benchmarking reports and analysis (for example, comparisons to a respective top-firm for learning purposes)	258	1.00	5.00	636.00	2.47	8
Competitor analysis and forecasts (competitors entering, leaving, tactics/strategies)	258	1.00	5.00	685.00	2.66	5
Customer analysis (ERA satisfaction, etc.)	258	1.00	5.00	760.00	2.95	3
Reports and analysis of innovation and development	258	1.00	5.00	647.00	2.51	7
Analysis and scenarios for alternative strategies	258	1.00	5.00	668.00	2.59	6
Shareholder value analysis	258	1.00	5.00	521.00	2.02	10
Differentiation strategy (such as different in providing service , unique service)	258	1.00	5.00	779.00	3.02	2
Cost leadership strategy (such as low cost service, efficiency)	258	1.00	5.00	782.00	3.03	1
Technological (e.g. R&D advances, process innovations)	258	1.00	5.00	619	2.40	9
Community (e.g. public image, community involvement)	258	1.00	5.00	703.00	2.72	4
Valid N (list wise)	258	1.00	5.00			

Source: Survey 2017 by the researcher

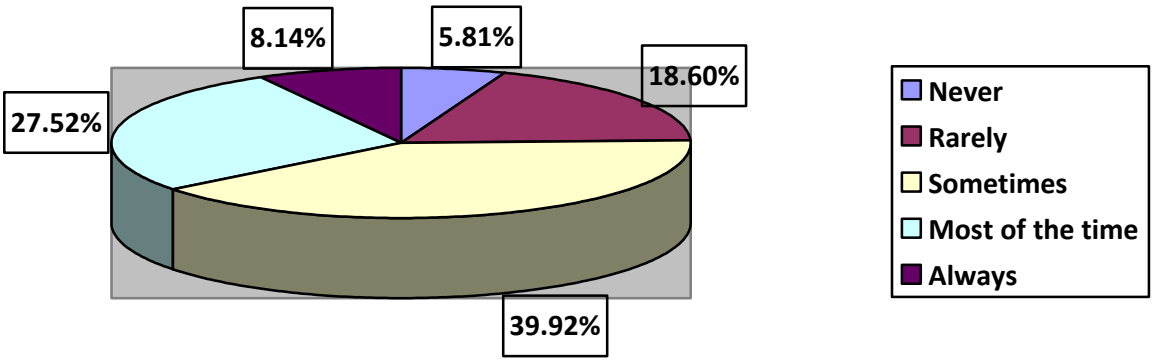
According to the respondents shown in the above table, the overall practice of strategic planning and programming in the corporation was not satisfactory i.e. it has a mean score value of 2.64. Moreover, with regard to the specificity nature of vision statement of the corporation, 245 (94.96%) respondents replied that the vision of the corporation is specific that

guides employees to say 'no' for business opportunities. Only 13 (5.03%) respondents replied no on the specificity of the vision of the corporation. It has a mean score value of 2.72.

The result found here shows that the corporation is not focusing in designing the strategic plan rather focuses on its day to day operation. This implies that the corporation is not well organizing in designing and applying strategic planning and programming, that is one important component of management control system. The reason for this is lack of experience and knowledge of planning department experts and managers in designing and implementing strategy. As a result the Corporation may face difficulties in attaining its objectives and compete in this turbulent business environment. In order to implement a good strategy, the Corporation needs to conduct various analyses thoroughly such as technology, shareholder, benchmarking, innovation & development, and alternative strategy. Moreover, the strategic plan of the Corporation needs to be backed with relevant data in the case of competitors, community, customer, alternative strategies, cost leadership, differentiation, benchmarks, innovation & development, technology and shareholders.

4.2.2 BUDGETING SYSTEM

Figure 1:- Budget follow ups, & Variance analysis



Source: Survey 2017 by the researcher

The budget is being used more and more like a tool for better control, in line with the development towards goal orientation, and this change will likely continue. What will probably remain constant though is the fact in ECWC that the budget is updated once a year, primarily because the projects needs to put so much time and effort into creating their budget. As displayed from the above figure, the Corporation are follow up their budget and make analysis to know how much departure results from the expected one so as to know the usage portion and additional requirements. It has a mean score value of 3.14.

