# INFLUENCE OF PERCEIVED EFFECTIVENESS OF BALANCED SCORE CARD SYSTEM ON EMPLOYEE PERFORMANCE AT LAPFUND

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (STRATEGIC MANAGEMENT) SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

# **DECLARATION**

This project is my original work other University.	and has not been presented for a	degree award in any
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# **DEDICATION**

I dedicate this research project to my late loving father Mr. Andrew Andieri Maina and daughter Jada; both lovers and seekers of knowledge. I also dedicate it to my supportive husband, family and friends who have always believed in me as well as all lovers of education; especially those that seek and find knowledge towards self-actualization.

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I wish to express my gratitude to God Almighty for granting me a chance to live long enough to pursue my dream of attaining an MBA degree in this lifetime. I also acknowledge my daughter and husband who have supported me in this journey. Your support, effort, sacrifices, encouragements and provisions were not in vain.

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Lastly, I salute all University of Nairobi MBA students with whom we have journeyed together, hand in hand sharing and collaborating towards one goal. We even had the largest whatsup group ever the "On Time Projects" where we kept vigil for each project and ensured we move together towards graduation square. We are indeed champions and I wish us all success and let us always remember: "Everything depends upon execution; having just a vision is no solution." **Stephen Sondheim** 

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# LIST OF ABBREVIATIONS

**BIRT METRICS** BSC application name of system used at LAPFUND

**BoD** Board of Directors

**BSC** Balanced Score Card

**CEO** Chief Executive Officer

**HOD** Head of Department

HR Human Resource

ICT Information Communications Technologies

**OPI** Organizational Performance Index

**ISO** International Standards Organization

**LAPFUND** Name of organization undergoing the CASE study

**M&E** Monitoring and Evaluation

**PC** Performance Contracting

PM Performance Management

PMSC Performance Management System Cycle

**PMS** Performance Management System

PMTT Performance Management Technical Team

**RBA** Retirement Benefits Authority

**SBD** Strategy and Business Development

**SMART** Specific, Measureable, Accurate, and Time bound

**SWOT** Strengths, Weaknesses, Opportunities and Threats

**TORs** Terms of Reference

**TQM** Total Quality Management

SPSS Statistical Package for the Social Sciences

#### **ABSTRACT**

This academic study seeks to establish how employees at LAPFUND perceive the development, implementation and evaluation of the Balanced Score Card (BSC) system, and how it affects staff performance at LAPFUND. To establish the perceived effectiveness of BSC on employee performance at LAPFUND, the study sought views of all 42 permanent staff in the organization. Both primary and secondary approaches were used to show evidence of staff appraisals and the trend of performance over a period of three years. This is the period under the automated BSC system as opposed to the previous system that was manual and highly subjective. The study was guided by the objective of establishing the influence of perceived effectiveness of BSC on employee performance at LAPFUND. Primary data was collected using questionnaires while secondary data was obtained from existing appraisal reports. Column tables, trend analysis graphs and mean scores were used to analyze all the data obtained. Findings and recommendations conclude that top management support and BSC system objectivity was a major contribution to the continued success of the system. The study also established few challenges that need to be addressed and can form basis for future studies in these sections. The balanced scorecard is tailored for each employee of the organization to contribute in a holistic towards the corporate objectives. Downward alignment of vision and direction allows each business unit to tailor its own objectives to contribute effectively to the company's objectives. The study recommends that LAPFUND addresses the challenges observed in automation, feedback and performance management cycle in order to maximize on the application of the BSC system. LAPFUND should also ensure continuous improvement and setting up clear guidelines towards ensuring a successful appraisal process.

#### **CHAPTER ONE: INTRODUCTION**

# 1.1 Background of the study

The common denominator between performance management system tools and employee performance is that both have acquired the status of standard business approaches and practice; as institutions continuously get involved in formulas and strategies to link the two. Most overall performance management systems have 7 notable cyclic steps which are training, strategic planning, target setting, scoring, appraisal, reporting and the monitoring and evaluation phase. These phases are the link between organizational structures and the performance management systems (Brown 2000).

The above steps agree with standard international performance management cycle steps comprising 9 notable steps based on performance models: Assessment, Strategy, Objectives, Strategy Map, Performance Measures, Initiatives, Performance Analysis, Alignment and Evaluation (The BSC institute, 2015). Simpler models collapse these nine steps into 5 or 4 continuous steps. The former includes planning, monitoring, developing, rating and rewarding that form a cyclic performance management loop. The later will have the plan, develop, perform and review stages to still form the PMSC.

Models and approaches to BSC can be as varied as there are many organizations. What matters is that there is a clear show of strategy formulation, execution, measurement and evaluation. The BSC is an agreeable and objective tool used in ensuring objective corporate performance measurement and management. Whereas structures define an organization's staff establishment, reporting lines and job specifications; performance management defines both long-term and short-term plans, how the organization intends to achieve these goals and an evaluation to ensure sustainability, accountability, control and measurement (Gerrish, 2015).

Performance management is now largely strategic with clearly defined approaches and outcomes. The BSC is one way in which an organization can ensure objective and systematic performance management at all levels from individual, departmental to

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corporate performance. Paradigm shifts in human resource require strategies that deliberately inspire dynamism, objectivity, motivational agendas and transparent models in staff and corporate appraisals (Schneiderman, 2006). Success on performance management tools is dependent upon support from top management, consistency, continuous improvement, objectivity, policies and flexibility (Kaplan and Norton, 1992).

Strategic theories exist to support and define the development and implementation of BSC (Molleman, 2015). These theories largely focus on how financial stewardship, customer focus, organizational capacity and internal processes are used to tie the vision and goals of any organization to its strategic objectives. The internal and external environments of a company, the strategic plan, the organizational structure and overall mandate of an organization will always contribute to the final outcome of both the individual, departmental and corporate scorecards. Regardless, the four pillars of Customer, Finance, Learning and Growth and Internal Business Processes will always reflect in any formidable BSC (Schneiderman, 2006).

# 1.1.1 Concept of Strategy

Through strategy, an organization develops and implements plans that champion and actualize both long-term and short-term goals. The process of strategic management is a continuous and is applicable in all business units and processes; giving direction and coordinating all manner of business excellence and success. Organizations adopt to strategy formulation to ensure they adapt to both internal and external trends and influences such as globalization, business process re-engineering, re-organization and rightsizing. Several theories and key concepts characterize the development, implementation and evaluation of strategic management (McGahan and Porter, 1997).

At the core of strategy formulation is the creation of goals, a vision, a mission statement, organizational culture and values, strategic objectives and other statements of value or pillars of excellence. These guide the organization in its pursuit of success and strategic opportunities. Managers are able to make informed decisions like who should be rewarded, what targets are priority during goal setting, when to restructure and how to

meet stakeholder expectations. Through goal setting, organizations strategize on how to compete in an increasingly competitive and global business environment (Porter, 2008). The BSC is a strategic management tool as it helps to manage performance through goal setting, target cascading and performance measurement (Molleman, 2015).

# **1.1.2** Concept of Perception

In philosophy and other cognitive sciences, perception is regarded as the practice and process of attaining awareness of a much deeper understanding of sensory information (Kumar, 2016). Psychologists see it as the development and formula by which an individual will organize, select and interpret stimuli into meaningful images and coherent pictures of this world. It is how we see the world around us. Through perception conceptualizing, researchers are able to study, internalize and report on what drives a particular population once they become introduced to a concept and apply the same concept for achievement of certain goals and ends. As individuals select, organize, interpret and receive various information to make it relevant; this results in meaningful and informed decision making and actions (Johnsen, 2001)

The study proposed to build on and establish how perception can positively or negatively influence the outcome of a plan or goal. It is usually hard to predict how people will react to a new entry or modification that challenges the status quo. However, investigations into these changes through interviews, case studies, observations and other research methods can indeed lead to the establishment of how and why a certain individual or group of people hold certain theories as true or false; good or bad; positive or negative or remain neutral; as human beings often are subconsciously selective to what they perceive (Kumar, 2016).

