

**PERFORMANCE MEASUREMENT IN MANUFACTURING COMPANIES
(A SURVEY OF JUABEN OIL MILL AND GUINNESS GHANA LIMITED ASHANTI
REGION)**

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STATEMENT OF AUTHENTICITY

We have read the university regulations relating to plagiarism and certify that this report is all our own work and do not contain any unacknowledged work from any other source. We also declare that we have been under supervision for this report herein submitted.

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SUPERVISOR'S DECLARATION

We hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by Christian Service University College.

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ABSTRACT

The study was conducted to determine the extent to which the four perspective of the balanced scorecard help manufacturing companies in the performance measurement. Issues talked about include;

- Identify the extent of the usage of the balance scorecard by manufacturing companies
- Explore whether manufacturing companies use the four perspectives namely, customer, financial, internal business and learning and growth of the performance scorecard
- Explore how to communication the companies vision, mission and objectives into the perfect development and implementation of the balanced scorecard

Two manufacturing companies were used for this study; that is

Juaben Oil Mill (Ashanti Region)

Guinness Ghana Limited (Kumasi-Kaase)

The main data collection instrument adopted for the study included the administration of questionnaire and unstructured interviews.

The target population was categorized into two, namely; the management team members and the staff of the two companies.

The findings of this report revealed that the companies used P4G (the employees set their own target and also suggest ways to achieve those objectives) and comparison of past record with present record to measure performance. Both companies do not use balanced scorecard due to lack of understanding. The study shown that the main objective of these companies were profit maximization hence the need for performance appraisal.

It is evident from this study that the presence of balanced scorecard will help them to continuous profit.

Base on the findings, conclusions were drawn on the need for both companies to implement the balanced scorecard.

A number of suggestion and recommendations were also made which can serve as guidelines and yardsticks for the implementation of the balanced scorecard.

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DEDICATION

To our various families for their constant love and support

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To all our dedicated lecturers who made the journey with us and never failed to show us the way.

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CHAPTER ONE

1.0 BACKGROUND OF THE STUDY

Accountants communicate with financial statements. Engineers communicate with as built drawings. Architects communicate with physical models. It seems that almost every profession has some means of communicating clearly to the end user. However for people engaged in strategic planning there has been an on-going dilemma. The finished product, strategic plan, has not communicated and reached the end user. Sure strategic plans are full of bar charts nice covers well written, and professionally prepared but they simply have not impacted the people who must execute the strategic plan. The end result has been poor executions of the strategic plan throughout the entire organization. And the sad fact of the matter is that execution of the strategic plan is every body's business not just upper level management. Upper level management creates the strategy, but execution takes place from the bottom up. So why do strategic plans fail? According to balanced scorecard collaborative, there are four barriers to strategic implementation.

There has been growing criticism of financial measure in performance evaluation system in manufacturing company as they are his tone in nature and lack futurist outlook. The relevance in the information are, when the company are building internal assets and capabilities is questioned. The situation may worsen when the firm is compelled to pursue short term goals at the cost of the organization.

Kaplan and Norton developed innovative and multi-dimensional corporate performance scorecards known as Balance Scorecard. It compels the firm align its performance and control from the customers perspective, internal business perspective, learning and growth perspective and innovation their impact on the financial indicator. There are agreements that the Balance Scorecard should be unbalanced based on the strategy followed by the firm. The corporate experiences with the implementation of the Balance Scorecard suggest mixed results. From the article of Manoj Anand, Sahay, Sushashish. These are articles that a) identify the extent of the usage of the Balance Scorecard by manufacturing company (b) Explore whether manufacturing firms use all four perspectives, namely Customer, Financial, Internal Business and Learning and Growth in their performance scorecard. (c) Capture the management innovation for implementation of the Balance Scorecard. d) Identify the key performance indicators in relevant perspective scorecard and evaluate the performance of the Balance Scorecard as a management

1.1 STATEMENT OF THE PROBLEM

After reading the article entitled “balance scorecard in India” by Sahay et al, we identified these problems;

1. How manufacturing companies developed a multidimensional performance measurement.
How can their short term operation, control the long term vision and strategy of the business?
2. How to communicate a firm's visions and objectives to strategize in the development of the Performance

1.2 OBJECTIVE OF THE STUDY

What has prompt us after go through the article stated above for the manufacturing companies concerning the balance scorecard are?

1. Identify the extent of the usage of the balance scorecard by manufacturing company.
2. Identify the key performance indicators in relevant perspective scorecard and evaluate performance of the balance scorecard as a management tool.
3. Capture the management innovation for implementation of the balance scorecard.
4. Explore how to communicate the companies' vision, mission and objective to the stakeholder.

1.3 RESEARCH QUESTIONS

1. How do the three non- financial perspectives of the balance scorecard help to improve or achieve the financial objective of the manufacturing company?
2. How does the manufacturing company measure performance?

1.4 DEFINITION OF THE TOPIC

According to (Elbert and Brown 2000; Drury, 2002): Balance scorecard is a casual of lead and lag indicator of performance. It provides a useful way to think about alternative method people use when designing performance evaluation part of incentive compensation plans. it emphasis or focus on balance scorecard as communication device a way of helping manager and other employees see how their action ultimately affect financial performance measure to and specify examples of performance measure to provide people with feedback.

Also, Kaplan and Norton, 1992a and b, 1993 1996 2000, defines Balance Scorecard as a strategic performance management tool- a semi standard structured report supported by automation tool that can be used by manager to keep track of the execution of activities by staff within their control and monitor the consequence arisen from these action. it a well know widely adopted performance management framework of management tools.

