PERFORMANCE MEASUREMENT SYSTEMS IMPLEMENTATION AMONG LARGE FOOD AND BEVERAGE PROCESSORS IN NAIROBI KENYA

BY

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DECLARATION

I Elizabeth Kalee Kalungu declare that this research Project is my original work and has not been presented to any university or institution for the award of any academic qualification.

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This research project has been submitted for examination with our approval as the University supervisors.

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DEDICATION

This research paper is dedicated to; my parents Dorcas and Lazarus Kalungu, my husband Makerious and our dear children George and Vina, my brothers and sisters and to our Susu for the encouragement and support they accorded during my studies.

ABSTRACT

Driven by increasing trend towards performance management, performance measurement is an important factor to drive firm performance. A study was conducted on Performance measurement systems implementation in large food and beverage processors in Nairobi county. The study had three objectives to achieve: To determine the performance measurement systems implementation in large food and beverage processors in Nairobi County; To establish the critical success factors in the implementation of performance measurement systems in large food and beverage processors in Nairobi County and to determine the relationship between Performance measurement systems implementation and firm performance in large food and beverage processors in Nairobi County. The researcher adopted a descriptive research design and census was used to collect primary data by use of questionnaires .The study targeted 46 large food and beverage processors in Nairobi County and 38 firms responded by filing the questionnaire. The data was analyzed and presented in tables and regression analysis was conducted to establish the relationship between performance measurement systems implementation and firm performance. The findings indicate large food and beverage processors in Nairobi County have implemented performance management and performance measurement systems and the critical success factors to drive firm performance. There is a positive correlation between implementation of performance measurement systems: Balanced Scorecard**,** Strategic Measurement Analysis and Reporting Technique system, Performance Measurement Matrix, Performance Prism, Business Excellence Model, Theory of Constraints Model**,** The Kanji Business Excellence Measurement System and increase in firm productivity levels.

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LIST OF ABREVIATIONS

PMS:	Performance Measurement System
SMART system:	Strategic Measurement Analysis and Reporting Technique system.
EFQM:	European Foundation for Quality Management.
EOQ:	European Organization for Quality
TOC:	Theory of Constraint
ROI:	Return on Investment
BSC:	Balanced score card
Pp :	Performance Prism
CSF:	Critical Success Factors
TQM:	Total Quality Management

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Performance management processes have become prominent in recent years as means of providing a more integrated and continuous approach to the management of performance than was provided by previous isolated and often inadequate merit rating or performance appraisal schemes. They are based on the principle of management by agreement or contract rather than management by command. It emphasizes development and initiation of self-managed learning plans as well as the integration of individual and corporate objectives (Armstrong, 1977). The real concept of performance management is associated with an approach to creating a shared vision of the purpose and aims of the organization, helping each employee understand and recognize their part in contributing to them and in so doing, manage and enhance the performance of both individuals and the organization (Fletcher, 1993).

At the heart of the performance management process is performance measurement system which enables the closed loop deployment and feedback system. It integrates all relevant information from the relevant systems and enables correct deployment of the strategic and tactical objectives of the business as well as providing a structured framework to allow the relevant information to feedback to the appropriate points to facilitate the decision and control processes (Bititci et al., 1997). For a long time many companies have been using financial measures to evaluate performance of commercial organizations. Johnson and Kaplan highlighted many of the deficiencies in the way in which management accounting information is used to manage businesses (Johnson, 1983;

Kaplan, 1984; Johnson and Kaplan, 1987). They highlighted the failure of financial performance measures to reflect changes in the competitive circumstances and strategies of modern organizations. The shortcomings of traditional measurement systems have triggered a performance measurement revolution (Eccles, 1991; Neely, 1999).

Business today faces a stark reality: anticipate, respond, and react to the growing demands of the market place, or perish. In a fiercely competitive environment, business strategy not only determines success, it governs business survival (Nah and Lau, 2002). Business Performance improvements arising from increased manufacturing integration continues to be one of the primary competitive issues of the 90's. Recent research in to manufacturing systems integration has identified the need for effective deployment of business objectives down through the organization and the subsequent measurement of performance in critical areas ,as key elements of sustainable competitive advantage (Bititci et al., 1997).

1.1.1 Implementation of Performance Measurement Systems

Performance measurement system is a set of metrics used to quantify both the efficiency and effectiveness of actions and is vital in the management of an organization. It does not only tell whether an organization is successful, but if properly used can help an organization implement their strategies (Kaplan and Norton, 1996). At the same time if the design and implementation of the PMS are not done with care, the PMS can lead to dysfunctional behavior and in the end could harm the entire organization (de Wall, 2003).

In an attempt to overcome criticism of traditional performance measures developed from costing and accounting systems, other performance measurement frameworks have been developed to encourage a more balanced view. Most of widely cited performance measurement systems include: Performance measurement matrix (Keegan et al., 1989), Theory of constraints (Goldratt,1990), the SMART system performance pyramid (Lynn and Cross , 1992), Balanced scorecard by Kaplan and Norton(1993), Performance prism (Neely et al,. 2001), Business excellence model (Kanji, 2002) and EFQM business excellence model (EFQM, 1999). According to Striteska and Spickova (2012) the most widely adopted PM systems are the Balanced Scorecard (Kaplan and Norton, 1996) and the EFQM Business Excellence Model (EFQM, 1999).

Critical success factors are the few things that must go well to ensure success for a manager or an organization and therefore they represent those managerial or enterprise areas that must be given special and continual attention to bring about high performance. CSFs include issues vital to an organization's current operating activities and its future success (Boynton and Zmud, 1984). CSFs are also important for evaluation of the appropriateness of performance measurement framework (Sureshchandar and Leisten, 2005). It's only by identifying and strengthening critical success factors can a firm achieve sustainable competitive advantage (Jay and Barry, 2008).

Critical success factors include; top management support (Anthony and Govindarajan, 2007) ,good performance measurement system design with ownership and clarity in setting of objectives ,achievable targets and perceived achievability of targets (Neely and

Bourne,2000; Otley,1991; Sartorius et al., 2006; Baron and Greenberg, 2000). , Performance measurement system implementation, information system infrastructure, availability of resources, time and effort, management of the firm with performance data and strong organizational culture (Andr'e A and Harold, 2008; Neely and Bourne, 2000 ;Timothy, 2011; Price, 2007). Other researchers have observed organizational culture and management styles have an impact on how performance measurement systems are implemented and used, thus affect its success or failure; and performance measurement systems can affect management styles and, to a certain extend organizational culture (Bititci et al., 2004).

Looking at the firm as a complex organism seeking to survive or thrive in its competitive environment, PMS systems serve as a key contributor to the perceptual and coordination or control capabilities of the firm. Firms use PMS to help monitor and control specific activities; to predict future internal and external states; to monitor state and behavior relative to its goals; to make decisions within needed time frames; and to alter firm's overall orientation and behavior (Kellen, 2003). PMS in a business are often designed to be a vehicle for strategic dialogue therefore performance metrics and scorecards scattered horizontally and vertically across a corporation, need to be coherent so that the conversations between people about the strategy is consistent and different measurement units contribute to the performance of the corporation overall (de Haas and Kleingeld, 1999).

1.1.2 Food and Beverage processors in Nairobi County

Food processing consists of multiple value chains beginning with agricultural production and reaching into domestic, regional, and global markets. Beverage or drink processing firms are concerned with products ranging from drinking bottled water, alcohol, non-alcoholic drinks, soft drinks (carbonated drinks) fruit or vegetable juices. In addition to fulfilling a basic need, drinks form part of the culture of the society. In published statistics food processing is grouped with beverages and tobacco, and the combined total in 2008 was Kshs 58.6 billion, or about 2.8% of GDP (Kenya, 2008)

Kenya Association of Manufacturers estimates that the food processing industries account for approximately 50% of manufacturing production turnover. Precise data on manufacture of food processing machinery is not readily available, but the larger category of 'equipment manufacture' accounted for Kshs 6.6 billion, or 4.4% of Kenya's manufacturing value added in 2005. Nairobi County consists of both local and international firms that are both engaged in the manufacturer and processing of foods and beverages. This has been a growing industry that has experienced a rapid growth from the early 80's until recently. The high competition has resulted in a flooded market with products from other countries taking up a large market share of Kenyan local market (Kenya, 2008). This research will therefore investigate large scale firms in the two related industries, food and beverage industries in Nairobi County.