Table 4.3 Budgeting System

Criteria	Total Respondents	Minimum	Maximum	Sum	Mean	Rank
Monthly or Quarterly budget for cash flow	258	1.00	5.00	842	3.26	3
Budget for the firm's capital structure(equity and liabilities)	258	1.00	5.00	793	3.07	4
Budget targets require costs to be managed carefully in my business unit (reverse coded);	258	1.00	5.00	886	3.43	1
Control over my business is achieved by the corporate parent principally by monitoring how well my budget is on target.	258	1.00	5.00	876	3.40	2
Over all mean	**258**				**3.29**	

According to the response of the respondents the overall budgeting system of the Corporation has a mean score value of 3.26. This implies that the Corporation is in a good position in utilizing resources effectively and efficiently.

4.2.3 PERFORMANCE MEASUREMENT

The construction industry has mainly aimed to measure its performance in financial terms at the project level. In the informal interview with project managers the researcher understood that, measuring performance in traditional terms such as profit or turn over can give misleading signals for the future strategies.

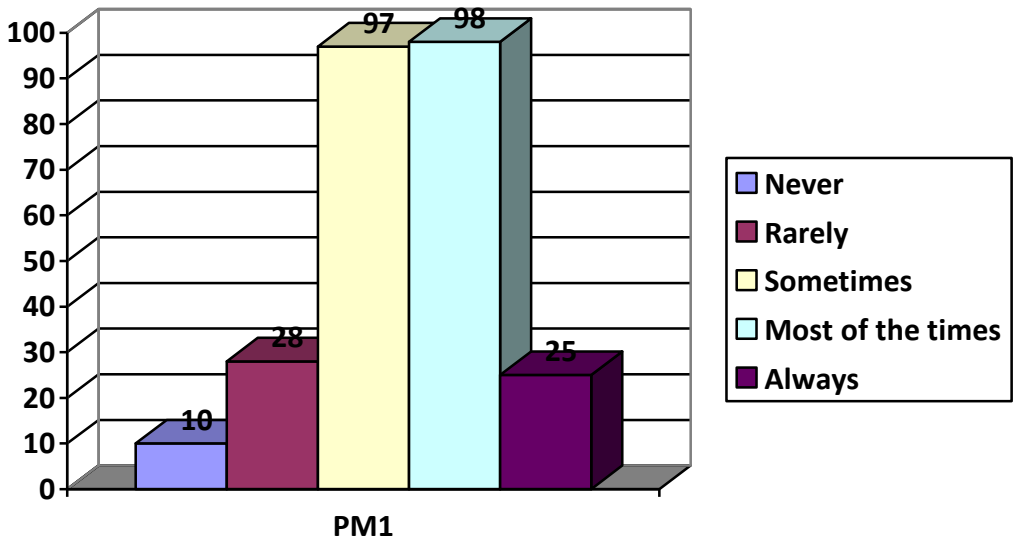
Table 4.4 Evaluation is by comparing actual performance with predetermined target.

Criteria	Frequency	Percent	Valid Percent	Cumulative Percent
Never	12	4.65	4.65	4.65
Rarely	36	13.95	13.95	18.60
Sometimes	96	37.21	37.21	55.81
Most of the Time	98	37.98	37.98	93.80
Always	16	6.20	6.20	100.0
Total	258	100.0	100.0	

Source: Survey 2017 by the researcher

As shown in the above table, with regard to the comparison of actual performance versus predetermined target has a mean score value of 3.27 which indicates that the Corporation is frequently practicing it.