1.5 METHODOLOGY

The study covered the Kumasi metropolis of the Ashanti Region of Ghana Businesses at Guinness Company Limited, and Juaben Oil Mill Company Limited were places, where data was collected for this study.

1.6 DATA COLLECTION TECHNIQUE

Both interview and questionnaires would used to collect data.

The purposive or judgmental sampling technique would be used to select the sample for the study.

1.7 POPULATION AND SAMPLING SIZE

A sample of 30 would be selected from the manufacturing business group. Both interviews and questionnaires would be used as means of collecting primary data.

1.8 DATA ANALYSIS AND PRESENTATION

Data would be analyzed manually and the findings presented in percentages. Both quantitative and qualitative data would be analyzed to arrive at the findings.

1.9 LIMITATION

The time given for the this study is inadequate, as such a large sample size could not be used, which would have been a better representation of the population.

1.10 SIGNIFICANCE OF THE STUDY

At the end of the study the outcome of the investigation will be shared and compared with related studies and to among the manufacturing companies. We will call for effective and efficient of the outcome of the study to use by companies in performance measurement.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

The literature view concerning the topic “How does manufacturing companies measure performance? Have been divided into four sub-sections. The first section would emphasis on communicating the vision, mission, objective, and strategies of the organization to its internal property (employee and other stakeholders) on improving upon their performances. The second section would explain performance measurement in the light of manufacturing companies; the third section would also cover how does the four perspective of the balance scorecard help management in achieving the objective. (Financial and the overall company performance) and implementation of the balance scorecard.

The professional and academic strategy literatures claim that many organizations have found traditional performance measures (e.g. ex post costs, profits, return on investment) to be insufficient guides for decision making in today’s rapidly changing, hyper-competitive environment. It has long been argued that sole reliance on current, financial measures of performance does not reflect the importance of current resource decisions for future financial performance [e.g., Deardon, 1969]. Though some firms recognized the importance of non-financial measures of performance many years ago (e.g., General Electric in the 1950s), growing international competition and the rise of the TQM movement have widened their appeal. Since the 1980s, authors have filled the professional and academic literature with recommendations to rely more on nonfinancial

2.1 PERFORMANCE MEASURE AS A COMMUNICATION DEVICE

Merchant [1989] argues that communication failure is an important cause of poor organizational performance. Because no organization's knowledge or strategy exists apart from or succeeds without its key human actors, the ability to effectively communicate may be itself a source of competitive advantage [Tucker et al., 1996; Daft and Lewin, 1993; Grant, 1991; Schulze, 1992; Amit and Shoemaker, 1990].

If the BSC does articulate organizational knowledge and strategy in a superior manner, then it may be a source of competitive advantage, at least until all competitors' use it equally well. The organizational communication literature, however, identifies a complex set of characteristics that affect the quality or effectiveness of communication (or articulation) in organizations. Based on a review of the literature, an organizational communication device or system may be characterized by the attributes of its (1) processes and messages, (2) support of organizational culture, and (3) creation and exchange of knowledge. Brief reviews of these communication characteristics follow.

2.2 PROCESSES AND MESSAGES

Individuals use and rely on communication if processes and messages are perceived as understandable and trustworthy. Other characteristics of effective organizational communication processes are routineness, predictability, reliability, and completeness [Barker and Camarata, 1998; Goodman, 1998; Tucker, et al., 1996]. Communication also is more effective if it uses concise messages and clearly defined terms [Goodman, 1998]. Furthermore, an effective communication system precludes suppression of truth or misstatement of performance. There

should be no ambiguity regarding the differences between truthfulness and “looking good” or integrity with winning. Thus, the effective communication system and its users will be intolerant of “spin, deniability, and truth by assertion” [Goddman, 1998]. Therefore, organizational communication will be effective if processes and messages are valid representations of performance. Note the conceptual overlap between this aspect of effective communication and effective performance measurement, which was discussed previously.

2.3 SUPPORT OF CULTURE, VALUES AND BELIEFS

The traditional view of effective organizational communication is that it supports organizational culture and individual interest by reinforcing desired patterns of behavior, shared values, and beliefs. Effective communication demonstrates that the organization does what it says and that individual or group rewards are predicated on their actions [Tucker, et al, 1996; Goodman, 1998]. Communication by leaders that consistently articulates shared goals, values and beliefs [Tucker, et al, 1996; Goodman, 1998] also is effective in reinforcing culture and directing behavior. Furthermore, effective communication must encourage behavior consistent with organizational goals, values, and beliefs [Goodman, 1998]. Proponents of the BSC [e.g., Kaplan and Norton, 2000] argue that it also can be an instrument of cultural and strategic change. Consistent with Kotter’s [1995] observations of change processes, the BSC may facilitate change by effectively creating and communication a credible vision of and method for achieving change.

2.4 CREATION AND EXCHANGE OF KNOWLEDGE

Knowledge, which may be objective or tacit, is the basis of strategy formulation and implementations. Therefore, an effective communication system supports an organization’s

strategy by nurturing both objective and tacit knowledge. The effective communication system exchanges objective (observable) knowledge among key individuals so that all are aware of the organization's current status. Organizations create objective knowledge from the development and integration of new knowledge by individual specialists. Objective knowledge usually derives from the refining and sharing of individuals' tacit knowledge, which is understood but not yet articulated or usable by the organization. Therefore, an effective communication system encourages and enables the sharing of individuals' experiences and collects those shared experiences. This may be best accomplished by intense and frequent sharing, and by dialogue rather than one-directional reporting. Perhaps importantly for the effectiveness of the BSC, de Haas and Kleingeld [1999] argue further that participation in the design of performance measurement systems is an important determinant of effective communication of strategy.