1.2 Statement of Problem

Performance measurement is an important part of effectively managing organization and its work and when properly implemented measurement gives managers timely and accurate data for their many information driven duties. Business pressures are ever-increasing and organizations are now required to become even more effective and efficient, execute better on business strategy, and do more with less in order to remain competitive. This calls for businesses to manage performance, Mohrman and Mohrman (1995) said 'Managing performance is running the businesses'.

Food and beverage processing industry is very important in Kenya and has remained its agenda throughout. Recent policy documents, including the Economic recovery strategy for wealth and employment creation (Kenya, 2003) and the Kenya Vision 2030 (Kenya, 2008), have stressed the countries commitment to expand the industry as part of Kenya's overall development strategy. Vision 2030 stresses the importance of food processing in the manufacturing industry as the most important single sub-sector in terms of its contribution to GDP (28.7%) and its rate of employment provision is (34.5%) within the manufacturing sector. Kenya business climate has not been favorable in the recent past. According to World Economic Forum (WEF) (2010), Kenya was ranked 106th out of 139 countries included in the survey with a Global Competitiveness of 3.65 a decline from 2009 where Kenya had a GCI score of 3.7 to be ranked 98th which shows the Kenyan Business climate is becoming tougher.

Food and Beverage industries in Kenya are faced by a lot of competition both from local and imported products. For these firms to remain competitive they need to employ performance Measurement Systems. Last year a giant in beverage Industry Coca-Cola saw return of its main competitor Pepsi into Kenyan Market. This shows no firm is an exception to competition and according to Parsons (2011) forward thinking companies should implement innovative solutions that ensure processes deliver real results and improve performance.

Holloway (2001) observed that much of the research and development efforts have been on the development of particular models and frameworks for performance measurement, but little has been done to describing and analyzing problems with the application of these models and frameworks. The failure rate of PMS implementation and usage projects is said to be around 70 percent (Bourne, 2000) and both popular and scientific literature does not agree on the reasons for this high failure rate Bourne et al. (2002). In Kenya Njagi (2003) conducted a survey on the application of performance management principles in the Kenyan commercial banking industry. The study found performance management principles are practiced by all the Kenyan commercial banks to a fair extent. Nyokabi (2010) on her study factors influencing successful implementation of employee performance management systems a case of KPMG East Africa concluded that her findings were consistent with previous studies that suggest that the design, implementation and use of employee performance management system as well as the context in which performance management system is used influence the success and effectiveness of the system.

This paper addresses the omissions by earlier researchers to provide literature in Kenya on Performance measurement systems implementation in food and beverage processing firms. The research will focus on performance measurement systems implementation in large food and beverage processors in Nairobi County and is expected results should be able to be replicated in other similar firms throughout the country to enhance their performance. The study seeks to answer the following research questions: What are some of the performance measurement systems being implemented by large food and beverage processors in Nairobi County?, What are the critical success factors in the implementation of Performance measurement systems among large food and beverage processors in Nairobi County? And is there a relationship between successful implementation of Performance measurement system and firm performance among large food and beverage processors in Nairobi County?

1.3 Research Objective

The research will be guided by the following objectives,

i. To determine the performance measurement systems implementation in large food and beverage processors in Nairobi County.

ii. To establish the critical success factors in the implementation of performance measurement systems in large food and beverage processors in Nairobi County.

iii. To determine the relationship between Performance measurement systems and firm performance in large food and beverage processors in Nairobi County.

1.4 Significance of the Study

Upon completion of this study, the findings will be useful to the following;

It will guide the management of the food and beverage industries to have a deeper understanding of the critical success factors for successful implementation of performance measurement systems and how it leads to organizational success.

To Academicians, researchers and practitioners, it acts a point of departure for further investigation of critical success factors for a firm's success and as a reference point for other related studies.

Through this paper Government and regulating bodies will be guided on how well formulated policies and mechanisms will work best in the Kenyan economy and environment to promote firms growth and enhance achievement of Vision 2030 goals for the food and beverage industry in Kenya.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter reviews both theoretical and empirical literature. It has subsections on the ; concept of performance management and performance measurement, the different types of performance measurement systems, critical success factors in performance measurement systems implementation and performance measurement and firm performance. It also has a conceptual framework that was developed from theories to inform this study.

2.1 Performance Management

Extreme competition, combined with pressures make life for organizations tougher than ever before as many organizations have to respond by adopting performance management which is the task of most managers. This helps in actively monitoring organization performance levels with the aim of continuous success. Importantly, performance management is concerned with ensuring that the support and guidance people need to develop and improve are readily available.

Firms which have effectively adopted performance management systems are able to compete well (Armstrong, 2001). At the heart of the performance management process is performance measurement system which is an information system which enables the closed loop deployment and feedback system. It integrates all relevant information from the relevant systems and enables the correct deployment of strategic and tactical objectives of the business as well as providing a structured framework to allow the

relevant information feedback to the appropriate points to facilitate the decision and control processes Bititci et al. (1997).

2.2 Performance Measurement Systems

Performance Measurement Systems have been widely used in the marketing field. Measurement plays a vital role in organizations signaling to participants where effort is desired, and where it is not (Dixon et al. 1990; Merchant, 1985). Traditionally marketing performance measurement had been focused exclusively on the achievement of a limited number of key financial measures, based on the information provided by the accounting department, and derived from balance sheets and income statements (Crosby and Johnson 2001; Neely et al., 2000). Traditional performance measures, developed from costing and accounting systems, have been criticized for encouraging short terminism (Banks and Wheelwright, 1979; Hayes and Garvin, 1982), lacking strategic focus (Skinner, 1974), encouraging local optimization (Hall, 1983; Fry and Cox 1989), encouraging minimization of variance rather than continuous improvement (Johnson and Kaplan, 1987; Lynch and Cross, 1991) not being externally focused (Kaplan and Norton, 1992) and even for destroying the competitiveness of US manufacturing industry (Hayes and Abernathy, 1980).

The increasing complexity of the organizations, environment and markets in which firms operate induces a great challenge and the historic financial data is not enough to satisfy the Performance measurement in the new economy (Kernnerly and Neely, 2002). This is because financial reports are now less indicative of shareholder value. Cumby and

Conrod (2001) points out “sustainable shareholder value is instead driven by non-financial factors such as customer loyalty, employee satisfaction, internal processes and an organizations innovation.” There should be development of integrated systems that include different types of measurements –both financial and non-financial–and which at the same time consider the different dimensions have an impact on the market success of firms in the end markets (Waggoner et al., 1999; Yeniyurt, 2003).

Dissatisfaction expressed by several authors on Backward looking Accounting based performance measurement systems have led to development of “balanced” or “multi-dimensional” performance measurement frameworks. These frameworks placed emphasis on nonfinancial, external and future looking performance measures. They were then quickly followed by the development of management processes specifically designed to give practicing managers the tools to develop or redesign their performance measurement systems. The result has been the publication of alternative balanced performance measurement frameworks and suggested management processes for the design of performance measurement systems (Bourne et al., 2000).

2.2.1 Balanced Scorecard

Balanced scorecard was developed by Kaplan and Norton (1992) and it incorporates both financial measures that report the results of actions already taken and operational measures on customer satisfaction, internal processes and the improvement activities-operational measures that are drivers of the future performance. Unlike traditional systems the Balanced score card puts strategy, vision and communication in the center

rather than control. It also recognizes the weaknesses and vagueness of previous management approaches, and provides a clear description of what companies should measure in order to balance the financial perspective.

Many industries have reported the success of the balanced score card and success has also been reported within the public sector in the US (Hepworth, 1998). Although attention was drawn to the complexity of the system and the need for commitment towards accepting it for success of its application, many pitfall and problems were identified in practice (Kaplan and Norton, 1996),no failures of the concept were identified (Hepworth, 1998). The main weakness of the BSC is that it is primarily designed to provide senior managers with an overall view of performance; thus it is neither intended for nor applicable at the factory operation levels (Ghalayini et al., 1997). Organizations can use this model to clarify goals, define performance objectives and communicate selected strategies (Striteska and Spickova, 2012).