## 1.1.3 Concept of effectiveness

In contrast to the term efficiency, to be effective means to determine what the right thing is and do the right thing. Efficiency will concentrate on doing the thing right; but effectiveness is doing the right thing. The concept of effectiveness seeks to check the degree to which set objectives are achieved and the range to targeted goals are reached or

challenges solved. The researcher explores the concept of effectiveness as the central focus of the development and implementation of the balanced score card. Scholars and other professionals have used this concept based on historical data and evolution to establish and implement different projects and programs.

In order to rationalize and improve effectiveness, you must first understand the 'right' being sought and the 'impact' of the right or on the right after a period of time based on trends and other factors. The BSC will only be effective if it is developed in the right manner, by the right people and through the right processes. An effective system will always be felt and measured through positive feedback and functioning systems that lead to positive results and informed decision making (Lipe and Salterio, 2000).

#### 1.1.4 Balanced Score Card System

BSC can be defined as a strategic management tool for planning that organizations use to align their day-to-day work with overall corporate strategy (Kaplan and Norton, 1992). BSC communicates the vision and mission of an organization and prioritizes projects, products and services. It is a tool that is used to measure and monitor progress towards strategic targets. In 1992, Kaplan and Norton published an article on BSC when at the time it was still a new concept to strategic management. Over the years like in 1996, renowned writers like Michael Porter have refined the concept and theories and agree that in formulating competitive strategies, a company must relate its operations to competitive forces in the industry in which it competes.

The BSC translates the vision, mission and strategy of an organization into strategic objectives and measures based on the four perspectives: financial stewardship, customer focus, internal business processes and organizational capacity (learning and growth) (Porter, 1987). Under financial stewardship, the company determines how it will be viewed by its stakeholders and how it will uphold its worth.

Under the customer perspective the company focusses on how its clients will view it and how it will fulfil the expectations of its customers. Internal business processes describe the business procedures and workflows that any company has to adopt in order to satisfy its stakeholders and customers. In order to change and continuously improve the company must undertake learning and growth as the fourth perspective so as to meet its goals as outlined in its vision and mission. (Molleman, 2015)

## 1.1.5 Employee Performance

The BSC involves cascading of pre-set goals from top-to-bottom, based on the four perspectives of finance, customer, internal processes and organizational capacity (Kaplan and Norton 1992). Employee performance is all about setting goals, then aligning those same goals and objectives with the employees' skills, measures, development plans and deliverables or results. Every worker or unit in the organization is expected to come up with job based activities that will be placed on their scorecards. Assessment of these measures are done periodically (weekly, monthly, quarterly, bi-annual or annual). The more a company improves in performance and processes, the shorter the periods become.

There are different performance criteria that an employee will be evaluated against but ideally all employee performance targets should be aligned to overall strategy and goals. Companies then come up with incentives and penalties to match employees' performance and usually this are laid down as company policies or guidelines. A company can have a rewards and recognition policy, performance management policy, employee motivational guidelines, employee corrective action guidelines or employee performance guidelines that all give guidance to how employee performance is set up and executed (Waal, 2003).

# 1.1.6 LAPFUND Company

Local Authorities Provident Fund (LAPFUND) is a body corporate operating under an Act of Parliament, Cap. 272, Laws of Kenya in conjunction with the RBA Act, 1997 and Regulations 2000; and the State Corporations Act, County governments Act and Urban areas and Cities Act. LAPFUND is a defined contribution retirement benefits scheme for employees of county governments, cities and urban areas, municipalities and associated water companies in Kenya.

LAPFUND has a membership of approximately 34,000 and the fund is valued at approximately KES. 40 billion (http://www.lapfund.or.ke/). Employees at LAPFUND have the role of ensuring they achieve set targets and goals through participating in all the steps of performance management. Key among their roles is to ensure they set annual targets, develop their individual scorecards as per company policy and then enter their daily scores in the automated scorecard board. Further in cascading, each HOD went ahead to develop their individual scorecard which translate to the departmental scorecard; and later cascaded to individual staff so that all assignments are aligned to the corporate scorecard and overall vision and mission of LAPFUND.

### 1.2 Research Problem

The BSC translates the vision, mission and strategy of an organization into strategic objectives and measures based on the four perspectives: financial stewardship, customer focus, internal business processes and organizational capacity (learning and growth) (Porter, 1987). BSCs are used worldwide to manage employee performance; especially in USA, Europe and Asia and mostly shows improved performance. The BSC has also been approved by Harvard Business Review editors as an influential business tool of the past 75 years (Porter, 1992). Using the concept of perception where individuals are allowed to give relevant and meaningful information on a subject of choice; the study seeks to establish how positively or negatively the BSC strategy has impacted employee performance. This is also through comparing influence determined by doing the right thing through the concept of effectiveness.

The concept is gradually being adopted in Africa and this study seeks to investigate how a company in Kenya – LAPFUND – is using the BSC not just to manage employee performance; but also to understand what is the influence of perceived effectiveness of BSC system on employee performance. The effect of BSC implementation at LAPFUND Company on performance of employee has not been fully understood. Studies done outside Kenya may not provide a correct picture due to contextual differences. Often, LAPFUND engages staff in business redesign and planning in order to respond to both internal and external conditions, challenges, demands and processes as shown in the

SWOT analysis by LAPFUND in its business plan. The use of the BSC has ensured staff re-organization so that staff are placed in areas where they are relevant and skilled with enough capacity to contribute to overall strategic objectives.

Empirical studies carried out by Kaplan from 1992 show several case studies that describe how companies had integrated BSC. Though the studies did not get into the actual employee perceptions and effects on performance; they show what overall performance was attained. The intention of this study is to go further into discovering the influence of perceived effectiveness of BSC on employee performance and presents a good opportunity for companies to gauge system implementation and performance. A chemical company Texas Eastman company set production records through use of BSC in its daily operations. These helped the employees to quickly assess consequences from production or machine downtime; make trade-offs amongst conflicting quality demands, plus guided spending decisions. Another case described how

Big-3 automobile engine fabrication plant had made a deep commitment to total quality principles (Kaplan, 2010). It provided decentralized teams with information flowing about machine downtime and scrap in order to improve operational processes and reduce bottlenecks. It further eliminated root causes of scrap and off-spec production. Staff also were happy that they could receive daily reports on their spending and weekly accurate reports on total overhead expenses. Analog Devices a semiconductor company described how executives benefited through informed decision making.

These cases reveal the advantage of complementing non-financial and financial information in results measurement. This company introduced a quality system that led to an innovative culture eventually leading to improved results. Metrics like on-time delivery, punctuality; customer satisfaction and per-million defect rates that zeroed in on specific result based activities were now available for comparison and decision making. These cases reveal the advantage of complementing non-financial and financial information in results measurement.

None of the previous studies reviewed have conclusively addressed the use of BSC system in Kenyan member based organizations. Drawing of strategic objectives from the overall vision and mission and ensuring a relevant staff establishment involves analysis, creative thinking, forecasting and projections; all of which are within the control of management. Implementation of the BSC involves factors such as organizational structure, leadership, strategic planning, job specifications, target setting, cascading of roles to lower cadre staff, employee's attitude to change, timing and availability of the correct resources. The study seeks to involve employees more in system measurement and give Kenyan member based organizations an insight into how the BSC is developed as well its effectiveness and influence as perceived by staff using this strategy in performance management. The study will thus address the gap of how does use of the balanced score card system used at LAPFUND influence employee performance?

### 1.3 Research Objective

To establish the influence of perceived effectiveness of Balanced Score Card system on employee performance at LAPFUND

## 1.4 Value of the Study

In Kenya, the concept of BSC remains fairly new in many government organizations. This case study specifically looks at the development and implementation of BSC at LAPFUND and its perceived effect and influence on employee performance. The study will help other organizations struggling with the development and implementation of BSC. LAPFUND will achieve insight on how staff rate the system and address challenges and other modifications from employee feedback.

Like any skilled managers in any organization, top management at LAPFUND face complex business management issues that require rapid responses to both internal and external environments. These environments though indented with risks offer opportunities for growth which through informed decision making can lead to effective business development, improved organizational culture, contribution to the larger society and improved interpersonal skills. By focusing on the strategy of BSC, it will be possible

for LAPFUND to keep existing and thriving in its environment, even as the stated objectives continue to be met.