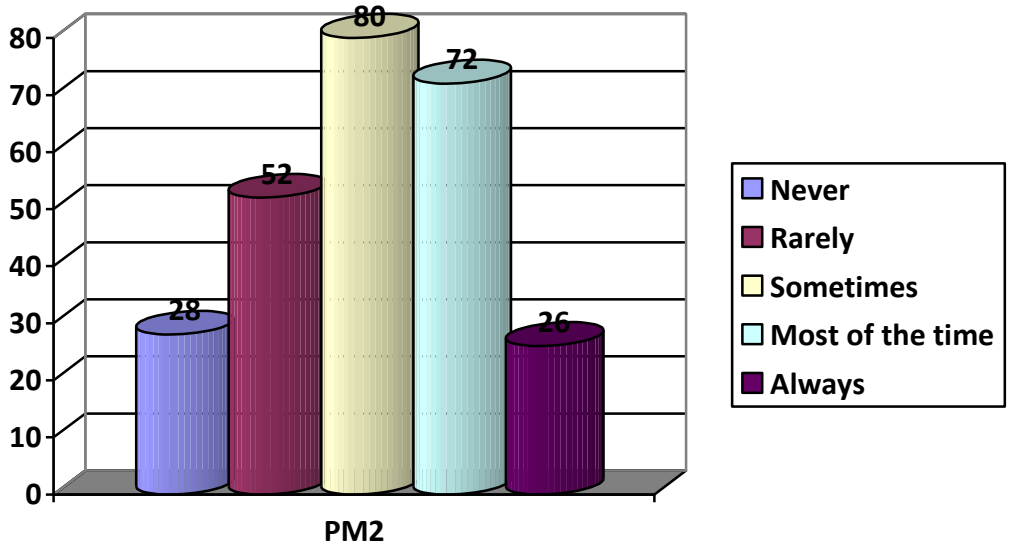
Figure 2: Financial measures



Source: Survey 2017 by the researcher

The figure above displayed how frequently the corporation uses the financial measures. In connection with this issue, 98 (37.98%) of the respondents agreed that the corporation uses 'Most of the Time'. Whereas, some 97 (37.60%) of the respondents agreed that the corporation uses ' Sometimes', 28 (10.85%) of the respondents agreed that the corporation uses 'rarely' & 25 (6.69%) of the respondents agreed that the corporation uses 'Always' and 10 (3.88%) respondents consider does not use financial measures. Coming to the individual level, 220 (85.27%) of the respondents feel that their financial measures at the range of greater than or equal to `Sometimes` and the remaining marked 'Never', and `rarely` for the practice of financial measures in measuring the corporation performance measurement. It has a mean score value of 3.39.

Figure 3: Non-Financial measures



Source: Survey 2017 by the researcher

The figure above displayed how frequently the corporation uses the non- financial measures. In connection with this issue, 80 (31.01%) of the respondents agreed that the corporation uses ' Sometimes'. Whereas, some 72 (27.91%) of the respondents agreed that the corporation uses 'Most of the Time', 52 (20.16%) of the respondents agreed that the corporation uses ‘Rarely’ & 26 (10.08%) of the respondents agreed that the corporation uses 'Always' and 28 (10.85%) respondents consider does not use nonfinancial measures. Coming to the individual level, the respondents agreed that their nonfinancial measures at the range of greater than or equal to `Sometimes` and the remaining marked 'Never', and `rarely` for the practice of nonfinancial measures in measuring the corporation performance measurement. It has a mean score value of 3.06.

Table 4.5 Performance Evaluation Criteria in ECWC						
Criteria	**Total Respondents**	**Minimum**	**Maximum**	**Sum**	**Mean**	**Rank**
Net profit margin	258	1.00	5.00	836.00	3.24	1
Economic Value Added	258	1.00	5.00	807.00	3.13	2
Return on Equity	258	1.00	5.00	556.00	2.16	3
Return on Investment	258	1.00	5.00	553.00	2.14	4
Valid N (list wise)	258					

Source: Survey 2017 by the researcher

The table above displayed how frequently the corporation uses the financial performance evaluation criteria. In connection with this issue, 208 (80.62%), 198 (76.74%), 88 (34.11%), and 84 (32.56%) of the respondents agreed that the corporation uses net profit margin, EVA, ROE, and ROI as financial performance evaluation criteria at the range of greater than or equal to `Sometimes` and the remaining marked 'Never', and `rarely`. It has a mean score value of 2.67

Based on the response of the respondents, the performance measurements implemented in the corporation were found at satisfactory level as it has a mean score value of 3.09. This does not imply that both the financial and nonfinancial position of the Corporation is satisfactory, resources like time and money are wasted, and failure to set standards that the corporation needs to focus on it. Without performance data to back up the financial and nonfinancial measures, there is no way to determine the profitability and success of the Corporation.