2.5 TRANSLATING THE VISION

The top management of the organization will come out with a clear vision and will try to develop consensus among the top layers of management. They would explicitly agree on the revenue projections in each of the products and service the company offers; identify most desirable customer segments so on. Finally the top management would translate their vision into such term that are easily understood by those (middle and lower level managers) who ultimately executive the vision.

2.6 PERFORMANCE MEASUREMENT

Performance evaluation or measurement is an integral part of management accounting (Emmanuel and Otley, 1995). While financial measures of industrial age environment continue to dominate in the corporate performance scorecard, there has been growing use of non-financial, forward-looking measures such as on-time delivery, customer satisfaction, and productivity in addition to financial measures for performance evaluation by corporate India in today's information age (Anderson and Lanen, 1998; Joshi, 2001). The publication of Johnson and Kaplan's book titled *Relevance Lost* in 1987 brought revolution in the history of management accounting. There has been growing criticism of financial measures as they are historic in nature and lack futuristic outlook (Schoenfeld, 1986; Dearden, 1987; Emmanuel and Otley, 1995; Kaplan and Norton, 1996a). The top ten performance measures in Japan do not include any financial measure whereas Europe widely uses the cost indicators (Jeans and Morrow, 1990). The other criticism of financial measures is that they strive to quantify too many things and that too in a wrong way.

Their relevance in the information age when the companies are building internal assets and a capability is questioned (Elliott, 1992). The traditional view of business performance measurement as a vehicle to control performance is immature. The use of performance measures as a means of control led to managing the measures rather than performance by the people whose performance is measured. A large number of similar examples are reported in the financial press. The situation may worsen when the firm is compelled to pursue short-term goals at the cost of the organization's long-term objectives. The management may reject a positive net present value project simply because it may have adverse impact on short-term return on investment due to

depreciation and asset valuation policy (Dearden, 1969; Hopwood, 1972; Vancil, 1979; Kaplan, 1984; Demirag, 1998).

The financial measures alone in performance measurement and control system are inadequate tools for strategic decision-making as they are unable to ensure goal congruence between management decisions and actions (Parker, 1979; Maciariello and Kirby, 1994). The lack of 'strategic focus' in its design and implementation led to a plummet in firm performance (Venkatraman and Ramanujam, 1986; Baldwin and Clark, 1992; Brancato, (1995). Chakravarthy (1986) found that classic financial measures (return on assets, return on sales, and return on capital employed) failed to distinguish between Peters and Waterman's (1982) 'excellent' and 'non-excellent' firms. The accounting measures of performance captured only the history of a firm. Thus, the performance management systems should have strategic focus and should include both financial and operating measures.

Dale (1996) found that investment analysts who considered both financial and non-financial measures were more accurate in their earnings forecasts than those who considered only financial indicators. Kaplan and Norton (1992) developed an innovative multi-dimensional corporate performance scorecard known as the Balanced Scorecard. It provides a framework for selecting multiple key performance indicators that supplement traditional financial measures with operating measures of customer satisfaction, internal business processes, and learning and growth activities. It is a step towards linking 'short-term operational controls' to the 'long-term vision and strategy' of the business. The focus is on the strategy and vision. It compels the firm to align its performance measurement and controls with the customers' internal business

processes and learning and growth perspectives and investigate their impact on the financial indicators.

The Balanced Scorecard protects the managers from information overload by limiting the performance measures to only four perspectives, namely, customer, financial, internal business, and learning and growth. It also safeguards from sub-optimization in the decision-making process by forcing the managers to consider the four perspectives of business performance to have a complete picture. The implementation of the Balanced Scorecard is a process whereby the organization's strategy is translated into a set of key performance indicators (Kaplan and Norton, 1996a). Slater, Olson and Reddy (1997) argued that the Balanced Scorecard should be 'unbalanced' based on the strategy followed by the firm. The corporate experiences with the implementation of the Balanced Scorecard suggest mixed results. However, these examples are confined only to Europe and North America.

Lanen (1999) have examined the extent to which a broad set of organizational performance measures are used and whether these measures represent internal and external perspectives as well as financial and quantitative perspectives. Joshi (2001) has examined the management accounting practices in a sample of 60 large and medium-sized manufacturing companies in India and compared the results with the study of Chenhall and Smith (1998). No study on the implementation process of the Balanced Scorecard in the manufacturing companies' context appears to have been done.

The objectives of the present study are to:

- Identify the extent of usage of the Balanced Scorecard by manufacturing company.
- Identify the key performance indicators in relevant perspective scorecard and evaluate performance measure in manufacturing company.
- Capture the management innovation for implementation of performance measurement.
- Explore how to communicate the companies vision, mission and objective to the stakeholder.