Other beneficiaries are regional pension schemes, policy makers and regulators like RBA, the government of Kenya, private and public institutions as well as future researchers looking to enrich knowledge in use of the BSC and test and build theories. The study shall help organizations embrace the use the BSC as a tool in strategic management; particularly in undertaking performance management.

The study shall help LAPFUND and other companies to accept the role of BSC and its importance in attaining overall strategic objectives. They shall apply knowledge learned to seek further clarifications and build on core findings as well as build appropriate structures as BSC approaches keeps evolving. Scholars shall use findings obtained as a basis for comparative analysis with other studies developed in similar fields.

A look at past studies like the case of Big-3 automobile engine fabrication plan shows results based on the researchers perceptions not the users (employees). It is the same for studies carried out by Kaplan at Analog Devices and Texas Eastman and for all three the studies do not necessarily match the contextual Kenyan social security industry and pension schemes management.

The researcher seeks to provoke thought, insight and form the foundation for further research and development in the Kenyan pension and insurance industries; or other formal organizations that seek to have objective staff and corporate appraisals. Further research shall lead to the study of relationships in the fields of strategic management, performance management, BSC and organizational structuring. All arguments made qualify the study to be universal and not necessarily restricted to strategic management and the pension industry in Kenya.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1 Introduction

The study will look at the 'goal-setting theory' and the 'top-down modelling theory' to give a view of how BSC are developed and implemented. Feedback from staff can be integrated to new versions of BSC systems so as to keep improving on staff ratings to effectiveness of a system.

#### 2.2 Theoretical Foundation

The study was supported by two theories; the goal setting theory and the top-down modelling theory as discussed below.

### 2.2.1 The goal setting theory

The BSC begins with strategic planning, a process through which top management develop, review and evaluate future prospects and decide on appropriate stratagems to achieve long-term company goals. By carrying out analysis like the SWOT, a company can be able to have a snapshot of its strengths, weaknesses, opportunities and threats. Strategic Plans and Business Plans detail analysis of both the internal and external environment before laying down strategies to maintain improve or counter SWOT analysis findings. While this study looks at the rational strategic planning process, it is key to remember that throughout the strategic planning period emerging issues call for personal judgements and alterations to strategy to counter these issues that ultimately shape strategic directions (Gautreau and Kleiner, 2001).

This study puts forward the BSC approach as a strategy to strategic management. Since people are key in organizations and strategy implementation, the study focusses not just on the technical application and functionality of the BSC; but also on the perceptions and insights of the staff in order to understand how the performance system works. The researcher seeks to establish that as an objective performance measurement system; BSC can lead to staff retention as it encourages innovation, growth and a desirable performance culture. Initially, scholars related the BSC as introduced in the 1990s as a

tool for measurement and not really about strategy formulation and implementation. The BSC strategy retained mainly the measures of financial operations, the insulating and lagging indicators, but also supplemented them with measures on the drivers, the principal indicators, of future financial performance (Brown, 2000).

This did not really solve future performance and did not assist much in reducing pitfalls in running organizations. The founders and early implementers of the BSC realized that they needed to measure more than the financials; they needed to measure strategy. It is how all the four perspectives which comprised of both financial and non-financial indicators were borne and derived from vision, mission and overall strategy (Kaplan and Norton, 2001b). It is how the BSC became a tool for managing overall goals and strategy. By 2000, many companies in the USA and Scandinavia were already using the BSC as a tool for performance measurement. As surveys showed gradual rise to satisfaction levels to the tool (some started as low as 36%); software packages began being developed to resolve most of the challenges being raised and to date, the idea of the BSC continues to make its mark with over 100 software applications in the market (Gadenne, 2000). Some of the software applications include quick scores as applied by the balanced score card institute and the Actuate BIRT Metrics as applied by OpenText.

With the increasing need to measure non-financial indicators which were more descriptive and captured indicators like intellectual capital, service quality levels, employee skills, responsiveness to emerging issues, adaptability to environment, brand and visibility; the BSC continues to thrive. Earlier financial reports like the balance sheet were not able to capture these indicators and other soft skills. The BSC as designed to measure the four perspectives(financials, customers, internal business processes and learning and growth) gives adequate information to every part of the organization creating a synergy of thought and workflows (Brewer and Speh 2000)

# 2.2.2 Theory of top-down modeling

The BSC is a top-down process approach to strategy execution and acts as an objective tool for performance management. Its drivers are vision, mission, mottos, strategic

objectives, core values and business themes or pillars of an organization(Poll, 2001). If well developed and executed, scorecards display a balance between internal measures (business processes, innovation, learning and growth) and external measures (customers, shareholders, wealth maximization). It further acts as the bridge between past and future targets of performance. The BSC is sufficient for use as a tool for strategic management systems and can manage performance over long periods of time (Poll, 2001). The process has the stages of Planning, Reviewing, Developing and Performing (Latshaw and Choi, 2002). When an organization looks at these broader sections or steps of the BSC which are to plan, review, develop and perform; both long-term and short-term goals are revealed and measured.

Combined, the performance cycle of events gives stakeholders and management an overall view of the status of the company and enables it to maintain a competitive edge in its environment (Hagood and Friedman, 2002). As it flows from top to bottom, the BSC has the vision and mission at its peak. This defines the ideal "success story" of the company which every staff and stakeholder of interest must continuously endeavor to achieve. Companies define these top goals and strategies in its strategic plan, business plan, PC Agreement and corporate score card. The relative importance is that weightings, ratings and measures are assigned giving priority and emphasis to the most relevant or core issues and trickling down relatively to the less impacting agendas; but nevertheless vital in achieving overall strategy.

The process can be called strategy mapping and leads to the development of a corporate scorecard which is then cascaded down to business units, departments, heads of departments, team leaders and individual staff systematically based on the reporting lines as outlined in the organizational structure and staff establishment. At the end of it all, the company has a pyramid of "balanced score cards" that if implemented can give a snapshot view of the level of performance of any part of the organization; especially the corporate view. Continuous trainings, feedback, learning and evaluations will give the system enough life to diversify and grow always adapting to the strategic capabilities of the performance targets and goals as well as internal and external environments.

Organizational boards, stakeholders and management are then able to determine whether the organization is on track, or if it requires urgent interventions and redesign before things go terribly wrong. Unlike past measurement tools, the BSC therefore provided a "real-time" window to the decision making process since the ability to continuously monitor and modify strategies as they occur reflects real time learning (Johnsen, 2001).

# 2.3 BSC System and Performance

It is therefore right to conclude that a BSC is a template that defines activities of an organization based on a number of weighted measures for each of the four dynamic perspectives (Brown and McDonnell, 1995). It can also be called a summarized performance report that combines both financial and non-financial aspects of an organization as summarized below:

Table 2.1 – The 4 perspectives of the BSC Source: www.ghacks.net

Perspective	Details		
Financial	These are measures aimed at communicating to the shareholders that the		
	company is doing well in terms of return on investments, shareholder value		
	and asset utilization		
Customer	This perspective achieves the vision through customer focus and		
	satisfaction. It builds good brands and customer relationships, develops and		
	enhances products and seeks to create a reputable image and reputation for		
	customer good will.		
Internal	Targets are aimed at satisfying the question: "What business processes must		
business	we excel in if we are to satisfy our shareholders and customers?" It defines		
processes	how a company actually executes its overall mandate to its stakeholders		
Learning	Based on the ability to innovate, improve and change, a company must set		
and growth	targets that will ensure its growth and sustainability. It measures employee		
	motivation levels, capabilities and willingness to keep excelling through		
	training and development.		

Once vision, mission and strategy are set, the organization then lays down its action plans together with risk mitigations in order to meet its targets. The believe that once these targets are cascaded as sub-tasks to the lower cadre staff and units will ensure an entire organization is focused in attaining a shared future goal is what makes the BSC unique, 'balanced' and capable of satisfying the customer (Waal, 2003). The score card is 'balanced' as it has a time dimension in target setting and achievement; it interprets both the internal and external environments; it integrates staff and processes at all levels; it has aspects of past present and future and is linked through cause and effect theories (Arora, 2002). This synergized system reflects on time, indicators, goals and emerging issues giving strategists an opportunity to keep learning and un-learning towards the ideal vision. These four perspective based measures are intended to move the company towards desired business strategy (Kaplan and Norton, 1992, 1993, 1996a, 1996b, 2001a). To improve managerial decisions, the BSC should be applied to align performance measures to overall strategy (Lipe and Salterio, 2000).