4.2.4 REWARDING & COMPENSATION CONTROL

According to (Malmi & Brown, 2008) Reward and compensation controls intended to stimulate and increase the performance of individuals and groups within organizations by linking rewards to the achievement of objectives. It has been said that the reward and compensation controls are of help full in controlling the direction of staff effort (individuals focus on the tasks), and duration of effort (how long individuals can devote themselves to the task), and the intensity of effort (the amount of attention individuals devote to the task). Employees in any organization work for reward, and most important reward is money, but individuals expect more than wages or salary from their employers. In ECWC, there is a policy in order to share profit when the firm's profitability is more than 60% of the planned ones. The whole respondent agreed that

there are no profit sharing systems for managers or subordinates today, but there will be within a years.

Table 4.6 Rewarding and compensation control

Criteria	Total Respondents	Minimum	Maximum	Sum	Mean	Rank
Financial rewards related with performance	258	1.00	5.00	932	3.61	4
Financial rewards	258	1.00	5.00	1012	3.92	2
Nonfinancial rewards	258	1.00	5.00	632	2.45	5
Performance-pay contracts are customized for each employees	258	1.00	5.00	939	3.64	3
The corporation uses predetermined criteria in evaluation and rewarding	258	1.00	5.00	1015	3.93	1
Over all mean	**258**				**3.51**	

The overall application of management control system in the corporation was satisfactory in the case of rewarding and compensating employees which account a mean score value of 3.09.This leads to conclude that the Corporation creates high job satisfaction, enhance productivity and low turnover upon employees. The reason for this is that the Corporation is using some financial rewards and also some nonfinancial reward systems.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATION

In the previous chapters, the researcher discussed the research problem and its approach of the application of management control in the literature part of this paper. In this chapter, the researcher focused on the practice of management control system in Ethiopian Construction Works Corporation. This information is collected from 258 respondents who are professional employees and managers at head office of the Corporation. Now conclusions and recommendations of the study are presented hereunder.

4.1 SUMMARY OF MAJOR FINDINGS

Examining the application of management control systems can be based on the strategic planning, budgeting, performance measurement and rewarding. Based on this premises, the findings of the research are summarized as follows:

The overall application of management control systems, which comprised the above issues of management control systems, in ECWC has a mean score of 3.02 which indicated the application of management control system is satisfactory.

In the first category of management control systems, strategic planning, most of the items have shown an average response, but interestingly (cost leadership strategy), with a mean score of 3.03 has shown a satisfactory state of application in the Corporation. The overall use of strategic planning to apply management control system in the Corporation mean score counts 2.64, which reveals below average. However, the use of technology which can help to apply management control system in the Corporation is not satisfactory, which has a mean score value of 2.40.

The budgetary system in an organization has its own impact on the application of management control system. The overall budgetary system in the Corporation was found to score a value of 3.26 which indicated a satisfactory level of application. From the analysis, we can say that, budget practice in the Corporation has a mean score value of greater than 3.26 which is satisfactory.

With regard to the performance measurement, the Corporation has a mean score value of 3.09 which is satisfactory. However, in the case of applying the criteria of financial measures i.e. return on investment (ROI) and return on equity (ROE) 2.14 and 2.16 respectively, which is below average that the Corporation needs to focus on it.

The overall application of management control system in the case of rewarding and compensating employees in the corporation accounts a mean score value of 3.09, which is satisfactory. However, the application of profit sharing in the Corporation is null, though there is a policy of profit sharing. Moreover, the Corporation's application of nonfinancial rewards is not satisfactory as shown in the analysis it has a mean score value of 2.45 that the Corporation needs to focus on it.

5.2 CONCLUSIONS

On the basis of findings, the following conclusions were drawn.

The overall application of management control system by using strategic planning, budgeting, performance measurement and reward, in the corporation is encouraging. The existence of strategic planning, budgeting, performance measurements both financial and nonfinancial, and rewarding is vital mechanisms or components of management control systems in an organization.