2.2.2 Strategic Measurement Analysis and Reporting Technique system (SMART system)

The strategic measurement analysis and reporting technique system was proposed by Cross and Lynch (1992) and its primary aim is to connect through organization's strategy with its operations by translating objectives from the top down (based on customer priorities) and measures from the bottom up (Tangen, 2004). The Performance Pyramid contains four levels of objectives that affect the organization's external effectiveness and simultaneously its internal efficiency. At the first level of

pyramid is defined an overall corporate vision, which is then divided into individual business unit objectives. At the second-level of pyramid are set short-term targets (e.g. of cash flow and profitability) and long-term goals of growth and market position (e.g. market, financial). The third level contains day to day operational measures (e.g. customer satisfaction, flexibility, productivity). Last level includes four key indicators of performance measures: quality, delivery, cycle time, waste.

The model shows recognition for the importance of the human resources in achieving company vision and integrates corporate objectives with operational performance indicators and also combines financial and non financial as well as operational and strategic indicators. It does not provide any mechanisms to identify key performance indicators nor does it explicitly integrate the concept of continuous improvement (Ghalayini et al., 1997). According to Striteska and Spickova (2012) organizations can use this model to clarify goals, define performance objectives and communicate selected strategies.

2.2.3 Performance Measurement Matrix

The performance measurement matrix was first-time presented in 1989 by Keegan et al. and is able to integrate different dimensions of performance, and employs generic terms such as internal, external, cost, and non-cost. The strength of this model lies in the way it seeks to integrate different classes of business performance, financial and non-financial, internal and external (Neely et al., 200). Fitzgerald et al. (1991) developed modified system of the performance measurement matrix called

Results and Determinant which tries to overcome the criticism of matrix that is not as well packaged as the balanced score card and does not explicit the links between the different dimensions of business performance, which is arguably one of the greatest strengths of Kaplan and Norton's balanced scorecard (Neely et al., 2000).

The performance measurement matrix from Fitzgerald is based on the key assumption that there are two basic types of performance measure in any organization, those that relate to results (competitiveness, financial performance), and those that focus on the determinants of the results (quality, flexibility, resource utilization and innovation). It highlights the fact that the results obtained are a function of past business performance with regard to specific determinants, i.e. results are lagging indicators, whereas determinants are leading indicators (Neely et al., 2000).

2.2.4 Performance Prism

Performance prism (pp) is one of the younger conceptual systems and is considered a second –generation PMS. It was developed by a team of experienced researchers and consultants in performance management area; Neely et al. (2001). It builds on the strength of existing measurement system on shareholder value and brings innovation based on three promises. First the organization should think of the wants and needs of all their key stakeholders as well as how to deliver value to each of them. Secondly the organizations have to harmonize and integrate strategies, processes and capabilities in order to deliver real value to its stakeholders. Thirdly, the relationship between organizations and their stakeholders is reciprocal-stakeholders expect the

fulfillment of their wants and needs on the other hand they have to contribute to organization (Wu, 2009). Therefore performance prism consists of five interrelated facets i.e. stakeholder satisfaction, strategies, processes, capabilities and stakeholder contributions.

Performance Prism is not a prescriptive measurement system and according to it measurement should not be derived from strategy: but instead ‘‘strategies should be put in place to ensure the wants and needs of the stakeholders are satisfied’’ (Neely et al., 2001). Though its recency, it has been tested in few cases (e.g. DHL, London youth, and the house of Fraser) and the feedback was overwhelmingly positive (Neely et al., 2001). Even though the model gives attention to process of finding the right strategies that performance measurement should be based on, it neglects issues of how performance measures are going to be realized, hence little concentration is given to the process of designing the system (Tangen, 2004). PP main purpose is to help organizations respond to changing priorities in the so-called “new economy” and builds on the strengths of previously developed performance measurement systems (namely BSC) and addresses their shortcomings.

2.2.5 Business Excellence Model

The Business Excellence model was generated in 1991 and introduced in the European Foundation for Quality Management (EFQM) with the support of EOQ, the European Organization for Quality and the European Commission. It’s a non-prescriptive system proposed to help organizations to access their progress to excellence and continuous

improvement. The core of the EFQM model is the Radar methodology which is cyclical and continuous and consists of five steps: determine required results, plan and develop approaches, deploy approaches, assess and review achieved results.

The model is a self-assessment tool, which enables a comprehensive, systematic and regular review of an organizations activities and results. It is currently used by thousands of organizations mainly throughout Europe such as, firms, health institutions, schools, public safety services and local government institutions among others. It provides organizations with common management terminology and tools, thus facilitating the sharing of best practices among organizations of different sectors (Ray, 2003) hence the model is more suitable for benchmarking in organizations (Striteska and Spickova, 2012).

2.2.6 Theory of Constraints Model

Theory of Constraints Model was first used in manufacturing environment and reported at an American production and inventory control society conference (APICS) in 1980. It has changed over the past 20 years from a production scheduling technique to systems methodology which is primarily concerned with managing change .Original goal of TOC was to set out, to devise a systematic approach to identifying what was preventing a company from achieving its goal of making money for its owners. It's helping set of tools guide the user to find answers to the basic questions relating to change, namely: what to change? What to change to? And how to cause the change?

Goldratt's TOC states that the overall organization is limited by its weakest link and if an organization wants to improve its performance, the first step must be to identify the systems weakest link or constraint. The TOC can be used also for performance measurement and it has "five steps of focusing" and are conducted in the following way (Goldratt, 1990): identify the systems constraints(s); decide how to exploit the systems constraint(s), subordinate everything else to the above decisions, elevate the systems constraint(s), and when the constraint is broken go back to the first step. The TOC tool contains three global performance measures, which are used for assessing a business organizations and ability to obtain the goal (i.e. making money) and the measures represent net profit, ROI and cash flow. TOC empowers managers by providing a consistent framework for diagnosing problems (Hrisak, 1995).

2.2.7 Kanji Business Excellence Measurement Systems (KBEMS)

This system was authored by Kanji and it consists of excellence model (KBEM) and Kanji business scorecard (KBS) and is based on critical success factors (CSFs), which correspond to the drivers of performance. KBEM is intended for the measurement of performance from the internal stakeholders' point of view, whereas the KBS evaluates performance from the external stakeholder' perspective. Afterwards the internal and external scores are incorporated to calculate the final organization performance excellence index (OPI) that provides an aggregate measure of the organizations excellence in managing all the CSFs (Kanji, 2002).

Kanji's Business excellence model (KBEM), based on Kanji's pyramid principles of TQM, links together the prime (Leadership) the four principles (Delight the customer, Management by fact, People Based Management and continuous improvement), and core concepts, to provide forces of excellence in an organization. The KBEM can be used to measure Business Excellence Index (BEI) in order to show how well different areas of the organization i.e. leadership, continuous improvement and other TQM principles, are performing. The way it's constructed allows for direct comparison across each area while at the same time is able to compare the same business in different geographical areas. The idea or principle of KBEM was widely accepted but the measurement system of KBEM has not gotten other researchers attention and has missed acceptance among practitioners and based on this, it's assumed that the measurement system of KBEM has some deficiencies and only studies conducted by Kanji utilized its measurement systems (Chen et al., 2012).

2.3 Implementation of Performance Measurement Systems

Significant research in auditing and implementing performance measurement systems in industrial organizations shows some of the implementations were successes and some were considered to be failures. These implementations were facilitated by the same people, using the same or similar approaches, tools and techniques that operate in the similar environmental conditions (Umit et al., 2002). According to de Wall and Counet (2008) the failure rate of PM implementations has decreased from 70 to 56 percent in the past decade. The reason for the reduction in failure rate might be the widespread use of PMS nowadays and the ever increasing number of publications (Hansen and Mouritsen,

2005; Rigby, 2005). Without proper research being performed on the problems organizations that are implementing a PMS will be confronted with the same problems over and over again, resulting in inefficiency, longer project lead-times and even cancelled and terminated systems.

Successfully used PMS is defined as a system that is used on a daily basis (de Waal, 2000) and helps in controlling and managing the organization (de Waal, 2002). Zairi (1994) states that at the heart of the problem of performance measurement lays the human element and Ashton (1997) quotes the American Productivity and Quality Center's International Bench-marking Clearinghouse: People issues appear to be "make or break" factors in success – deliberate, targeted and ongoing communication strategies are crucial, along with education and reinforcing a central question: how does individual effort relate and contribute to business strategy? Simons (2000) states that management control systems cannot be designed without taking into account human behavior and Holloway et al. (1995) remark that the successful implementation of PMS depends on understanding and accommodating the human element in management control.