2.7 PREVIOUS RESEARCH

Management by Objectives and Balanced Scorecard

The management by objectives (MBO) philosophy of Drucker (1955) and the Balanced Scorecard approach of Kaplan and Norton (1992) are based on ‘strategic measurements’, ‘goal congruence,’ and ‘Theory Y’ of Mc-Gregor (1960) as a means to improve the firm performance (Hoffecker and Goldenberg, 1994; Newing 1995; Dinesh and Palmer, 1998). The Balanced Scorecard is based on ‘rational goal model’ and incorporates ‘human relations model’. It is a motivation tool also since employee compensation is linked with different key performance indicators. The difference between the two approaches is that which MBO is more ‘open-ended,’ the Balanced Scorecard is ‘more explicit and focused’ as it incorporates the perspectives of customers, shareholders, internal business processes, learning and growth (Dinesh and Palmer, 1998).

The major motivations for the introduction of MBO in the 1960s and 1970s in 48 Irish organizations were ‘to link evaluation to performance,’ ‘aid manager in planning,’ ‘motivate

managers’, and ‘to have two-way feedback’ contrary to ‘goal congruence’ found by Reddin and Kehoe (1974). It failed because, in practice, it has been used only as a performance evaluation tool and a focus on ‘goal congruence’ and ‘human element’ has been missing (Landau and Stout, 1979; Poister and Streib, 1995; Bechtell, 1996). Dinesh and Palmer (1998) expressed similar concerns on the failure of the Balanced Scorecard in view of the turbulent business environment and the continuously changing need for an appropriate set of performance measures. The Balanced Scorecard is an approach within the broader field of total quality management to effectively measure strategy rather than a vehicle to lay down the strategy (McAdam and O’Neill, 1999). Grint (1997) expresses his concerns over the means being emphasized more than the objectives in the implementation of the Balanced Scorecard and total quality management.

2.8 THE FOUR PERSPECTIVE OF BALANCE SCORECARD

Many scholars have given credit to Kaplan and Norton for their tremendous work on the Balance scorecard as an effective and efficient management performance measure tool which integrate financial non financial. It is assume that no organization exist in the vacuum therefore there is the need to recognize the stakeholders who are involved. The four perspectives are; customer perspectives, internal business process perspective, learning and growth perspective and along with financial perspective (normally referred to as tradition method).

(a) CUSTOMER PERSPECTIVE

As Richard Quinn vice president of Quality at sears has observed “you can’t manage anything you can’t measure”. Customer in recent management philosophy has show an increasing relationship of the importance of customer focus and customer satisfaction in any business.

Drury, (2000), contributes the customer perspective of the balance scorecard; manager should indentify the customer and market segment in which the business unit will compete. Target segment may include both existing and potential customers, then develop performance measure that track the business unit's ability to create satisfied and loyal customer in the targeted segment. Customer perspective typically includes several core and generic measure that relate to customer loyalty and the outcomes of the strategy in the targeted segment. It includes; market share, customer retention, new customer acquisition, customer satisfaction and customer profitability.

Art schneiderman; for an unprofitable existing customer, action should be taken to try and make them profitable. Such action might include trying to alter their buying behavior price increases. If neither of these strategy is successful they should not be retain.

(b) INTERNAL BUSINESS PERSPECTIVE

The internal business perspective turn lead to higher customer satisfaction and market share and finally to superior financial performance .horngren al et (2002) the balance scorecard scheme is organized , rational and identifies for employees and management the importance of each perspective as a feeder of success into the next text. It encourages the identification of measure that answers the question “what must we excel at”?

Kaplan and Norton highlights some innovation measures they have observed in organizations using or who want to use balance scorecard ; percentage of sales from new product, new product introduction versus competitors'; also new product introduction versus plan, time to develop next generation products, number of key items in which the company is first or second to the market,

break even time being the time from the beginning of product development work until the product has been introduced and has generated enough profit to pay back the investment originally made in this development.

Kaplan and Norton, 2002; includes warranty and repair activity, treatment of defects and returns and the process and administration of customer payment. In addition, an excellence community relation is an important strategic objective for ensuring continuing community support to operate manufacturing facility in companies where environmental factors are involved.

Finally (Elbert, Brown 2004) management must provide incentive for good supplier relation ship company develop supplier rating system that indicate which supplier certified for delivery of product without inspection and which are not. Manager in company should have much incentive to get supplier certified, working with them to reduce their cost and increase quality.

(c) THE LEARNING AND GROWTH PERSPECTIVE

Kaplan and Norton (2002) have identified the following three principal categories enables for the learning and growth objectives: employee capabilities, information system capabilities and motivation, empowerment and alignment.

They point out that, although they have found that many have made excellent progress on specific measure for their financial color, innovation and operating processes virtually no effort has been develop to measuring the outcome relating to the above three categories. As companies implement management process based on the Balance Scorecard framework more creative and customized measures relating to the learning and growth perspective are expected to encourage.

Also management should stress on motivation, empowerment and alignment number of suggest improvement per employee is proposed as a measure relating to having motivated and empowered employees. The performance drivers for individual organizational alignment focus on whether individual have their goal aligned with company objectives articulated in the Balance Scorecard. Outcomes measure is the percentage of employee with personal souls.

Balance Scorecard in learning and growth perspective includes employee training and corporate cultural attitudes related to both individual and corporate self improvement. In a knowledge-worker organization people are the main resource in the current climate of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning modes.

Government agencies often find themselves unable to hire new technical workers and that same time is showing a decline in training of existing employee. Kaplan and Norton emphasizes that 'learning is more than 'training', it also includes things like mentors and tutors within the organization, as well as that ease of communication among workers that allow them to readily get help on a problem which it is needed. It also includes technological tools such as an intranet.