BSC is a very expensive affair especially at the initial stages but is eventually a cost effective exercise. Managers must be trained and sensitized on use of the BSC so as to ensure its cost effectiveness as inability to utilize the system fully will prevent an organization from benefiting fully. Whereas some of the measures and targets could be global and will cut across all subsidiary units, most measures will be unique to an individual staff or section. In the top-down modeling, the staff are expected to contribute to overall strategy after target setting and cascading. Top management will cascade their targets from the Strategic Plan objectives and then proceed to cascade the same down to every staff that reports to them. Line mangers must ensure targets are cascaded based on the job descriptions, organogram and strategic objectives. (Kaplan and Norton, 1992).

Caution must be taken however to avoid placing more emphasis on global targets at the expense of individual unique benefits which actually motivate and lead to realization of self-worth of every employee. Once the employee feels their personal contribution is measured, appreciated and matters, they each put effort to improving and eventually make up the total sum of success of the organization (Appelbaum and Reichart, 1998).

#### CHAPTER THREE: RESEARCH AND METHODOLOGY

#### 3.1 Introduction

This chapter is about research design and methodology. It includes research design, target population, data collection and analysis and other ethical considerations.

# 3.2 Research Design

This research design is a cross-sectional survey because unit of analysis is employee from whom data will be collected at one point in time. The study will focus on the opinion of LAPFUND staff on the influence of perceived effectiveness of Balanced Score Card system on employee performance. The study is contextual and the approach mainly focused on acquiring data at LAPFUND which forms the context of this study. Also known as transversal approach or prevalence analysis, this is a type of study that analyzes data acquired from a given scope or population; or a representative subset, at a specific point in time. Its data was referred to as cross-sectional data and the method used was the most appropriate and cost effective approach. The study aimed at collecting data to make inferences and judgements about permanent and pensionable staff at LAFPUND; giving a snapshot of the population at a given point in time.

#### 3.3 Target Population

The target population or respondents are employees at LAPFUND on permanent and pensionable terms of service. Though there are other short-term contractual staff, temporal staff and interns; manual systems are used to appraise them due to varying contact periods and assignments. It is only the permanent staff who must undertake the full annual performance management cycle and will be the target for this study since historical data for this group is available, consistent and accurate. The study will focus on the opinion of LAPFUND staff on the influence of perceived effectiveness of BSC system on employee performance.

#### 3.4 Data Collection

Data will be gathered through both primary and secondary data collection methods. The primary data will be acquired from completed questionnaires send directly to staff emails and secondary data will be obtained from existing records on performance management. By obtaining data from all permanent and pensionable staff, the study will prevent information bias and increase credibility of the final report. Also, to ensure anonymity and a true reflection of employees' perceptions, the respondents will be asked to drop the completed questionnaires in selected suggestion boxes found in all branch offices, as well as have the option to not mention their names.

The questionnaire will be semi-structured in nature with 5 possible answers from the respondents as follows: 1 = Very dissatisfied, 2 = Somewhat dissatisfied, 3 = Neither satisfied nor dissatisfied (neutral), 4 = Somewhat satisfied, 5 = Very satisfied. The type of questions are close-ended factual questions.

# 3.5 Data Analysis

In order to determine the influence of perceived effectiveness of BSC system on employee performance at LAPFUND, the study will compile data from past years and give summary findings and recommendations. The study will compare performance data for the past 3 years and argue if there has been any impact to staff with the introduction of the BSC. Colum tables, trend analysis graphs and mean scores will be used to analyze all the data obtained from the selected sample. Data analysis will commence after primary and secondary data collection. Employees' influence will be analyzed using regression analysis and data from the questionnaire will be further analyzed using descriptive analysis such as mean.

#### CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

The scope of this chapter is analysis of the data collected on the basis of the topic and research objective. To meet the objectives of the study, data analysis was categorized into two main variables. These are the Employee Performance obtained from secondary data and the Employee Perceptions obtained from the questionnaire as primary data. The results are presented in 4 key tables after data were obtained after secondary data from employee records and primary data from the research questionnaire were compiled.

Data was analyzed based on the four BSC perspectives of Customer, Learning and Growth, Business Processes and Finance. The organizational value statements and strategic direction which includes the core mandate description, the vision, the mission, the motto, the core values, strategic themes, quality policy and strategic objectives (LAPFUND Strategic Plan pp 19-28) were also key in designing the research tool.

Other issues that arose from the primary and secondary research especially past scorecards were also analyzed. The results from the past three years have been used to show trend analysis of how individual performance over the years keeps varying and the impact of these variations to both individual and corporate scorecards; with respect to employee perceptions.

# 4.2 Perceived Effectiveness of Balanced Score Card

The study first looks at the Effectiveness of the balanced score card on employee performance through collection of employee data over the past 3 years. The employee performance was presented as a percentage score for each employee and data was easily available from employee records. The data obtained is averaged and a graph drawn to show the improvement noted over the years with the new and more objective balanced score card, as opposed to the previous manual system.

This is also directly tied to the Strategic Plan as targets were obtained from the Strategic Objectives and respective job descriptions. The study analyses how the BSC has impacted on Employee Performance through achievement of strategic goals. The study also looks at the influence of the score card on performance as perceived by the employees themselves. The study has total marks of each staff out of 125 and further converts the same to a mark out of 5 that shows the weighting of each respondent.

LAPFUND has aligned daily employee targets into to the Strategic Plan by ensuring that the four perspectives are cascaded down from the corporate score card to each employee. The Financial Perspective holds the strategic objective of growth of fund value by 25% annually while the customer perspective is represented by two objectives. These objectives are to attain and sustain members' satisfaction above 80% as well as enhance organizational brand equity. On learning and growth, LAPFUND cascaded into to the BSC two targets namely enhance corporate governance and management best practices as well as strengthen institutional capacity.

# 4.2.1 Analysis of secondary data obtained from employee records

This data was specifically collected to enable the study analyze employee performance over the past three years. The data was collected from individual employee records and represented as a table (Table 4.1) showing percentage (%) scores for each employee over the past three years.

Table 4.1–Means and standard for measures of employee performance

Staff	2014/2015	2015/2016	2016/2017	Average
Number	Results (%)	Results (%)	Results (%)	Performance
	Y1	Y2	Y3	(%)
1	92	101	106	100
2	90	85	95	90
3	86	86	89	87
4	97	118	112	109
5	75	75	72	74
6	103	100	102	102
7	72	98	101	90
8	84	84	90	86
9	91	90	104	95
10	92	98	100	97
11	91	97	101	96
12	69	61	73	68
13	81	82	80	81
14	90	70	94	85
15	100	99	102	100
16	82	85	99	89
17	70	100	98	89
18	70	68	82	73
19	57	61	66	61
20	87	87	98	91
21	66	76	96	79
22	98	93	96	96
23	79	88	89	85
24	64	77	83	75
25	85	86	88	86
26	76	82	81	80

27	75	88	87	83
28	91	99	100	97
29	92	100	100	97
30	93	87	101	94
31	92	99	99	97
32	94	111	110	105
33	100	99	102	100
34	69	82	90	80
35	73	77	87	79
36	75	76	100	84
37	93	96	99	96
38	74	100	101	92
39	83	88	91	87
40	76	76	83	78
41	101	100	105	102
42	72	77	83	77

Six objectives developed by staff during strategic planning and aligned to the vision and mission of the organization were placed in the corporate scorecard. Each was placed under a specific perspective and aimed at improving both corporate and individual scores. This was done repeatedly for the past three years, with the exception only being in the actual targets set, cascaded and applied.

# 4.2.2 Scores for the employee ratings of the effectiveness of BSC based on secondary data collected

Table 4.1 shows individual staff performance for the 42 staff for three consecutive financial years. Most staff show a great improvement on their scores and most have maintained a consistent upward performance grading level. This is attributed to the implementation of the BSC which being a strategic planning and management tool is able to identify and improve various internal functions of a business and their resulting external outcomes.

Feedback obtained from these score cards is able to communicate accomplishments (as seen with employee results over the years), align and integrate day to day work with overall strategy, prioritize project selection and implementation as well as measure and monitor staff progress towards strategic targets.