2.4 Critical Success Factors in Implementation of Performance Measurement Systems

Recognizing that organizations, whether for-profit, governmental or non-profit, are complex entities, researchers often describe and analyze them as systems of interdependent core elements (resources, activities, and policies) (Porter, 1996; Rivkin, 2000; Siggelkow, 2002) that by complementing one another contribute to enhancing

and sustaining competitive advantages. Most quantitative studies have used a single element such as human capital (e.g., Hitt *et al.*, 2001) or leadership (e.g., Waldman *et al.*, 2001). Although such studies yield useful knowledge, it must be recognized that the organization's competitive position is derived from a complex combination of organizational elements. Generally speaking, it is not likely that a firm with a sustainable competitive advantage relies on a single element, important as it may be. For example, the competitive advantage of Wal-Mart (Stalk *et al.*, 1992), Southwest (Porter, 1996), and Vanguard (Siggelkow, 2002) cannot be explained by just one element; it is based on a successful integration of various strategic and non-strategic elements.

2.4.1 Strong Organizational Culture

A 'strong' corporate culture - facilitates goal alignment and engenders high level of employee motivation and 'is better able to learn from its past' (Brown, 1995). Cultures can be assessed, managed, constructed and manipulated in the pursuit of organizational effectiveness. Employee's norms, beliefs and values can (and when necessary should) be changed so that they can contribute the appropriate behavior, commit themselves to the organization, support management and strategy. Norms and values shared by members of the organization create consensus, induce unity and generate appropriate behavior. Cultures integrate the organization (Meek, 1988) and cultural norms dictate 'acceptable' standards of performance and the management methods through which they are assured (Price, 2007).

2.4.2 Management Commitment and Support

Management needs to put to put high priority on implementation of PMS for it to be a success. Time constraints and work pressures in the daily working environment cause management to be too busy solving short - term organizational problems, which delays or slows down PMS development and implementation. Management support is required as implementation of PMS takes a considerable period of time after which the organization has to start learning the new system which also takes time (André A and Harold, 2008).

2.4.3 Management Styles

Leadership is the fundamental driver of business excellence (Kanji, 2001) and leadership style in an organization is one of the factors that play significant role in enhancing or retarding the interest and commitment of the individuals in the organization. The extent to which members of an organization contribute in harnessing the resources of the organization equally depends on how well managers (leaders) of the organization understand and adopt appropriate leadership style in performing their roles as managers and leaders. Thus efficiency in resources mobilization, allocation and enhancement of organizational performance depends to a large extend on leadership style among other factors (Timothy, 2011). Effective leadership is a source of management development and sustained competitive advantage for organizational performance improvement (Avolio, 1999; Lado, Boyd and Wright, 1992; Rowe, 2001).

2.4.4 PMS Design and Implementation

Many managers make fundamental mistakes when deciding what to measure and these make implementation of the performance measurement system almost impossible. The key to designing a good measurement system is not to start with the question 'what should we measure?' but instead with the organization's success map which explicitly lays out the levers that managers can pull and the impact that pulling these levers will have on the business performance. Once success map is described it becomes possible to identify the right measures of performance, because clearly the appropriate measures will be those that relate to the levers that management of the organization deem most important to pull at that particular point in time. Though clearly and well defined performance measurement systems that are well communicated are important, their implementation is the ultimate goal. It is essential that the measurement system be introduced in a way which eliminates or reduces the opportunity for it to be used as a big stick (Neely and Bourne, 2000).

2.4.5 Information System Infrastructures

In cases most businesses data to calculate particular performance measures exists in one form or another and is spread throughout the entire organization. It's held in unrelated, unlinked databases and often in inconsistent formats. The senior management team may have been through a robust process and developed a set of measures that really reflects the organization's strategy, but then they are frustrated by the fact that it takes long to get access to the data they require. A good set of

measures may have been defined originally, but then if the infrastructure is never put in place, they can never be used (Neely and Bourne, 2000).

2.4.7 Time, Effort and Resource

It is important to understand that building a measurement system is more akin to a long march than a quick hike. A quick hike is rapid, things get done quickly, changes are seen rapidly, the whole process is over soon but the benefits usually don't last. Long marches can lead to permanent change, provided the march is completed. In long marches people get tired and weary. Senior executives have to recognize that this is a long, slow process and there is real need in the organization to boost energy levels regularly to ensure the process continues through to completion (Neely and Bourne, 2000).

2.4.8 Managing With Performance Data

PMS should be used for daily management of the organization for reviewing, analyzing and discussing the results achieved on CSFs and KPIs and corrective action should be taken to achieve the targets of the organization (de Waal and Counet, 2008). There are growing numbers of business that have put in place superb infrastructures to support their performance reporting systems but then the managers do not analyze the performance data. They are not aware of tools and techniques that are available to help them understand the messages inside the performance data. The whole process of measuring performance is completely wasted unless action is taken on the performance data that are produced (Neely and Bourne, 2000).

2.5 Firm Performance

Organizational or its work unit performance measurement is the link between decision and organization goals. Organizational performance or improvement in individual group cannot occur unless there is some way of getting performance feedback. This means what is to be improved can somehow be quantified and before something can be improved one should be able to measure it which is the process of quantification and its effect is, to stimulate positive action on the organization or its work unit performance. Fundamental purpose of every business enterprise is to consistently outperform the competition and deliver sustained, superior return to the owners while satisfying other stakeholders (Inman, 2005).

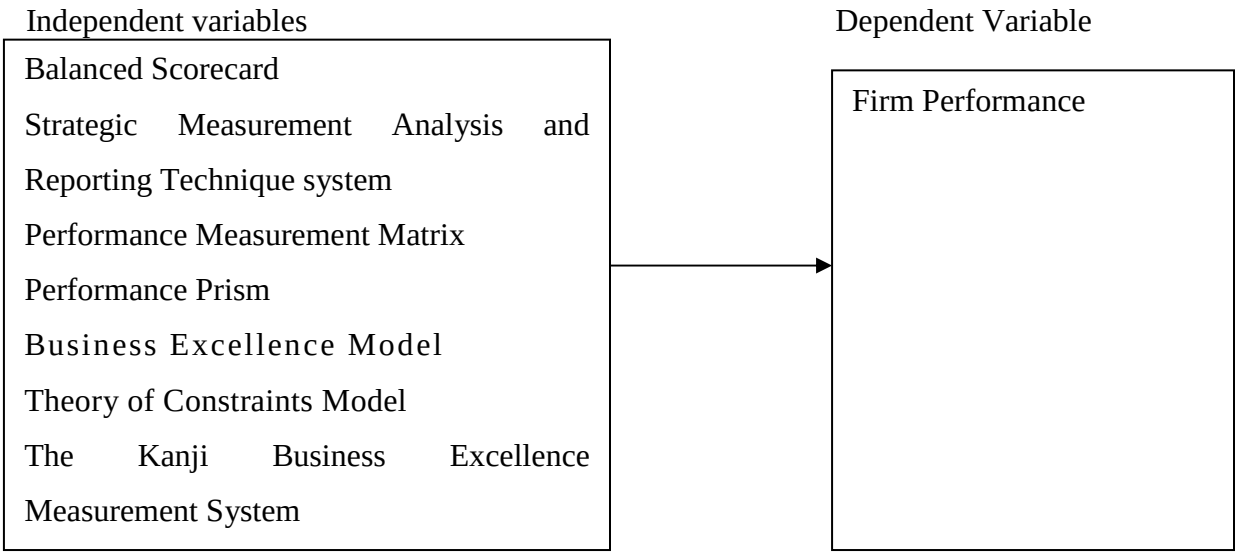
Measurement of how successful firms are achieving their purpose is a key issue for practitioners and researchers. Financial metrics are important to practitioners because they are primary way by which performance of firms and top leaders are evaluated and they inform decisions made about the firm by internal and external stakeholders (Verbeeten and Bonn, 2009). From a research perspective, financial metrics are important since they are extensively used as the criterion measure to evaluate the impact on firm performance on a diverse range of interventions, such as human resource practices or advanced manufacturing technologies. It's therefore of high concern to both practitioners and researchers that there is little consensus on how firm performance should be measured (Kenexa High Performance Institute).