(D) FINANCIAL PERSPECTIVE

Kaplan and Norton reject the new that financial measures are unnecessary on the ground that improvement in the operational measures are not automatically followed by an improvement in the financial measures. Operational improvement can create excess capacity but financial benefit of it is eliminated or used to generate additional revenues. The financial measure therefore provide feedback on whether improved operational performance is being translate into improved

financial performance and also summarized the economic consequences of stated by implementation.

Kaplan and Norton do not disregard the traditional need for financial data. Timely and accurate funding data will always be priority and managers will do whatever necessary to provide it. In fact, often there is more than enough handing and processing of financial data. With the implementation of a corporate database, it is hoped that more of the processing can be centralized and automated. But the point is that the current emphasis on financial leads to the unbalanced situation with regard to other perspectives.

There is perhaps a need to include additionally financial related data such as risk assessment and cost benefit data. In the end financial measure are important but are not sufficient to guide performance in creating value are the non-financial measure sufficient form providing the both financial and non-financial to guide organizational performance toward success.

CHAPTER THREE

METHODOLOGY

3.0 RESEARCH DESIGN

This study tried to find out in Kumasi. The study was a description of survey conducted among the members of the sector. The two main research philosophies that are quantitative and qualitative research were used. Both qualitative and quantitative data were analyzed.

3.1 POPULATION SAMPLING SIZE

The population involved in this study is the informal manufacturing company in Ashanti Region. It was not possible to work with the whole population. The judgmental sampling techniques was used to select a sample for answering the questionnaires among other techniques like; Simple random, stratified random and systematic random sampling technique.

Members selected were key individual who could provide the needed information for the questionnaires. This done by using printed questionnaires. The judgmental sampling technique is easy.

3.2 SAMPLE SIZE

A sample size of 30 was selected from the manufacturing companies. Due to time constraints a large sample could not to used, however the sample selected provide the needed information. The sample sizes selected were as follows:

3.3 DATA COLLECTION INSTRUMENT

Among the objectives of the study was to identify the extent of the usage of the balance scorecard by manufacturing company. Both interviews and questionnaires were used to collect data for this. Reasons for the questionnaires are that;

- Respondents have adequate time to give well thought out answers.
- Respondent, who are not easily approachable, can also be reached conveniently
- Large samples can be made use of and thus the results can be made more dependable and reliable.
- Although it has disadvantage as; the control over questionnaires may be lost once it is sent. Also it can be used only when respondents are educated and cooperating. This is the reason why interviews were also used.
- Copies of questionnaires are included in appendix.

3.4 LIMITATION

- **Responses:**

To get true facts were somehow difficult among some workers. Also, the time for the study was in adequate; as such a large sample size could not be used, which it was also difficult to reach some important officials who could give more reliable and accurate information, thus information obtained was scanty.

- **Cost**

Traveling cost and the actual cost involved in completing the project work was also a limiting factor. That the more pages written the higher the cost of printing.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

This chapter represents the analysis and interpretation of data collected, result and findings and other free discussion on the topic “To what extent does the Balance scorecard (the four perspectives) help manufacturing companies in performance measurement”. A survey of Juaben Oil Mills and accounts section of Guinness Ghana Limited all in the Ashanti region.

We conducted a questionnaire base survey captured the issues in the communication of the company vision and objective in a dynamic strategy how the company abreast to the use of the four(4) perspective and implementation of the Balance scorecard and its associate consequence find and more importantly on performance measurement using the Balance scorecard. The study consist of two (2) major manufacturing company which we have stratified Ashanti region into Northern and Southern. Based on value judgment and since best result were the paramount to us we include the elite employees and customer of the company. Also as part of our finding a vital important were obtain through interviews and personal observation and interacting with prominent academicians and chief financial and accounts officer in the company. The evidence is perpetual nature and while it ideally results the reality of the low impact of the Balance scorecard system. It also may reflect individual and researcher biases in ways that are not easily detectable. The study attempted to mitigate the effect of these unknown biases.

A draft questionnaire based on the review literature and objective of the studies and circulated to a growing of prominent academician and chief financial and accounts officer to respond on simple YES or NO questions and sealed of the answer. Zero means not at all or No, One means other method for performance measurement two means there is no mechanism in place. We intentionally sub- divided the questionnaire into two (2). One part of it is for management and other for elite employees in the company's.

4.1 RESPONSE

We sent 15 questionnaires to the chief financial and accounts officer and the elite employee of each company's of which five (5) were for management and ten (10) for employees in both companies. We first sent questionnaire to Juaben Oil Mill at Juaben on May 5th and follow up on 12th may for the collections of the questionnaire. We obtain 12 questionnaires fill from Juaben.80% of the received were fully filled, 5% were almost and filled half and 5% were not filled at all.

In the date of collection of the questionnaires we conducted unstructured interview with accounts officers and financial controller and other prominent employees who have worked there for 15 to 20 years. The response rate on the basis of filling the questionnaire was considerable. On one hand Guinness Ghana Limited Kumasi (kaase) as said earlier 15 questionnaires were sent out on 17th may and we went for collections on the week time which also had time to talk with credit control officer, accounts officers crew and the financial controller unit. We received 7 answered questionnaires out of 15, of which we 5 were from the management and the remaining 2 from employees.