Figure 4.1 below illustrates results obtained in Table 4.1. It outlines the effect of the BSC on employee performance. The figure shows individual staff performance based on appraisal scores for three years. In Y3 (year 3), the graph indicates relatively high score for most staff than in Y1 and Y2 (year 1 and year 2). For instance, employee 1 scored 92, 101 and 106 respectively over the three year period showing a steady upward improvement in staff performance.

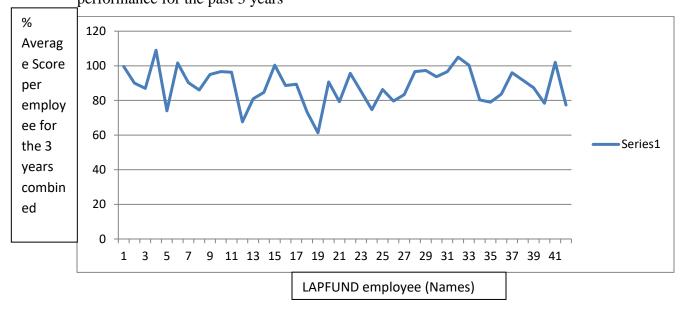
120 % 100 Score per 80 employ Series1 ee for Series2 each 60 Series3 year 40 20  $11 \ 13 \ 15 \ 17 \ 19 \ 21 \ 23 \ 25 \ 27 \ 29 \ 31 \ 33 \ 35 \ 37 \ 39 \ 41$ LAPFUND employee (Names) Series 1 - Y1, Series 2 - Y2, Series 3 - Y3

Figure 4.1 - Trend analysis of results of employee over a period of 3 years

22

Figure 4.2 – Trend analysis of average results of every employee over a period of 3 years.

Series 1 represents the Average Performance for 3 years. This figure reflects corporate performance for the past 3 years



# 4.2.3 Scores for the employee ratings of the effectiveness of BSC based on primary data collected

Before the BSC was introduced in 2014, manual staff appraisals and the 360 degree feedback systems were in use. However, staff felt these approaches were too subjective and limiting. The BSC has now been hailed as an objective system albeit few challenges as outlined by staff during the internal survey that was conducted by the study. The trend chart in figure 4.3 and table 4.2 below shows a summary of results obtained from the study during primary data collection. Employees gave a score of ranges from 1 to 5 for each question as per attached research tool (Appendix 1). Total scores were 125 and the highest employee scored 115 against the lowest employee who scored 69.

Overall, the least employee scored above average since 69 is still a mark above 50% of the 125 mark. Majority of the employees (28 / 42) gave an average score of 3.5/5. the table below shows how each employee rated the performance of the Balance Score Card and how it affects performance in their own view.

Table 4.2 – Perceived effectiveness of the Balanced Score Card

Staff	Total Staff	Average	C4aff Name
Name	Score	Staff Score	Staff Name
1	107	4.28	somewhat satisfied
2	100	4	somewhat satisfied
3	78	3.12	neutral
4	80	3.2	neutral
5	115	4.6	somewhat satisfied
6	112	4.48	somewhat satisfied
7	98	3.92	neutral
8	92	3.68	neutral
9	100	4	somewhat satisfied
10	101	4.04	somewhat satisfied
11	105	4.2	somewhat satisfied
12	108	4.32	somewhat satisfied
13	69	2.76	Somewhat disatisfied
14	75	3	neutral
15	81	3.24	neutral
16	79	3.16	neutral
17	95	3.8	neutral
18	95	3.8	neutral
19	76	3.04	neutral
20	107	4.28	somewhat satisfied
21	89	3.56	neutral
22	91	3.64	neutral
23	96	3.84	neutral
24	99	3.96	neutral
25	89	3.56	neutral
26	87	3.48	neutral

27	83	3.32	neutral
28	102	4.08	somewhat satisfied
29	90	3.6	neutral
30	94	3.76	neutral
31	90	3.6	neutral
32	104	4.16	somewhat satisfied
33	102	4.08	somewhat satisfied
34	107	4.28	somewhat satisfied
35	85	3.4	neutral
36	97	3.88	neutral
37	92	3.68	neutral
38	94	3.76	neutral
39	78	3.12	neutral
40	81	3.24	neutral
41	86	3.44	neutral
42	79	3.16	neutral

Table 4.2 above shows the means and standard for measures of perceptions of effectiveness of the Balanced Score Card. The summary for the table is listed below

Indicator	Total Staff per indicator
1 = Very Dissatisfied	0
2 = Somewhat Dissatisfied	1
3 = Neutral	28
4 = Somewhat Satisfied	13
5 = Very Satisfied	0
TOTAL	42

# 4.2.4 Comparisons between the two variables on employee performance and employee perceptions

Table 4.3 below illustrates the key objective of the study which was to study the influence of perceived effectiveness of BSC system on employee performance at LAPFUND. The table shows the percentage (%) average performance of each permanent staff at LAPFUND for a period of 3 years. The average score is compared against the perception of employees; first represented as the total score out of 125 and then the same results weighted to give a score out of 5 so that the results can be used to calculate the correlation and regression ratios.

Table 4.3 – Data on average scores from secondary and primary data on performance, effectiveness and perceptions

	Average	<b>Total Staff Score</b>	Average Staff Score
Staff	Performance (% of	on Perceptions	on Perception
Name	<b>Effectiveness</b> )		(Weighted)
	X%	x/125	x/5
1	100	107	4.28
2	90	100	4
3	87	78	3.12
4	109	80	3.2
5	74	115	4.6
6	102	112	4.48
7	90	98	3.92
8	86	92	3.68
9	95	100	4
10	97	101	4.04
11	96	105	4.2
12	68	108	4.32
13	81	69	2.76
14	85	75	3
15	100	81	3.24
16	89	79	3.16
17	89	95	3.8
18	73	95	3.8
19	61	76	3.04
20	91	107	4.28
21	79	89	3.56

22	96	91	3.64
23	85	96	3.84
24	75	99	3.96
25	86	89	3.56
26	80	87	3.48
27	83	83	3.32
28	97	102	4.08
29	97	90	3.6
30	94	94	3.76
31	97	90	3.6
32	105	104	4.16
33	100	102	4.08
34	80	107	4.28
35	79	85	3.4
36	84	97	3.88
37	96	92	3.68
38	92	94	3.76
39	87	78	3.12
40	78	81	3.24
41	102	86	3.44
42	77	79	3.16

This table purposes to show the relationship between the two variables on employee perception and employee performance

# 4.2.5 Results of regression analysis for the effect of perceived effectiveness of BSC on employee performance at LAPFUND