Currently there is some agreement on measures of firm performance and Global competitiveness report (2012-2013) report communicates that productivity sets out the level of prosperity that can be earned by an economy .A focused group study while focusing on 'what to measure', identified that key measures largely comprised of traditional focused lagging indicators as follows: Revenue (sales); Profits and profitability; Cash-flow and market share. Productivity is commonly used measure because any change program would first show improvements in productivity before the results are seen in sales, profits or cash-flow. They concluded the most useful indicators for purposes of performance comparison in firms are growth in the following areas, profitability, value added productivity, cash flow, market share and customer satisfaction (Bititci et al., 2010).

2.6 Summary of the Literature

There are various Performance measurement systems used by different firms. The focus of this study is to evaluate which PMS are practiced by large food and beverage processors in Nairobi County. It's expected that firms which have adopted these PMS will show growth in value added productivity. In firms where these PM have not adopted they will show reduced growth in value added productivity. Firm performance is the dependent variable while performance measurement systems are the independent variables.

Fig 2.1 : Conceptual Framework (Researcher, 2013).



CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter discusses stages and phases that will be followed to complete the study. It involves blueprint for data collection, measurement and analysis of the data. The following subsections are included; research design, data sources and data collection instruments and techniques of analysis.

3.1 Research Design

The study used descriptive research design type of survey. A descriptive research design is concerned with determining the frequency with which something occurs or the relationship between variables (Bryman and Bell, 2003), while a survey is to question people and record their responses for analysis.

3.2 Population of the Study

The research targeted all large food and beverage processing firms in Nairobi County. They were 46 large food and beverage processing firms operating in Nairobi County during the time of the study (Kenya Business list, 2013).

3.3 Sample Design

This research sampled all the 46 large scale food and beverage processors in Nairobi County. This formed census form of sampling which is used when the entire population is sufficiently small and involves sampling every member in the population (Statpak, 2013). The respondents were management staff or their

assistants where they were not be present, shop floor staff and staff in human resource department.

3.4 Data Collection

This study used primary data collected by use of questionnaires .The questionnaires were closed and open ended to enable respondents express their views. Drop and pick later method was used to administer the questionnaires which were first piloted to enable assessment of the questions validity and reliability of the data being collected.

3.5 Data Analysis

The data collected was analyzed by calculating percentages and frequencies and findings presented in charts and tables. Regression analysis was also done to establish the relationship between performance measurement systems implementation and firm performance. Spss software was used to do the data analysis. The following regression equation was used: $P=a+b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5+b_6x_6+b_7x_7+e$, where P is increase in firm productivity in percent and X1= Balanced Scorecard; X2= Strategic Measurement Analysis and Reporting Technique system; X3=; Performance Measurement Matrix; X4= Performance Prism; X5= Business Excellence Model; X6= Theory of Constraints Model; X7= The Kanji Business Excellence Measurement System.

CHAPTER FOUR: FINDINGS AND DATA ANALYSIS

4.1 Introduction

This chapter presents the data analysis, findings and conclusions of the study. The data was collected from management, human resource and shop floor employees of large food and beverage processors in Nairobi County. Data was collected from a total of 38 firms out of the targeted 46 respondents. This translated to a response rate of 82.6% which the researcher considered sufficiently representative for this study.

4.2 General data of the firms surveyed

This section ought to classify the large food and beverage processors in Nairobi County according to the type of products they manufacture, and get feedback from employees on performance management and measurement systems of the firms they work for. The study findings are explained below.

Table 4.1: Classification of firms by their products

	Frequency	Percent	Valid Percent
Bottled Water	9	23.7	23.7
Carbonated Soft Drinks	3	7.9	7.9
Food	18	47.4	47.4
Herbs and Spices	4	10.5	10.5
Tobacco	2	5.3	5.3
Wine and Beer	2	5.3	5.3
Total	38	100.0	100.0

Table 4.1 represents data on how large food and beverage processors in Nairobi County are classified according to the type of products they produce. The results indicate 47.4% of the firms manufacture food, 23.7% bottled water, 10.5% herbs and spices, 7.9% carbonated soft drinks, and Tobacco, wine and beer have 5.3%. These findings are consistent with reports by Economic recovery strategy for wealth and employment creation in Kenya which indicate majority of firms in Nairobi County concentrate in food processing and is the most important subsector to enhance economic recovery and wealth generation (Kenya, 2003).

Table 4.2 Employee position in the Firm

	Position	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Management	21	55.3	55.3	55.3
	Non-Management	17	44.7	44.7	100.0
	Total	38	100.0	100.0	

Table 4.2 represents information on position of employees from large food and beverage processors in Nairobi County who participated in the study. Management staff had 55.3% participation level while non-management staff participation was 44.7%.The findings indicate the two classes of employees were fairly represented and the results of the study should be able to explain the opinions of these employees to performance management and performance measurement systems in their firms.

Table 4.3: Employee experience

Experience Level	Frequency	Percent	Valid Percent	Cumulative percent
<1 Year	11	28.9	28.9	28.9
1-5 Years	6	15.8	15.8	44.7
6-10Years	9	23.7	23.7	68.4
>10 Years	12	31.6	31.6	100

Findings on Table 4.3 represent the different levels of experience for the employees working in the sampled firms. The figures shows 31.6 percent of respondents had greater than 10 years working experience followed 28.9 percent of new employees with less than 1 year working experience , 23.7% had 6-10 years working experience and employees with 1-5 years experience participated least with 15.8%. The results indicate staff with different levels of experience participated in the survey. Performance measurement systems implementations in firms involve change programs in the way firms do their daily operations. This classification of employees is important especially when a firm is introducing performance measurement systems it expects different reactions from the different groups hence will be guided on the best tools to use to build a strong culture from all employees.

4.3 Implementation of Performance Management in the firms

In this section the researcher sought to determine if performance management was adopted in large food and beverage processors in Nairobi County. The respondents gave

their rating using Likert scale where 1= Very small Extent; 2= Small extent; 3=Moderately; 4=Great extent; 5=very great extent

Table 4.4: Performance Management Practices

Performance Management	N	Minimum	Maximum	Mean
It is prominent in the manufacturing sector	38	1	5	3.03
It is superior to performance appraisal techniques in the firm	38	1	5	2.82
It creates a shared vision of purpose in the firm	38	1	5	2.87
Enhances both the performance of individuals and organization in the firm	38	1	5	2.87
It is based on principle of management by agreement or contract rather than by command	38	1	5	2.74
Valid N (list wise)	38			

The findings tabulated above in table 4.4 are for aspects measuring for performance management practices in large food and beverage processors in Nairobi County. It's clear that on all aspects the firms agreed moderately with a mean score of approximately 3 to be practicing performance management. These firms have therefore embraced performance management to enhance their success. Performance management helps firms achieve their corporate goals by aligning individual and organizational objectives (Armstrong, 2006).

Table 4.5: Firms and Performance Measurement

	Frequency	Percent	Valid Percent	Cumulative Percent
Don't Measure	11	28.9	28.9	28.9
Do Measure	27	71.1	71.1	100.0
Total	38	100.0	100.0	

Table 4.5 represents findings in relation to if large food and beverage processors in Nairobi County measure their performance. Results show 71.1% of firms does measure their performance while the other 28.9% don't measure. Firms which measure performance are able to achieve higher productivity by focusing efforts of their employees to achieving the corporate objectives. Studies have shown leading organizations are using their measurement systems as a means of communicating to their employees what is important (Neely, 1999; Neely et al., 1994).

Table 4.6: There is Department for performance measurement in the Firm

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	25	65.8	65.8	65.8
	Yes	13	34.2	34.2	100.0
	Total	38	100.0	100.0	

Table 4.6 contains findings on whether the large food and beverage processors in Nairobi County have a department dedicated for performance measurement. The results shows in 65.8% of firms there is no department dedicated to performance measurement while in 34.2% there is a department which deals with performance measurement. This

implies that in majority of firms performance is not monitored from a central point but each department drives its own performance. Since departments are not identical in each organization its expected each will have its own performance measures but all will be directed towards meeting the overall corporate goal. While a department dedicated to performance measurement is a good thing to ensure focus research has shown what is most important is to ensure firms measures reflect their objectives and assesses their performance appropriately (Kennerley and Neely, 2000).