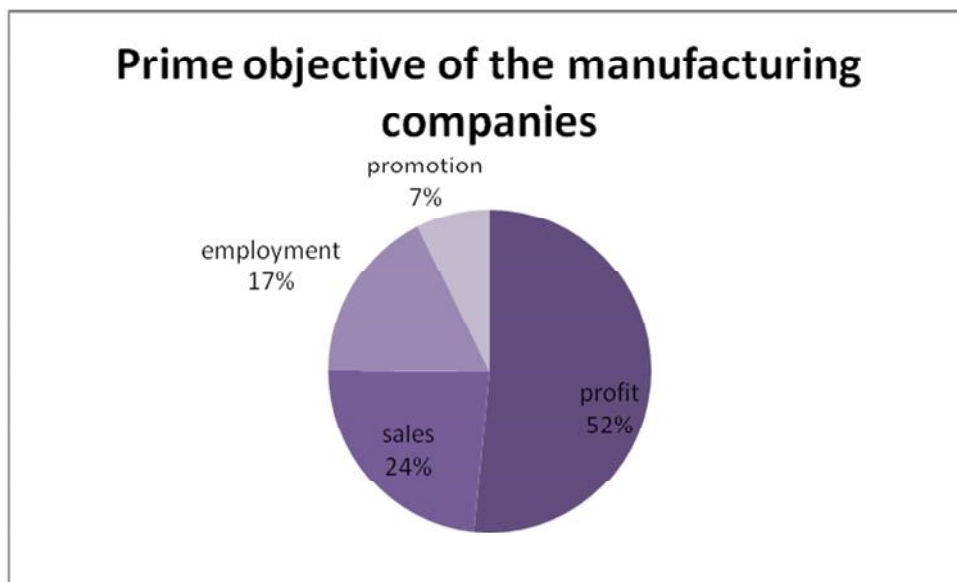
4.2 ANALYSIS OF RESPONSE USING RESEARCH QUESTIONS

4.2.1 MAIN OBJECTIVE OF MANUFACTURING COMPANIES

Profit maximization	44.4%
Sales maximization	22.4%
Employment creation	16.6%
Promotion of welfare of members	16.6%

It is clear from the pie chart below that the main objectives of the two manufacturing companies are profit maximization. That is why the companies must consider the need for a system to measure performance of their companies. The knowledge of the BSC will help the industry in earning more profits.

Figure1.



**(A) RESEARCH QUESTION: DOES THE MANAGEMENT COMMUNICATE ITS
VISION, OBJECTIVES AND STRATEGY TO EMPLOYEES**

Responses we received from the questionnaire which presumed to be the best of their knowledge

1. All the five from the management of Juaben Oil Mill shows low impact/ involvement of employees on communicating its vision and objective
2. All the seven (7) from the employees testifies that they are not involved in the management decision on the company vision and objectives. It is suspended at the heads of management, no circumstance would they be called to bring on board their competence and capability for the future of the company.
3. The interview conducted we found out that management decide what is best to their knowledge regarded the employees concerns that they consulted for deals of what they think would be beneficial on their part and growth of the company.

On the other hand, Guinness Ghana Limited (Kaase) the response obtains management clearly show that:

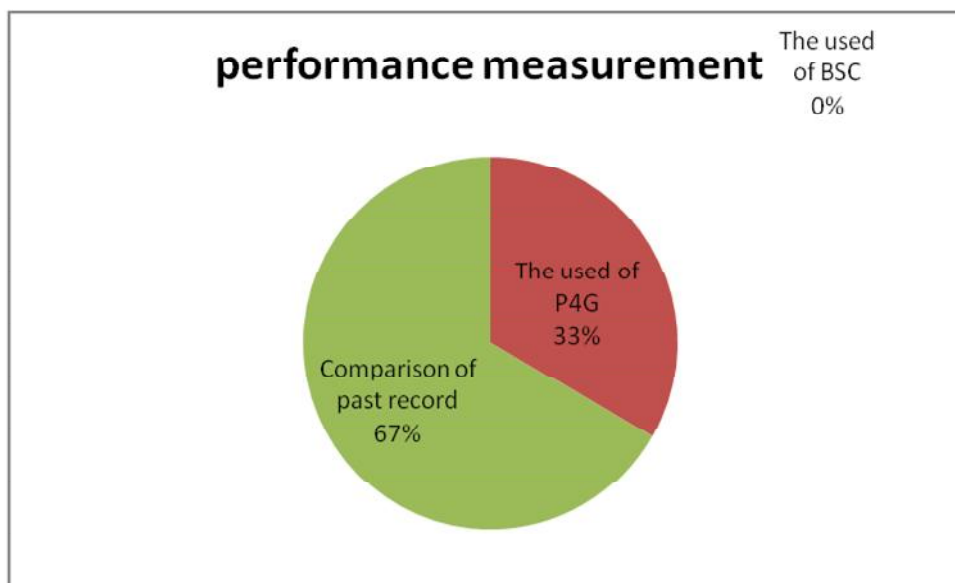
1. The entire five questionnaires prove that communicating the vision and objective is the hand of employees to set their own target to that strength, skilled and competence and it is associated and monitor by management to sue that it's achieved and various in the target are discuss and necessary changes are made for next years.
2. All the two (2) from the employees also were the same coin to that of the management. From the interview conducted response collected added explain that, despite the management given mandate to the employee to set target and bring their

vision and objectives which rally on the corporate vision and objective, management also set target depending the target of the employees. They sometime invite it loyal customers on board as to their preference and expectation and what they would want to experience.