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT VAROOOO2
/METHOD=ENTER VAROOOO1.
```

Regression:

Where:

Var00001(x) is the independent variable depicting **Employee** 

Performance (EPr) as a % and

Var00002 is the dependent variable depicting **Employee Perceptions** (**EPc**)

## [DataSet0]

# Variables Entered/Removed<sup>a</sup>

Model	Variables	Variables Method	
	Entand	Damaya	
1	EPr	. Enter	

a. Dependent Variable:

VAR00002

b. All requested variables entered.

### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.177 <sup>a</sup>	.031	.007	.44577

a. Predictors: (Constant), EPr

Table 4.4 – Analysis of Variance Table

Mode	el	Sum of Squares	d f	Mean Square	F	Sig.
1	Regression	.257	1	.257	1.292	.262 <sup>b</sup>
	Residual	7.948	40	.199		.202
	Total	8.205	41			

a. Dependent Variable: EPc

b. Predictors: (Constant), EPr

Table 4.5 – Results of regression analysis for the effect of perceived effectiveness of the BSC on employee performance at LAPFUND

Coefficient S <sup>a</sup>						
		Unstandardi Coefficients		Standardized Coefficients	t	
Mod	lel	В	Std. Error	Beta	-	Sig.
1	(Constant)	3.038	.589		5.155	.000
	EPr	.008	.007	.177	1.137	.262

a. Dependent Variable: EPc

#### **CONCLUSION**

Since P-value (0.262) is bigger than the alpha value (0.05) it's an indication of weak evidence against the null hypothesis, so we will not reject the null hypothesis. This means that there is no significant relationship between average performance and total staff score on perception. The employee perceptions will not largely influence future employee performance since their observations are mainly meant to communicate the GAPs in the BSC system but do not affect their targets as these are set from the Strategic Plan and cascaded into weighted measures (Appendix 2). LAPFUND only requires to address the issues raised under perceptions in order to improve the system and build more confidence in its application.

#### The detailed workings are as below:

The table 4.4 analyses the data to enable the study obtain the Regression co-efficient for the perceived effectiveness of the Balanced Score Card. The study uses 3 models to obtain the results. First, the use of Excel to obtain the co-relation, then the use of formulas to obtain the regression co-efficient and correlation, then the use of SPSS Application to analyze the data. The application assists in obtaining the summary model, the ANOVA table and the co-efficient table.

The formula used is:

$$Y = B_0 + B_1 X_1 + \pounds$$

Where Y = employee Performance

 $B_0 =$ the intercept

 $B_1$  = regression coefficient

 $X_1$  = perceived effectiveness of the BSC

Table 4.6 – Table showing the relationships between the two variables being studied to enable find the regression coefficient

Staff Name	Average Performance (% of Effectiveness) = X	Average Staff Score on Perception (Weighted) = Y	XY	X <sup>2</sup>	$\mathbf{Y}^2$
1	100	4.28	428	10000	18.3184
2	90	4	360	8100	16
3	87	3.12	271.44	7569	9.7344
4	109	3.2	348.8	11881	10.24
5	74	4.6	340.4	5476	21.16
6	102	4.48	456.96	10404	20.0704
7	90	3.92	352.8	8100	15.3664
8	86	3.68	316.48	7396	13.5424
9	95	4	380	9025	16
10	97	4.04	391.88	9409	16.3216
11	96	4.2	403.2	9216	17.64
12	68	4.32	293.76	4624	18.6624

13	81	2.76	223.56	6561	7.6176
14	85	3	255	7225	9
15	100	3.24	324	10000	10.4976
16	89	3.16	281.24	7921	9.9856
17	89	3.8	338.2	7921	14.44
18	73	3.8	277.4	5329	14.44
19	61	3.04	185.44	3721	9.2416
20	91	4.28	389.48	8281	18.3184
21	79	3.56	281.24	6241	12.6736
22	96	3.64	349.44	9216	13.2496
23	85	3.84	326.4	7225	14.7456
24	75	3.96	297	5625	15.6816
25	86	3.56	306.16	7396	12.6736
26	80	3.48	278.4	6400	12.1104
27	83	3.32	275.56	6889	11.0224
28	97	4.08	395.76	9409	16.6464
29	97	3.6	349.2	9409	12.96
30	94	3.76	353.44	8836	14.1376
31	97	3.6	349.2	9409	12.96
32	105	4.16	436.8	11025	17.3056
33	100	4.08	408	10000	16.6464
34	80	4.28	342.4	6400	18.3184
35	79	3.4	268.6	6241	11.56
36	84	3.88	325.92	7056	15.0544
37	96	3.68	353.28	9216	13.5424
38	92	3.76	345.92	8464	14.1376
39	87	3.12	271.44	7569	9.7344
40	78	3.24	252.72	6084	10.4976
41	102	3.44	350.88	10404	11.8336
42	77	3.16	243.32	5929	9.9856
Totals	3712	155.52	13779.12	332602	584.0736

Step 1:

From the table £x = 3712, £y = 155.52, £xy = 13779.12, £x2 = 332602, £y2 = 584.0736. n is the sample size i.e 42

$$a = (\pounds y)(\ \pounds x^2)\text{-}(\ \pounds x)(\ \pounds xy)\ /\ n(\pounds x^2) - (\pounds x)^2$$

$$b = n(\pounds xy) - (\pounds x)(\ \pounds y) \ / \ n(\pounds x^2) - (\pounds x)^2$$

Table 4.5 – Results from the regression formulas obtained from table 4.4 above

$a = (£y)(£x^2)-(£x)(£xy) / n(£x^2) - (£x)^2$	$b = n(\pounds xy) - (\pounds x)(\pounds y) / n(\pounds x^2) - (\pounds x)^2$
((155.52 x 332602) – ((3712 x 13779.12))	(42(13779.12) - (3712 x 155.52)) / (42
/ 42 (332602) - 3712 <sup>2</sup> )	$(332602) - 3712^2$
a = 3.037562	b = 0.007528

Inert values into the equation

$$y' = a + bx$$
 therefore  $y' = 30.97995$ 

$$Y = B_0 + B_1 X_1 + \pounds$$

The formula used is:

$$Y = B_0 + B_1 X_1 + \pounds$$

Where Y = employee Performance

 $B_0 = the \ intercept$ 

 $B_1 = regression coefficient$ 

 $X_1$  = perceived effectiveness of the BSC

And is worked out as below:

$$a = \frac{(\sum y)(\sum x^2) - (\sum x)(\sum xy)}{n(\sum x^2) - (\sum x)^2}$$
$$b = \frac{n(\sum xy) - (\sum x)(\sum y)}{n(\sum x^2) - (\sum x)^2}$$

$$= 0.007527582$$

So y=3.04+0.00752x

Step 2: Establish the Pearson's correlation coefficient (r).

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

$$\sqrt{[42(332602)-(3712)^2][42*584.0736-(155.52)^2}$$

#### =0.17690896 or 17.69%

The range of the regression coefficient is from -1 to 1. Our result is 0.17690896 or 17.69% which means the variables have a moderate positive correlation.

### Step 3:

The following values from the data is required:

- 1) Pearson's Correlation coefficient (r) which is 0.17690896 or 17.69%
- 2) Sample size which is 42.
- 3) Variance of the response variable (y) which is;

$$S^2 = 1/41 (4.28^2 + 4^2 + 3.12^2 \dots + 3.44^2 + 3.16^2) - 42(3.702)^2 = 0.2$$

#### Note:

- 1.  $R^2=SS(Reg)/SS(Total)$
- 2. SS(Total)=MS(Total)\*df(Total)
- 3. F=MS(Reg)/MS(Residual)
- 4. Total Df=n-1
- 5. MS(Reg)=SS(Reg)/Df(Reg)
- 6. MS(Total)=R

Figure 4.6 – Graph communicating the results obtained above

# Density plot for F(1,40)

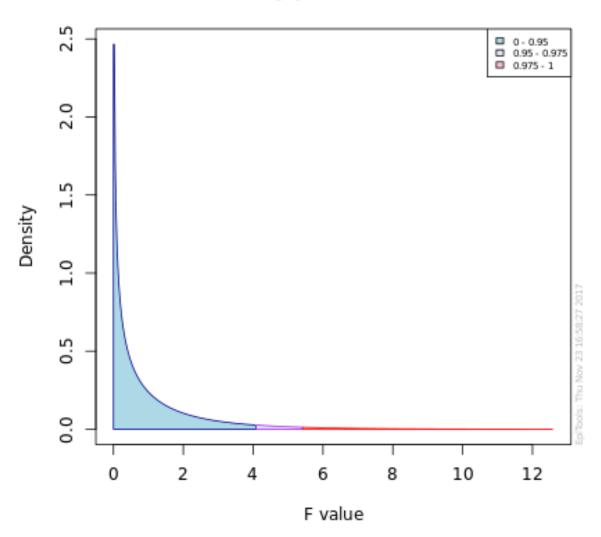


Figure 4.3 – Trend analysis of average results based on employee perceptions, using the weighted scores

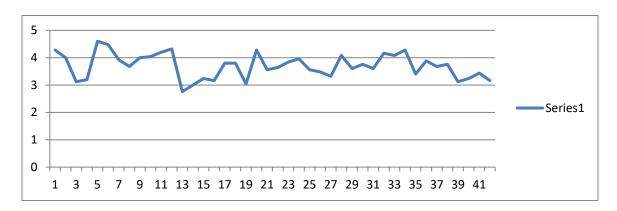
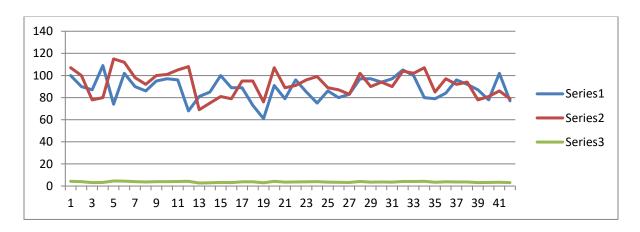
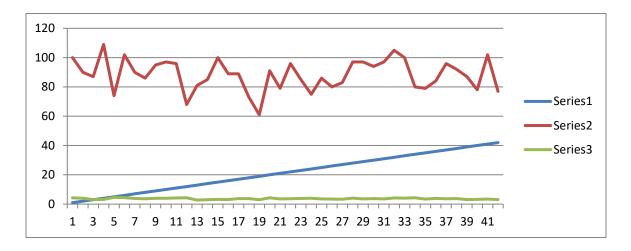


Figure 4.4 – Graphical analysis on data obtained for effectiveness and perceptions when combined



Series 1 = Employee Performance, Series 2 = Total Score on Perceptions, Series 3 = Weighted Score on Perceptions

Figure 4.5 – Graphical analysis on data obtained for effectiveness and perceptions when combined (Correlation)



#### 4.3 Research tools and findings

In summary, the results show that 28 out of the 42 staff are neutral; meaning they are neither satisfied nor dissatisfied with the system. Should the challenges faced be addressed by management, a majority of this group will find the system somewhat satisfying as most of their scores were really on the border indicator 3. If rounded off to the nearest whole number, most of these results will be in indicator 4 showing somewhat satisfied. On average, no staff was VERY DISSATISFIED nor VERY SATISFIED with 13 saying they were somewhat satisfied while only 1 member of staff was somewhat dissatisfied. The dissatisfied members of staff had major issues with their pre-set targets and this might have resulted in the low score given to the system.

On effectiveness and performance, the mean score for every staff was **88.39**; with a steady rise observed on Mean Scores for Y1, Y2 and Y3 as 83.33, 88.14 and 93.70 respectively. Clearly the BSC system has had a positive effect on both performance and effectiveness; and once management addressees the challenges picked from the perceptions analysis, it will be right to project that soon LAPFUND will hit and surpass the 100% mark on average score per employee; to become a regional center for benchmarking in the social security and pension sector. When formulas of regression and correlation are used, a predicted upgrade of 30.97995 on the average mark of 88.39 is foreseen in the next 3 years if all circumstances are assumed to remain constant. A variance of 0.176909 is expected.