4.4 Performance Measurement Systems Implementation in the Firms

In this section the researcher sought to determine from respondents the extent to which different performance measurements are practiced in their firms. The respondents gave their rating using Likert scale where 1= Very small Extent; 2= Small extent; 3=Moderately; 4=Great extent; 5=very great extent

Table 4.7 : Performance Measurement Systems Implementation in the Firms Statistics

	Balanced score card	Strategic measurement Analysis and Reporting Technique	Performance measurement matrix	Performance prism	Business Excellence Model	Theory of constraints Model	Kanji Business Excellence Measurement system
N	38	38	38	38	38	38	38
Mean	2.71	2.89	2.97	2.97	3.00	3.08	3.18

A table 4.7 represents findings on the adoption of performance measurement systems by large food and beverage processors in Nairobi County. The results indicate all the

performance measurement systems are practiced by all firms moderately by achieving a mean score of approximately 3.0 on all systems. The firms have shown to be practicing all performance measurement systems simultaneously. Performance measurement systems play an important role in the efficient and effective management of organization and its important that these systems are dynamic and reflect issues of importance to the firm (Lynch and Cross, 1991).

Table 4.8: Performance Measurement Systems Implementation Success

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Average	8	21.1	21.1	21.1
	Successful	17	44.7	44.7	65.8
	Unsuccessful	8	21.1	21.1	86.8
	Very Successful	4	10.5	10.5	97.4
	Very unsuccessful	1	2.6	2.6	100.0
	Total	38	100.0	100.0	

Table 4.8 represents findings on the level of success in performance measurement systems implementation in large food and beverage processors in Nairobi County. The results shows in 55.2% of the firms the process have been successful, 21.1% are average while in 23.7% of the firms the process have been a failure. The results indicate that some firms are still struggling with process of performance measurement systems implementation and in firms where the process has completely failed their performance will be poor. These results are consistent with research on performance measurement

systems which shows most of them fail during implementation phase with the failure rate having decreased to 56% in the past decade (de Wall and Counet, 2008).

Table 4.9 Critical Success Factors

Critical success factors	N	Minimum	Maximum	Mean
Managers do analyze performance data	38	1	5	2.24
Management support performance process	38	1	5	2.55
Firm employees committed are committed	38	1	5	2.58
Top management leadership is good	38	1	5	2.61
Firm's subordinates are inspired	38	1	5	2.61
Managers are busy solving short term goals	38	1	5	2.68
Measurement not used to punish	38	1	5	2.71
Use of Performance systems data daily	38	1	5	2.74
Sharing of Norms and Values	38	1	5	2.79
Action is based on performance data	38	1	5	2.79
Access to complete performance data in the firm	38	1	5	2.89
Senior executives boost energy levels	38	1	5	2.92
Alignment of corporate culture with motivation	38	1	5	2.97
People tire during the process	38	1	5	3.00
Firm ability to learn from its past	38	1	5	3.16
Valid N (listwise)	38			

Table 4.9 represents data on how the large food and beverage processors in Nairobi County are employing the factors critical to Performance measurement systems implementation success. The results show that firms have been employing all the critical success factors to support performance measurement systems on average by achieving a mean score of approximately 3 on most factors apart from one aspect where the firm

managers don't analyze performance data and had least mean score of 2.24. Research have proved that a firm should practice all the critical success factors as the organization's competitive position is derived from complex combination of all the elements (Carmeli and Tishler, 2004).

Table 4.10: Motivation for Implementing Performance Measurement Systems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Drive firm performance	6	15.8	15.8	15.8
	Cost management	5	13.2	13.2	28.9
	Guide appraisal systems	12	31.6	31.6	60.5
	Career succession planning	5	13.2	13.2	73.7
	Integrate performance of all departments	7	18.4	18.4	92.1
	To punish Non-Management staff	3	7.9	7.9	100.0
	Total	38	100.0	100.0	

Table 4. 10 represents the findings on the reasons for implementing performance measurement systems by large food and beverage processors in Nairobi County. Most firms have implemented performance measurement to guide employee appraisal systems with the highest percent of 31.6.Those which have implemented performance measurement systems to drive their performance represents only 15.8% of respondents

while 7.9% of respondents are of the opinion performance measurement is used by management to punish non-management staff. Once employees feel that the measurement system the firm has is meant to frustrate them they develop a negative behavior towards the organization. Empirical studies provide evidence that a paternalistic culture, that does not punish people's errors, encourages discussion and analysis, can lead to a successful performance measurement systems implementation (Bourne et al. 2002; Franco and Bourne, 2003).

4.5 Firm Performance

Firm performance is measured by the ability of the firm business enterprise to consistently outperform the competition and deliver sustained, superior return to the owners while satisfying other stakeholders. The researcher here sought to gather data on how different firms have been performing as measured by growth in productivity levels. The firms were asked to give their average growth in productivity for the last 3 years as updated in their performance scorecards.

Table 4.11 Firm's Performance Rating

Growth in Productivity		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.43	1	2.6	2.6	2.6
	.46	2	5.3	5.3	7.9
	.49	3	7.9	7.9	15.8
	.51	3	7.9	7.9	23.7
	.54	6	15.8	15.8	39.5
	.57	6	15.8	15.8	55.3
	.60	9	23.7	23.7	78.9
	.63	1	2.6	2.6	81.6
	.66	1	2.6	2.6	84.2
	.69	3	7.9	7.9	92.1
	.74	1	2.6	2.6	94.7
	.77	1	2.6	2.6	97.4
	.80	1	2.6	2.6	100.0
	Total	38	100.0	100.0	

Table 4. 11 Represents the performance results for large food and beverage processors in Nairobi County averaged for the last 3 years as measured by growth in productivity levels. 6 out of 38 firms have a performance rating of below 50% while the other 32 have a performance rating of above 50%. Majority of firms are performing above average and the highest performing firm has a score of 80%. The results of this study show a steady and above average growth for this industry. This industry has been concluded to be growing at a fast rate by Kenya Economic Recovery Plans and Kenya Vision 2030 and these two programmes are focusing on this industry to grow Kenyan economy and create more employment.