The overall practice of strategic planning in the Corporation is not satisfactory. Therefore, the corporation needs to address the issues of technology that can ease all activities in the Corporation and helps to be competitive in this turbulent business environment.

The use of budgeting in exercising management control system in the Corporation is satisfactory. The application of budgeting systems in an organization is vital in managing cash flows and variances which are helpful in control.

With regard to the performance measurement, the Corporation is good on it. However, the Corporation has a deficiency in using the evaluation criteria i.e. return on investment and return on equity which can measure the financial position of the Corporation.

With regards to reward and compensation, the Corporation is good on it. However, the Corporation has a deficiency in using nonfinancial reward system that may motivate employees in a sense that they feel they are recognized by their employer or manager who gives them praise or recognition besides money and other financial rewards. Moreover, the Corporation needs to exercise profit sharing as a mechanism of motivation as it is in the policy of the Corporation.

The study found that the application of management control system in the Corporation was helpful to know the strategic position of it, budgetary systems used, performance measures used and rewards used for motivating employees.

The application of strategic planning, budgeting, performance measurement, and rewarding and compensation are vital tools of management control systems for the Corporation. However, the researcher feels that there still lies a scope for further improvement in exercising or applying the above mentioned mechanisms of management control system to maintain competitiveness in the business environment and motivate employees of the Corporation.

5.3 RECOMMENDATION

On the basis of the findings and conclusions drawn, the following recommendations were forwarded to tackle problems in the Corporation pertaining to the application of management control systems.

- Strategic planning and programming is a road map for any organization towards the achievement of its objectives. Therefore, organizations need to focus on the preparation and implementation of strategic plan. The result pertaining to the components of strategic planning and programming such as benchmarking, reports and analysis, shareholder value analysis and technology in this research shows that very low. So, in order to be effective in strategic planning and programming, the Corporation needs to focus on these components so that the overall effectiveness of strategic planning will be vital for the attainment of the corporation's goals.
- Budgets of all types are good planning tools and can also serve a very valuable control function. Creating the budget itself does not cause programs to be installed to implement the budget. Therefore developing a feedback loop is necessary to direct attention to areas where difficulties may be encountered. The feedback loop requires continuous measurement of performance to budget estimates. For feedback to work properly, it should be regular, expected, and consistently reported. Comparisons are most effective when they are done regularly, consistently, and timely. Trend analysis of budget performance is a good early warning device.
- The new performance measurement literature indicates, performance measurement system should in corporate any financial and nonfinancial measure that provides incremental information on managerial efforts. However, ECWC approach to performance measurement is supplementing extensive financial measure and less on non-financial measures. As it is

argued by different scholars, the non-financial measures are the real measure of performance and they are less exposed to data manipulation as financial measures. Therefore, ECWC should make a tradeoff of using between financial and non- financial measures and extend to the emerging widely recommended performance measurement system of balanced scored card which is not fully implemented in the corporation.

- The reward and compensation package do not necessarily mean rewarding in the monetary form. It also includes flexible benefits, medical care, work-life balance, as well as employee perks. However, in ECWC there is not satisfactory nonmonetary reward system that today's employees need more. Therefore, to be competent and effectively utilizing its human resources, the Corporation needs to strengthen the application of monetary reward system and stick to nonmonetary reward systems.

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Different Documents

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ST. MARY'S UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE
(Post graduate studies)

Dear Sir/ Madam

Completion of research Questionnaire

I am at present conducting research into the Application of Management control system in Ethiopian Construction Works Corporation, at the St. Mary's University, department of Accounting & Finance towards MSC in Accounting & Finance. The topic is "the Application of Management control system in ECWC". The objective of the following questionnaire is to obtain empirical data on the characteristics of the management control system application in your company.

I should appreciate if you would complete the attached questionnaire or direct it to the person in charge with this responsibility. Due to limited resources a fairly small sample was selected to receive this questionnaire, thus your response is very crucial to the success of the survey. All information will be treated in the highest confidence and the respondent's name (optional information) will not be revealed.