This work out is a low correlation coefficient and predicts that the results will keep improving with an index mark of 30.97995 in the next three years. However, this cannot fully predict the results as dynamics especially on perceptions might change drastically. This predicts that the average results is likely to move from **88.39** to (**88.39** + **30.97995**) in the next 3 years of use of BSC at LAPFUND. This is to predict the future employee performance average score with an error margin of 0.007528

#### 4.4 Consistency to current theories

The study has proved most exiting theories right and LAPFUND has adopted both theories discussed. First, on the goal-setting theory, the organization does indeed set goals based on both long-term and short-term structures and strategies. These goals are aligned to the strategic objectives and broken down into the four perspectives of BSC. Likewise, the top-down approach has been well articulated as the corporate score card is first developed; later unit score cards are developed and eventually teams and individual staff get to develop their score cards. This avoids a scenario where targets set fail to achieve overall strategy.

NSSF Kenya, NSSF Uganda, Central Bank of Uganda and Kenya Revenue Authority were the regional benchmarks and are not yet fully automated in terms of the BSC system. Organizations that could be of full comparison were not physically reachable by the researcher and include Standards Australia, Texas Eastman, Analog Devices and Big-3 automobiles whose data was only obtained online.

#### CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

The Study investigates and outlines the perceived influence of the balanced score card strategy on corporate and employee performance at LAPFUND. Employees were able to give their views on issues like how objective is the system; if managers committed to performance measurement; impact of individual performance on overall performance; usability of the system and how user friendly it is; impact on professional and personal development; timelines and milestones of the system; target setting approaches and rewards and recognition guidelines after system evaluation.

#### **5.2 Summary of findings**

The paper concludes that the balanced scorecard approach may require some substantial changes in culture within the organization. The balanced scorecard requires understanding, commitment and support from the very top of the business down. The balanced scorecard will evolve as it has support across board and is viewed as a very objective system, as opposed to the previous manual system. However, major changes and improvements will have to be undertaken especially on automation, training and the reward and recognition guidelines as most scored these indicators low

As culture changes and develops to accept the new approach and members of the organization mature within the new culture, the organization will find new things to measure, new goals in different areas, to make the balanced scorecard even more balanced and effective in supporting a living, growing, viable organization. This will surely improve scores as most of the 28 staff saying they are neutral will soon be satisfied with the BSC system. Overall, staff rated the BSC system at 3.04/5 with most scoring top on Monitoring and Evaluation; Target Setting; Strategic Planning and Cascading. Some of the challenges are outlined by the study as the issue of Time Management where staff wanted the PMTT to observe punctuality and strict adherence to the Performance Management Cycles and Work plans. This they believe will ensure the cycles of events are completed in a timely manner. Staff also wish to be involved appropriately in performance management.

Among the major challenges was the issue of full automation of the BSC System. Most staff felt the Balance Score Card System (the BIRT Metrics software application) has several hitches that need to be addressed for smooth operations of the process. The hindrances include system down time; unable to upload evidence; user friendliness; refresher trainings; email notifications; customized reports and system errors. The study used a structured Questionnaire which was hand delivered and few emailed. The questionnaires (Annex I) used was reviewed and a report prepared based on the findings. The report details all the findings and recommendations made to top management in order to ensure continuous and successful implementation of the BSC system.

#### **5.3** Limitations to the study

There were few limitations to the study, with the main obstacle being limited time. This was addressed by extending working hours and using hand delivery as opposed to emails only in administering the questionnaires. The other challenge was getting any local company that has fully implemented the BSC for comparison studies since most are yet to get to the 100% mark.

#### 5.3 Implication of policy, theory and practice

Based on business principles and corporate objectives, the balanced scorecard is tailored for each employee of the organization to contribute in a holistic towards the corporate objectives. Downward alignment of vision and direction allows each business unit to tailor its own objectives to contribute effectively to the company's objectives. Business unit scorecards turn further into individuals' personal scorecards, which become the subject of regular staff reviews and appraisals. The process of creating the BSC system is a fairly involved process which requires a lot of understanding and commitment. For some business unit leaders, a lot of facilitation is required especially on operating the BSC software application. The business units also have to focus on those aspects of corporate objectives to which they can realistically contribute.

Translating the corporate scorecard into a business unit scorecard, and eventually a personal scorecard, requires one to think about the vison and mission of the establishment; and more so about the customer. Management must ask "what are the

customers' expectations?" "What impact does the existing strategies and goals have on customers?" Balancing both customer and corporate expectations is the key to successful performance as all stakeholders will have their targets met. The BSC system is balanced in another dimension and not just a balance of measures of essential areas of the business, but also a balance of actual goals versus accountability. If staff do not accept accountability for achievement of the balanced measures (customer, financial, internal processes and learning and growth) then there is no BSC system.

The balanced scorecard approach may require some substantial changes in culture within the business. The balanced scorecard requires understanding, commitment and support from the very top of the business down. The balanced scorecard will evolve. As culture changes and develops to accept the new approach and members of the organization mature within the new culture, the organization will find new things to measure, new goals in different areas, to make the balanced scorecard even more balanced and effective in supporting a growing and viable organization.

#### **5.4 Conclusion and Recommendations**

Different organizations have different needs, market segments, personalities, stakeholers, products and services. As such they will end up with significantly different balanced scorecards. Depending on the business model, the company will have to adopt different theories to setting up their scorecards. The study can conclude that if LAPFUND wants to keep excelling with the use a balanced scorecard system, then staff need to be prepared for rapid learning, substantial culture change, a lot of hard work and willingness to communicate through culture champions on what needs to be improved. The study recommendations are given below and if management can agreed to employ the following strategies to address the challenges observed, then the BSC will continue to steer LAPFUND to greater heights.

LAPFUND needs to employ a change and communications plan to address the issue of staff resistance. This can include desk reviews, use of pilot approach in implementing the system in piecemeal, frequent timely feedback to staff and have a homepage on the