Fig. 4.1 Graphical representation of performance for the different firms

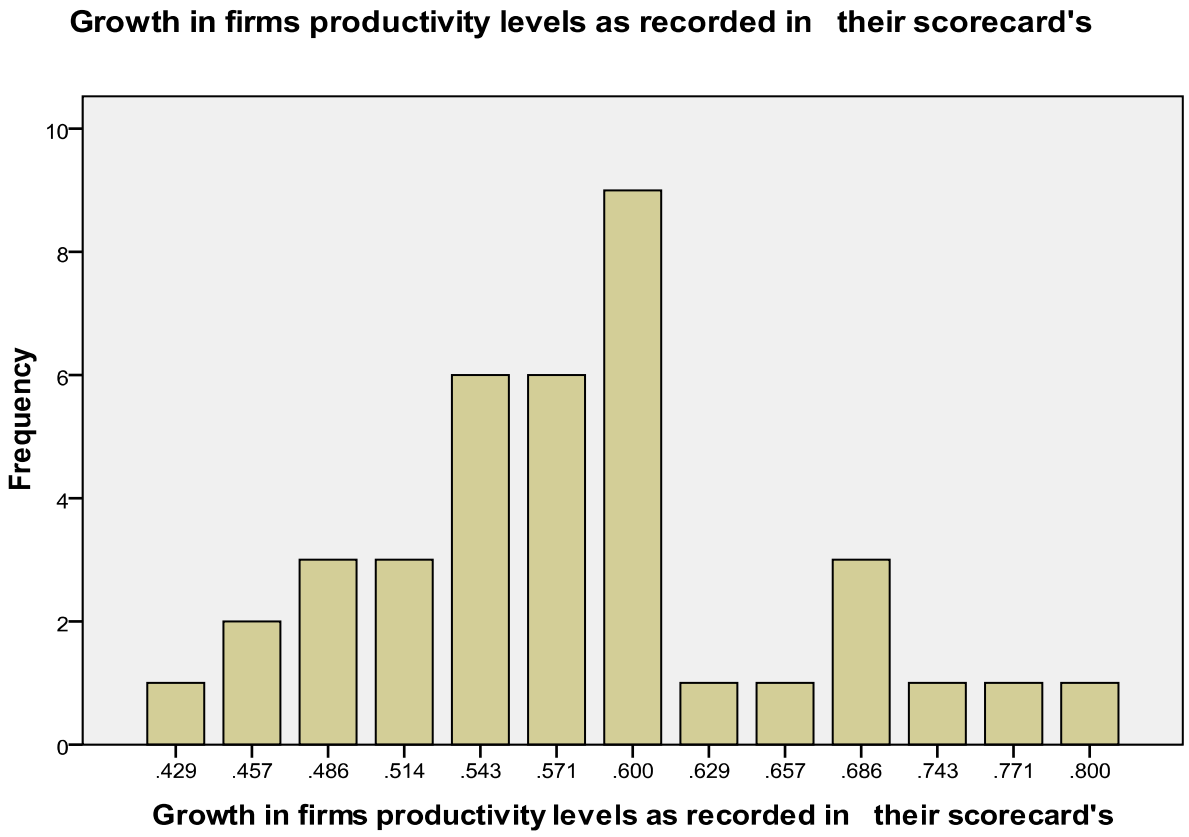


Figure 4.1 displays the performance of the different large food and beverage processors in Nairobi County as measured by their growth in productivity levels. Only 6 firms out of 38 firms have shown less than 50% growth in their productivity levels, the rest are operating at productivity growth of above 50% for a period of 3 years. This clearly shows there is positive growth in this industry as depicted by positive changes in productivity levels. Growth in firm's productivity level is a commonly used measure for firm performance because any change programme would first show improvements in productivity before the results are seen in sales, profits or cash –flow (Bititci et al., 2010).

4.6 Relationship Between Performance Measurement Systems Implementation and Firm Performance

In this section the study sought out to find out the effects of performance measurement systems implementation and changes in productivity levels of large food and beverage processors in Nairobi County. A regression analysis was conducted to establish the effects of different performance measurements implementation on firm performance. The averaged productivity rating for a span of 3 years given by the respondents was used as the dependent variable. The researcher adopted the following regression equation: $P=a+b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5+b_6x_6+b_7x_7+e$.

Table 4.12: Regression Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.583[a]	.34	.185	.0754	.34	2.204	7	30	.062

a. Predictors: (Constant), Balanced score card, Strategic measurement and Reporting technique, Performance measurement matrix, Performance prism, Business excellence model, Theory of constraints model, The kanji Business Excellence measurement system

b. Dependent Variable: Percentage increase in firm productivity.

Table 4.13 represents the results of regression model measuring the fitness of performance measurement systems implementation in leading to growth in firms productivity. The R square figure is 0.34 which means that 34 % variability in firm productivity levels can be explained by changes in the implementation of the seven independent variables Balanced score card, Strategic measurement and Reporting technique, Performance measurement matrix, Performance prism, Business excellence model, Theory of constraints model and the kanji Business Excellence measurement system. The remaining 66% variance on firm productivity changes can be explained by other factors not covered in this study.

Table 4.13 : Anova Table

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.088	7	.013	2.204	.062[a]
Residual	0.171	30	.006		
Total	0.258	37			

a. Predictors: (Constant), Predictors: (Constant), Balanced score card, Strategic measurement and Reporting technique, Performance measurement matrix, Performance prism, Business excellence model, Theory of constraints model, the kanji Business Excellence measurement system.

b. Dependent Variable: Growth in firms productivity levels as recorded in their scorecard's

Table 4.13 shows Anova for firm productivity and implementation of performance measurement systems. Since F-computed is 2.204 and F-critical is 2.33 the findings conclude that firm productivity is driven by implementation of performance measurement systems.

Table 4.14: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant	-.105	.233		-.450	.656	-.581	.371
Balanced Score Card	0.056	0.025	.366	2.242	0.033	.005	.107
Smart system	0.02	0.027	.12	.719	0.4478	-.036	.076
Performance measurement matrix	0.011	0.048	0.037	.224	.824	-.088	.110
Performance Prism	0.050	0.023	.371	2.207	0.035	.004	.097
Business Excellence Model	0.043	0.028	0.237	1.5642	0.133	-.014	.100
Theory of Constraints	.028	0.026	0.173	1.093	0.283	-.024	.081
Kanji Business Excellence Model	0.023	0.024	0.15	0.940	0.355	-.026	.071

a. Dependent Variable: Growth in firms productivity levels as recorded in the firms scorecard's.

Table 4.14 shows the values of independent variables that were considered in the study and their coefficients of determination. The constant is-.105 and it provides the level of firm productivity when the values of independent values are zero. There exists a positive relationship between firm productivity and implementation of performance measurement systems. The regression equation established from the results in Table 4.13 is

$Y = -0.105 + 0.056X_1 + .0.02X_2 + 0.011X_3 + 0.050X_4 + 0.043X_5 + 0.028X_6 + 0.022X_7$ .This equation shows there is a positive relationship between performance measurement systems implementation and increase in firm productivity. Balanced score card and performance prism are significant in driving firm productivity. While some measurement systems appear not significant the firms should check how they are implementing these systems because the systems in themselves don't fail it's the implementation phase which fails. Studies have shown that success of performance measurement is affected by multi- factors and if used properly can help an organization achieve its goals. At the same time if the design and implementation of performance measurement systems are not done with care it leads to dysfunctional behavior and in the end could harm the organization (Rompho and Boon- itt, 2012).

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings on the study on performance measurement systems implementation among Large Food and Beverage processors in Nairobi County. The chapter also presents the conclusions drawn from the findings**,** recommendations as well as areas suggested for further research.

5.2 Summary of Findings

The study established most large food and beverage processors in Nairobi county process products classified as food and the rest process bottled water, carbonated soft drinks, tobacco, herbs and spices, wine and beer. The study has found out that performance management, performance measurement systems and critical success factors have been adopted by large food and beverage processors in Nairobi County and employees from all levels and with different experience levels are aware of performance management and performance measurement systems in their firms.

The study also revealed that majority of large food and beverage processors in Nairobi County measure their performance, though only a few of them have departments dedicated to performance measurement. Majority of the firms have also successfully implemented performance measurement systems but in some the process has completely failed. These firms motive of introducing performance measurement is to enhance organizational performance, career succession planning, integrate performance of the

whole organization, cost management, employee appraisal systems but there is another category of employees who believe it was purely initiated to frustrate non- management staff.

It was evident from the findings that large food and beverage processors in Nairobi County have experienced above average growth in their productivity levels for the last 3 years. There is also a positive relationship between performance measurement systems implementation and increase in firm productivity. Although the performance measurement systems show a positive relation with firm performance, "its important to note the organizational context, performance measurement content and the process will all affect success of performance measurement system implementation success in driving firm performance," (Bourne et al; 2005) hence firms should consider all these factors.

5.3 Conclusions

Most large food and beverage processors in Nairobi County have adopted the process of performance management, performance measurement and the critical success factors which have contributed to growth in their productivity levels. There is organizational culture problem in some firms where shop floor employees indicated that performance measurement systems have been initiated to frustrate them. These deter performance improvement initiatives by weakening the organization culture.

5.4 Recommendations

The dependent variable shows a positive relationship with the independent variables which are performance measurement systems. The study indicates that positive change in firm productivity is driven by performance measurement systems implementation. Its therefore of importance for firms to manage implementation of these 7 performance measurement systems and the critical success factors to ensure their firms performance is optimized.

Large food and beverage processors in Nairobi County should not try to adopt basically all the performance measurement systems, they only need to borrow the guiding principles of performance measurement systems and then develop a tailor made measurement system which is best for the specific firm since it yields better results. Parker (2000) says measurement in itself consumes resources that is why firm's need to reduce on measurement systems and focus on where it will have real impact. The guidance given by model developed by this research should allow an organization to think about performance measurement in its own terms and within its own context. It should then be possible to design a performance measurement regime to support that specific organization in the pursuit of its own goals.

Large food and beverage processors in Nairobi County need to develop a department dedicated to performance measurement systems, this will help enhance focus in performance improvements. These firms also need to ensure all their employees support performance measurement systems implementations by creating a strong corporate

culture which facilitates goal alignment and engender high level of employee motivation and performance.

5.5 Study Limitations

This study was limited by some respondents who failed to respond, citing prohibiting company policies to provide information and others were unwilling to participate due to lack of time.

The researcher wished to have all questionnaires returned but some respondents failed and when the researcher made attempts to visit the firms to make follow up for the data there was still no response. While the study suffers from general problems associated with questionnaire based research, the researcher undertook efforts to minimize errors.