B)RESEARCH QUESTION: PERFORMANCE MEASUREMENT

Table1(b)

How performance are measured	Number of people	Percentage
The used of BSC	0	0
The used of P4G	10	33.3%
Comparison of past record	20	66.7%
Total	30	100%



JUABEN: Performance measurement in Juaben Oil mill as the response from the questionnaire proves:

The entire answered questionnaire shows that they use the historic and past experience from the previous years. Thus they project what they have experienced and reasonable judgment is made.

This prove that they only emphasizing on the financial records to measure performance of such are; return on capital employed (ROCE), return on net asset (RONA), return on investment (ROI) and all the necessary profitability ratios and efficiency or management for the performance measurement.

One the other side of the coin, Guinness Ghana Limited (Kumasi –kaase) are not only using the historical and past projection, they also use the system called P4G.this is where the employees are groups and set target as to what they can achieve firm through their own competence and capability and later compare the outcome against the target set if it prove equal and gap. Management will help to solve WHY the gap Walter higher or low. From the discussion above it strategy proves that performance measurement by integrating the financial and non- financial tools are blurred or zero.

(C) RESEARCH OUESTION: IMPLEMENTATION AND ASSOCIATED WITH THE BSC

From our previous discussion and interview conducted as well as the questionnaire we found out that both companies have not knowledge about the BSC. Therefore implementation has not been

given a look. All the questionnaire and interview prove that they are unaware of the BSC system and do not understand the system.

They highly prove that, they would want to implement it only if the compliance with organizational goal would be easy. 80% show that would like to understand and 20% of the remaining responses say they cannot implement for it is long process and would be time consuming.

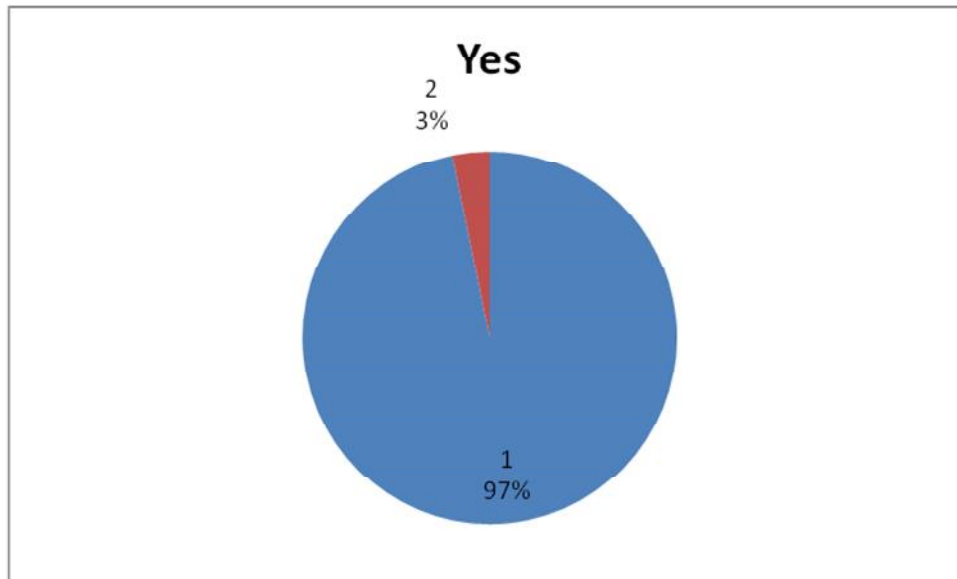
In the area of the implantation of BSC in their manufacturing companies, the management and employees agreed to this decision. The main method of the measure performance was the P4G and the comparison of the past record.

(D) RESEARCH QUESTION: DO YOU CONSIDER CUSTOMER FEEDBACK

Table 1(c)

Yes	29	97%
No	1	3%
Total	30	100%

Figure2



Responses rate from Juaben Oil Mill and Guinness Ghana Limited (Kumasi-kaase) prove 97%. They get hearing to their customers' appearance or matter concerning the improvement of their bargaining, satisfaction, expectation and need and problem they have satisfactory. They consider their customer as the main source of income and therefore treat them as kings and queens to their comfort. They give maximum that if you lose a customer it cost you five (5) times and more to another customer who would be loyal to you and prominent.

We consider that despite their sweet speeches and the maximum given we cannot conclude that it is 100% satisfaction to the customer on their feedback. Therefore the benefit of doubt we could say 3% would not be considered since resources are limited to every individual company regarded of your worth. Also it is possible to get an absolute result in human endeavor but can get a reasonable result.

Moreover, management of their companies relies on the feedback from customers in decision-making. This is because it enables management to know the exact results in advance hence making decision under certainty. Under conditions of certainty, therefore there is accurate, measurable, reliable information available on which to bases decision.

We conclude, our discussion it's obvious that the use of the BSC; the four perspectives, implementation and performance measurement in the light of the survey conducted is weak or blurred in Juaben Mills and Guinness Ghana Limited (Kumasi-kaase).

CHAPTER FIVE

SUMMARY, RECOMMENDATION AND CONCLUSION

5.0 SUMMARY

BSC is a strategic management technique for communicating and evaluating the achievement of mission, vision and strategy of the organization. The aim of scorecard is to provide a comprehensive framework for translating a company's strategic objectives into a coherent set of performance measures. (Kaplan and Norton)

BSC sought to integrate financial and non-financial measure and assist in clarifying, communicating and managing strategy. It requires that managers view the business from the following four different perspectives

- Customer perspective (how do customers see us)
- Internal business perspective (what must we excel at)
- Learning and growth perspective (can we continue to improve and create value)
- Financial perspective (how do we look to shareholders)

5.1 CONCLUSION

In the survey, review of literature and questionnaires and interview, we have analyzed the current practice of the organizational performance management system focus on the Balance scorecard. We believe that some practioners will find it useful to observe how other firm operate on the

balance scorecard and perhaps change their own practice. It may also be useful to the management accounting academic to consider the practice for re-examining the theory.