Thank you for your time and consideration!!!.

PART -1 - PERSONAL DATA

1- Gender: Male ☐ Female ☐

2- Age: 1) 18-25 ☐ 2) 26-35 ☐ 3) 36-45 ☐ 4) Above 45 ☐

3- Educational Background

1) Bachelor Degree ☐
2) Master & above ☐

4- Work Experience in ECWC 1) less than 5 Years ☐ 2) 5- 10 Years ☐
3) 11-15 Years ☐ 4) 16-20 Years ☐ 5) greater than 20 *Years* ☐

Part -2 - QUESTIONS RELATED TO THE TOPIC

USE OF MCS INFORMATION SUPPORTING BUSINESS MANAGEMENT

Next, there are listed reports of various MCS practices and techniques that can be used to support business management in several industries. Do you use these analyses or reports in your Corporation? If you do, how occasional (rarely – Most of the Time) is the use or is it systematic as a part of your normal routines? (Please, circle or "□" the most appropriate alternative for each Questions.

- **Source of most Questionnaires -** Sinikka Jänkälä 2007, `Management control systems (MCS) in the small business context`, Page -358

A- Strategic Planning & Programming

Please indicate to what extent the following statements describe the way of Strategic Planning & Programming in your corporation.	**Never** 1	**Rarely** 2	**Sometimes** 3	**Most of the Time** 4	**Always** 5
1. Benchmarking reports and analysis (for example, comparisons to a respective top-firm for learning purposes)					
2. Competitor analysis and forecasts (competitors entering, leaving, tactics/strategies)					
3. Customer analysis (ERA satisfaction, etc.)					
4. Reports and analysis of innovation and development					
5. Analysis and scenarios for alternative strategies					
6. Shareholder value analysis/EVA					
7. Differentiation Strategy (such as different in providing service , unique service)					
8. Cost Leadership strategy (such as low cost service, efficiency)					
9. Technological (e.g. R&D advances, process innovations)					
10. Community (e.g. public image, community involvement)					

11. Is the vision statement so specific that it guides employees to say 'no' for some business opportunities? Yes ☐ No ☐

B- BUDGETING SYSTEM

Please indicate to what extent the following statements describe the way of Budgeting system in your corporation.	**Never** 1	**Rarely** 2	**Sometimes** 3	**Most of the Time** 4	**Always** 5
12. Budget follow-ups, at least quarterly, and variance analysis					
13. Monthly or quarterly Budget for Cash flow					
14. Budget for the firm's capital structure(equity and					

liabilities)					
15. Budget targets require costs to be managed carefully in my business unit (reverse coded);					
16. Control over my business is achieved by the corporate parent principally by monitoring how well my budget is on target.					

C- PERFORMANCE MEASUREMENT

Please indicate to what extent the following statements describe the way of performance measurement in your corporation.	**Never** 1	**Rarely** 2	**Sometimes** 3	**Most of the Time** 4	**Always** 5
17. Is evaluated by comparing actual performance with predetermined target.					
18. Is evaluated based on financial measures					
19. Is evaluated based on non-financial measures					
20. Is evaluated on the basis of shareholder value analysis/Economic value added (EVA)					
21. Is evaluated on the basis of net profit margin					
22. Is evaluated on the basis of Return on investment (ROI)					
23. Is evaluated on the basis of Return on Equity(ROE)					
24. How is cost variance analysis (standard vs. actual)					

D- REWARD AND COMPENSATION CONTROLS.

Please indicate to what extent the following statements describe the way of evaluating and compensating subordinates' performance in your corporation.	**Never** 1	**Rarely** 2	**Sometimes** 3	**Most of the Time** 4	**Always** 5
25. Financial rewards are shared to employee & managements (e.g. profit sharing)					
26. Financial rewards increase as subordinate's performance exceeds targets					
27. Rewarding is financial (bonuses, share-based rewards)					
28. Rewarding is non-financial (e.g. recognition, promotion, training)					
29. Performance-pay contracts are customized for each employees					
30. The corporation uses predetermined criteria in evaluation and rewarding					

ANY OTHER COMMENT_____
_____
_____