website of LAPFUND that links staff directly to the BSC system. The issue of customized reports and email notifications should be included under resolving the automation issues derailing the system. Staff should be trained and the systems simplified to ensure smooth operations. Other automation issues that require urgent address are full system implementation, integration to other systems to ensure a seamless system, creation of links to reduce human error inputs and fully roll out the remaining phases of the system.

On-site trainings are also recommended as they are cheaper. Expert can be outsourced to come to the office and train staff from their workstations. A review of the rewards and recognition guidelines is required to match results to reward after staff appraisals. Also LAPFUND management needs to reduce the PMSC steps and engage staff more often through similar surveys so as to keep improving the system. Feedback reports should be automated and programmed to give timely feedback and the PMS committees need to be trained on how best to apply the system for optimal results. Other guidelines like ISO that support the PMS should also be well reviewed to match the changing internal and external environments that affect staff performance. Finally, management should avoid imposing goals and especially those not directly related to individual job descriptions. Rather, target setting and cascading should be a collective agreement after a review of strategic and individual goals of each staff are outlined.

#### **5.7 Suggestions for further Research**

For further studies, I would recommend that investigations be carried out on automation of the balanced score card to establish not just the best approach and software to use, but rather how the application of Information Communications Technology can help improve the Performance Management Cycle and raise employee performance index.

The study should further find out the different levels of ICT trainings required for each staff category and how ICT can help amplify roles of each unit in the BSC system implementation. Other beneficiaries of this study can seek to agree, disagree or build on the study using different contexts and variables.

#### REFERENCES

- Arora, R. (2002), Implementing KM a balanced score card approach, *Journal of Knowledge Management*, Vol. 6 No. 3, pp. 240-9. Big W (n.d.), Big W The Australian Store, available at: http://en.wikipedia.org/wiki/Big\_W(accessed 17 August 2008)
- Appelbaum, R.H. and Reichart, W. (1998) How to measure an organization's learning ability: the facilitating factors, Part I, *Journal Workplace Learning*, Vol. 9 No. 7
- Brewer, P.C. and Speh, T.W. (2000), Using the balanced scorecard to measure supply chain performance, *Journal of Business Logistics*, Vol. 21 No. 1, pp. 75-93.
- Brown, M.G. (2000), Winning Score: *How to Design and Implement Organizational Score Cards*, Productivity Press, New York, NY.
- Brown, P.C. and McDonnell, B. (1995), The balanced scorecard: short-term guest or long-term resident?, *International Journal of Contemporary Hospitality Management*, Vol. 7 No. 2, pp. 7-11.
- Gadenne, D. (2000), Brave new world: how can business meet new challenges in the 21st century? *Inaugural professorial lecture*, 6 September, Central Queensland University, Rockingham.
- Gautreau, A. and Kleiner, B.H. (2001), Recent trends in performance measurement systems the balanced scorecard approach, *Management Research News*, Vol. 24 Nos 3/4, pp. 153-6.
- Gautreau, A. and Kleiner, B.H. (2001), Recent trends in performance measurement systems the balanced scorecard approach, *Management Research News*, Vol 24 Nos 3/4, pp. 153-6.

- Gerrish, E. (2015) The Impact of Performance Management on Performance in Public Organizations: A Meta-Analysis. *Public Administration Review* 76(1):48–66.
- Hagood, W.O. and Friedman, L. (2002), Using the balanced scorecard to measure the performance of your HR information system, *Public Personnel Management*, Vol. 31 No. 4, pp. 543-57.
- Johnsen, A. (2001), Balanced scorecard: theoretical perspectives and public management implications, *Managerial Auditing Journal*, Vol. 16 No. 6, pp. 319
- Kaplan, R. and Norton, D.P. (1992), The balanced scorecard measures that drive performance, *Harvard Business Review*, Vol. 70 No. 1, pp. 71-9.
- Kaplan, R.S. and Norton, D.P. (1993), Putting the balanced scorecard to work, *Harvard Business Review*, Vol. 71 No. 5, pp. 134-47.
- Kaplan, R.S. and Norton, D.P. (1996a), Using the balanced scorecard as a strategic management system, *Harvard Business Review*, Vol. 74 No. 1, pp. 75-85.
- Kaplan, R.S. and Norton, D.P. (1996b), Linking the balanced scorecard to strategy, *California Management Review*, Vol. 39, pp. 53-79.
- Kaplan, R.S. and Norton, D.P. (2001a), The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment, *Harvard Business School Press, Boston, MA*.
- Kaplan, R.S. and Norton, D.P. (2001b), Transforming the balanced scorecard from performance measurement to strategic management: Part 1, *Accounting Horizons*, Vol. 15 No. 1, pp. 87-104.
- Kaplan R.S and Norton D.P. (1992) The balanced scorecard-Measures that drive

- performance. *Harvard business review*, 70(1):71-79.
- Kaplan, R.S. on Measuring Business Excellence, Vol. 7 No. 1, pp. 30-5.
- Latshaw, C.A. and Choi, Y. (2002), The balanced scorecard and the accountant as a valued strategic partner, *Review of Business*, Vol. 23 No. 1, pp. 27-9.
- Lipe, M.G. and Salterio, S.E. (2000), The balanced scorecard: judgmental effects of common and unique performance measures, *The Accounting Review, Vol.* 75 No. 3, pp. 283-286.
- McGahan, A.M. & Porter, M.E. (1997) How Much Does Industry Matter, Really? Strategic Management Journal, 18 (Summer Special Issue), pp. 15–30.
- Molleman, B. (2015) The challenge of implementing the Balanced Scorecard
- Porter, M.E. (1979) How Competitive Forces Shape Strategy, *Harvard Business Review*, March/April 1979.
- Porter, M.E. (1980) Competitive Strategy, Free Press, New York, 1980.
- Porter, M.E. (1985) Competitive Advantage, Free Press, New York, 1985.
- Porter, M.E. (ed.) (1986) Competition in Global Industries, *Harvard Business School Press*, Boston, 1986.
- Porter, M.E. (1987) From Competitive Advantage to Corporate Strategy, Harvard Business Review, May/June 1987, pp 43–59.
- Porter, M.E. (1996) What is Strategy, Harvard Business Review, Nov/Dec 1996.

- Porter, M.E. (1998) On Competition, Boston: Harvard Business School, 1998.
- Porter, M.E. (1990, 1998) The Competitive Advantage of Nations, Free Press, NY, 1990.
- Porter, M.E. (1991) Towards a Dynamic Theory of Strategy, *Strategic Management Journal*, 12 (Winter Special Issue), pp. 95–117.
- Poll, R. (2001), Performance, processes and costs: managing service quality with the balanced scorecard, *Library Trends*, Vol. 49 No. 4, pp. 709-17.
- Porter, M.E. (2001) *Strategy and the Internet, Harvard Business Review*, March 2001, pp. 62–78.
- Porter, M.E. & Kramer, M.R. (2006) Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility, *Harvard Business Review*, December 2006, pp. 78–92.
- Porter, M.E. (2008) *The Five Competitive Forces That Shape Strategy*, Harvard Business Review, January 2008, pp. 79–93.
- Porter, M.E. & Kramer, M.R. (2011) Creating Shared Value, *Harvard Business Review*, Jan/Feb 2011, Vol. 89 Issue 1/2, pp 62–77
- Porter, M.E. & Heppelmann, J.E. (2014) How Smart, Connected Products are

  Transforming Competition *Harvard Business Review*, November 2014, pp 65–88
- Porter, M.E. & Heppelmann, J.E. (2015) How Smart, Connected Products are

  Transforming Companies, *Harvard Business Review*, October 2015, pp 97—114
- Schneiderman, A.M. (2006) How to build a balanced scorecard, October 2006

The Business Daily (2016) *Insurance industry CEOs see brighter future*, Friday July 15, 2016. Pp 19

Waal, A.A. (2003), The future of the balanced scorecard: *an interview with Professor Dr Robert S. Kaplan*, Measuring Business Excellence, Vol. 7 No. 1, pp. 30-5

# **APPENDICES**

Appendix 1	Internal survey questionnaire
Appendix 2	LAPFUND corporate score card, Strategy unit score card and Individual
	Score card
Appendix 3	UON MBA proposal/project supervision allocation form
Appendix 4	UON student introduction letter