5.6 Suggestions For further Research

This study only concentrated in large food and beverage processors in Nairobi County. It's interesting to note majority of players in this field in Nairobi County are classified as small food and beverage processing firms and its worth to research on these to enable for creating insights.

There is need to conduct research on performance measurement systems implementations in all large food and beverage processing firms in Kenya .This will create more insights in this subject.

It's useful also to conduct a comparative research on performance measurement systems in both private and public firms to be able to come up with best practices.

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Appendix I: Questionnaire

Introduction

This questionnaire seeks to collect information on the critical success factors in Implementation of performance measurement systems in Food and beverage processing firms in Nairobi County. Kindly complete the questionnaire and give all relevant information that you may feel necessary for this study. Any information given will be used purely for this research and will be treated with utmost confidentiality.

SECTION A: GENERAL DATA

1. How would you best classify the products your Firm manufactures?

Food	( )	Bottled Water	( )
Carbonated Soft Drinks	( )	Herbs and Spices	( )
Tobacco	( )	Wine or Beer	( )

2. What is your Position in the Firm?

Management position	( )
Non-management position	( )

3. How long have you been working with the firm?

Less than 1 Year	( )
1-5 years	( )
6-10years	( )
Above 10 years	( )

2. To what extent do you agree with the following statements in relation to your firm value chain management practices? (Use the scale 1= Very small Extent; 2= Small extent; 3=Moderately; 4=Great extent; 5=very great extent)

Performance Management Factor	**Very small extent (1)**	**Small extent (2)**	**Moderately (3)**	**Great extent (4)**	**Very great extent (5)**
Performance management process are prominent in the manufacturing sector	(1)	(2)	(3)	(4)	(5)
Performance management is superior to performance appraisal techniques in the firm	(1)	(2)	(3)	(4)	(5)
Performance management creates a shared vision of purpose in the firm	(1)	(2)	(3)	(4)	(5)
Performance management enhances both the performance of individuals and organization in the firm	(1)	(2)	(3)	(4)	(5)
Performance management is based on principle of management by agreement or contract rather than management by command in the firm	(1)	(2)	(3)	(4)	(5)

SECTION B: PERFORMANCE MEASUREMENT SYSTEM IMPLEMENTED IN THE FIRM

1. Does your organization measure performance?

   Yes [ ] No [ ]

2. Is there a department dedicated to performance measurement within your Firm?

   Yes [ ] No [ ]

3. To what extent has your firm implemented the following performance measurement systems (Use the scale 1= Very small Extent; 2= Small extent; 3=Moderately; 4=Great extent; 5=very great extent)

Various Performance Measurement Systems Factor	**Very small extent (1)**	**Small extent (2)**	**Moderately (3)**	**Great extent (4)**	**Very great extent (5)**
The firm has integrated the four key perspectives in performance measurement: (Financial, customer, internal business processes and learning and growth) perspectives	(1)	(2)	(3)	(4)	(5)
The Firm has integrated corporate objectives with operational, financial and non-financial performance indicators but hasn't integrated the concept of continuous improvement	(1)	(2)	(3)	(4)	(5)
The firm has two types of performance measures, those that relate to results and those that focus on the determinants to results	(1)	(2)	(3)	(4)	(5)
The firm measurement system stipulates measurement shouldn't be derived from strategy but instead strategies should be put in place to ensure needs of all stakeholders are satisfied	(1)	(2)	(3)	(4)	(5)
The firm continuously accesses its progress to excellence and continuous improvement	(1)	(2)	(3)	(4)	(5)
The firm has systems which help identify its weakest links and also empowers its managers by providing a consistent framework for diagnosing problems	(1)	(2)	(3)	(4)	(5)
The firm is able to compare performance across each business area (critical success factors) and between business in different geographical areas to get direction where improvement efforts should be focused.	(1)	(2)	(3)	(4)	(5)

4. What was the motivation of implementing the above performance measurement systems in your firm?

……

……

SECTION C: Critical Success Factors in Performance Measurement Systems implementation

1. How would you rate the performance measurement systems implementation in your firm?

Very successful [ ]

Successful [ ]

Average [ ]

Unsuccessful [ ]

Very unsuccessful [ ]

2. To what extent have the following factors influenced the successful implementation of performance measurement systems in your firm? (Use the scale 1= Very small Extent; 2= Small extent; 3 =moderately; 4=Great extent; 5=very great extent)

Critical Success Factors In Performance Measurement Systems Implementation	**Very small extent (1)**	**Small extent (2)**	**Moderately (3)**	**Great extent (4)**	**Very great extent (5)**
Organizational culture Factor					
The ability of the firm to learn from its past	(1)	(2)	(3)	(4)	(5)
The alignment of corporate culture with employees motivation in the firm	(1)	(2)	(3)	(4)	(5)
Employee's commitment to the Firm	(1)	(2)	(3)	(4)	(5)
Shared Norms and Values by all members of the Firm	(1)	(2)	(3)	(4)	(5)

Management commitment and Support Factor					
Priority management puts on implementation of performance measurement systems in the firm	(1)	(2)	(3)	(4)	(5)
The firm Managers are busy solving short term organizational problems	(1)	(2)	(3)	(4)	(5)
The firm management gives support during the entire period of implementation	(1)	(2)	(3)	(4)	(5)
The firm is comfortable with the top management Leadership style	(1)	(2)	(3)	(4)	(5)
The firm has inspired subordinates to enhance efficiency	(1)	(2)	(3)	(4)	(5)
The firm Members are actively involved in harnessing its resources	(1)	(2)	(3)	(4)	(5)
Performance Measurement system Design Factor					
The firm uses Measurement systems to punish	(1)	(2)	(3)	(4)	(5)
The firm has designed an appropriate measurement system	(1)	(2)	(3)	(4)	(5)
Information System Infrastructure Factor					
Management have access to complete performance data in the firm	(1)	(2)	(3)	(4)	(5)
The firm has infrastructure to reduce time taken by management to access performance data	(1)	(2)	(3)	(4)	(5)
Time, Effort and Resources Factor					
In the firm People usually tire during performance measurement system	(1)	(2)	(3)	(4)	(5)

implementation					
In the firm Senior executives boosts energy levels to support performance measurement and implementation process	(1)	(2)	(3)	(4)	(5)
Managing with performance data Factor					
The firm makes use of Performance measurement systems data for daily management of its operations	(1)	(2)	(3)	(4)	(5)
Managers analyze performance data of the firm	(1)	(2)	(3)	(4)	(5)
The firm managers have tools and techniques available to help them understand messages inside the performance data	(1)	(2)	(3)	(4)	(5)
The firm always takes action based on performance data generated	(1)	(2)	(3)	(4)	(5)

SECTION D : Performance Measurement System Implementation and Firm Performance

1. Please indicate the average growth in productivity level for the last 3 years your firm achieved as indicated by its performance scorecard……..

Thank you for the time and effort taken to fill this questionnaire.

Appendix II: List of Large Food and Beverage Processors in Nairobi County

Aberdares Water Ltd

Alpine Coolers Ltd

Aqual Ltd

Aquamist Ltd

Bio Foods Kenya

Blue Label

British American Tobacco Kenya Ltd

Buseki Dairies

Cardbury Kenya and East Africa Ltd

Chirag Ltd

Coca Cola Juices Ltd

Deepys Industries Ltd

East Africa Sea Foods Ltd

East African Breweries Ltd

Energy Foods Ltd

Excel Industries Ltd

Farmers Choice Ltd

House of Manji Ltd

Kapa oil refineries

Ken chic Ltd

Kenafric Industries Ltd

Kenya Sweets Ltd

Kenya Wines Agency Ltd

Keroche Breweries Ltd

Kevian Limited

Mombasa Maize Millers Ltd

Nairobi Bottlers Ltd

Nakumatt Healthy Foods ltd

Nestle Foods Kenya Ltd

New Kenya Cooperative Creameries Ltd

Pembe Industries Ltd

Pepsi Cola

Premier food Industries Ltd

Pristine Ltd

Proctor and Allan East Africa Ltd

Safari Ltd

Sameer Agriculture & Livestock Ltd

Sierra Brewery

The good water company Ltd

Tropical Heat Industries Ltd

Tru foods

Unga Ltd

Unilever Kenya Ltd

Uzuri Foods Ltd

W.E Tilly Ltd

Wrigleys Company