Difficulty in assigning weight age to the different perspective and establishing cause and effect relation among these perspectives have found to be most critical issue in the implementation of balance scorecard in the manufacturing companies. Most scholars cited that implementation of BSC lead to identification of cost reduction opportunity in the organization which in turn improves in the bottom line.

What does the future hold? There is likely to be greater acceptance of the BSC as a strategic management and performance management tool. Due to the limited scope of present study a large number of research issues have not been attempted but are identify in the cause of the study.

Finally, the role of manufacturing company and the corporate culture in the successful implementation of the BSC. Relationship between the BSC adaptation and financial performance of a firm, some potential issue for the research.

5.2 RECOMMENDATION

Though the balanced scorecard (BSC) frame incorporate multiple performance measures. Both financial and non-financial, it lacks a long term perspective. The distinction between cause and effect is blurred and lacks empirical validation (maltz skenhar and Reilly, 2003). Some scholars

also argue that it difficult to achieve balance between the financial and non-financial measure and that firms do no adhere to this balancing act because of implementation problems.

Atkinson, Waterhouse and Wells, 1997 challenge that the Balance scorecard system face to highlight the employees, suppliers and community contributing in the achievement of the organization objectives. Despite the critiques raised above, the questionnaires and interview conducted proved that some firms in Ghana (manufacturing companies) are not known to the system. Various prominent academicians and chief financial and accounts officers we interview they edge that they want to use the system but have no or little knowledge about it.

5.2.1 BENEFITS THE MANUFACTURING COMPANIES CAN DERIVES FROM THE BALANCE SCORECARD ARE

1. It helps to balance profit, growth and control through their present performance measurement and control system (BSC).
2. It balances short term result against long term capabilities and growth opportunities. It balances the motive and behavior and lead to identification of cost reduction.
3. It clarify and translates strategy into a specific strategic objective and identify the critical drivers of the strategic object.
4. It communicate linking strategic objectives and measures, ideally, once all employees understand the high level of objectives and measures they should established local objectives that support the business units and growth strategy.

5. It will enhance strategic feedback and learning so that managers can monitor and adjust the implementation of their strategy and if necessary make a fundamental change to the strategy itself.
6. it will bring together in a single report four different perspectives on the company's performance that relate to many of the disparate elements of the company's competitive agenda such as becoming customer oriented, shortening response time, improving quality, emphasizing team work, reducing new product launch times and managing for the long-term.
7. It will help the two manufacturing companies' managers to consider all the important operational measures together. And it will also enables managers see whether improvements in one area may have been at the expense of another.

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APPENDIX

QUESTIONNAIRE FOR MANAGEMENT

The questionnaire below is prepared to solicit your help in gathering information on how balance scorecard helps management in performance measurement for academic purpose only. The answers provided thereof will be used for nothing other than the academic purpose for which it is intended to serve. We therefore promise sincerely to treat these answers very confidentially.

This paper is seeking the views of executives and employees on how the balance scorecard has aid them in this technological age.

1. Name and Position in the Organization

2. Do you measure performance of your entity

Yes ☐

No ☐

3. Have your entity used balance scorecard (BSC) as a performance measurement tool

Yes ☐

No ☐

4. If yes explain briefly how the BSC is used

5. If no, so how do you measure performance

6. Do you encounter difficulties in the use of the BSC?

Yes ☐

No ☐

7. Could you please write the reason for your answer to question 6 above?

8. Do you see the need for the implementing of the BSC?

Yes ☐

No ☐

9. Do certain factors exist to affect the implementation of the BSC?

Yes ☐

No ☐

10. Which of the following do you think that it will highly affect the implementing of the BSC?

a. Lack of appropriate understanding to the BSC?

b. Compliance with the organizational goals

11. Could you please write other reservation you have?

12. Is there mechanism to consider customers feedback

Yes ☐

No ☐

13. At what interval do you go for workshop on innovation

a. Monthly

b. Quarterly

c. Yearly

QUESTIONNAIRE FOR EMPLOYEES

The questionnaire below is prepared to solicit your help in gathering information on how balance scorecard helps management in performance measurement for academic purpose only. The answers provided thereof will be used for nothing other than the academic purpose for which it is intended to serve. We therefore promise sincerely to treat these answers very confidentially.

This paper is seeking the views of executives and employees on how the balance scorecard has aid them in this technological age.

1. Do management communicate to you its mission and objectives of the entity?

Yes ☐

No ☐

2. Do you go for training on innovation

Yes ☐

No ☐

3. If yes, how often

a. Monthly

b. Quarterly

c. Yearly

4. Does your entity used BSC as a performance measurement tool

Yes ☐

No ☐

5. Do you encounter difficulties in the use of the BSC?

Yes ☐

No ☐

6. Do you see the need for the implementation of the BSC?

Yes ☐

No ☐

7. If no why? If yes why?

8. Do you still want management to use the BSC

Yes ☐

No ☐

9. Could you please write the impacts (both positive and negative) of the use of the BSC?

10. Does the customer's feedback suggest that they are satisfied with the used of the BSC?

Yes ☐

No ☐