TRENDS IN BUSINESS PERFORMANCE MEASUREMENT: A LITERATURE ANALYSIS

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Abstract
The pace of change and intense competition in both manufacturing and service organisations has enlarged the scope, complexity and relevance of performance measurement in contemporary business environment. This paper offers a literature analysis of financial and non-financial business performance measurement. More specifically, the paper elucidates justification for the incorporation of non-financial measures to complement the traditional accounting system. The paper employs descriptive and explanatory research approach, by relying on secondary source of information. The paper observes that business performance measurement (BPM) systems have grown in popularity and application and it has further propelled researchers and business practitioners to develop other approaches or models for building and managing BPM system. The study concluded that the success of any organisation is reflected upon by its performance level which is closely related to its strategies. Although, an increased number of non-financial performance measures have been developed to complement the financial indices, they are not in any way adequate to serve as a perfect alternative. Based on this, it is recommended that business organisations integrate financial and non-financial measures to achieve a greater symmetry that incorporates the goals of broader business constituents and offers wider opportunity for firms to create value through sustainable business performance.

Keywords: business performance measurement, financial performance measures, non-financial performance measures, accounting information, performance, benchmark.
JEL Classifications: G2, G24, L15.

Introduction
Business performance measurement has remarkably drawn huge interest from academics and business practitioners in view of the changing growing recognition to measure performance for improved business growth and competitiveness. This is not surprising considering the fact that the growth and success of any business endeavours is reflected upon by its level of performance and by extension its strategies to actualise its business objectives. However, in this era of cut-throat competition, it has become evident that the competitive landscape requires not just setting performance standards and strategies, but proactively managing business operations to sustain performance. Some of the impetus for growing
interest in business performance includes heightened global competition, declining product life cycle, technological innovation and changing customer demand (Lockamy III, 1998). Consequently, organisations in both developing and developed nations have been struggling to articulate performance measure/index that is most relevant and applicable to the nature of their businesses (Valiris & Chytas, 2005).

Essentially, performance management encompasses management information systems that are used to evaluate both individual and firm performance and it also serves as a source of information about business operations such as planning, directing and controlling (Yildiz, Hotamisli, & Eleren, 2011). Until lately, organisations focussed mainly on the use of financial measures as the basis of performance evaluation. However, some scholars criticised over reliance on the use of accounting criteria as a measure of performance (Otley, 2001). Proponents of non-financial measures of business performance posited that non-performance indices are difficult to quantify from financial point of view, however, they have gained considerable application in many fields of endeavours (Berrah, Mauris, & Venadat, 2006; Georgescu, Budugan, & Cretu, 2010).

Generally, performance measures provide yardstick to evaluate firm’s strategies and its level of commitment to actualise established standard criteria, either as a metric or as an initiative. For instance, firm’s commitment to improve sale by 80% is a measurable indicator in quantitative (financial) terms, whilst a strategic initiative statement or commitment to improve environmental and social policies is a qualitative (non-financial) performance measure. Both of these indicator categories serve as the mainstay of what is labelled as “Key Performance Indicators” (KPIs), and are applicable at the enterprise-wide, business unit or project specific levels (Neely, Huw, Mills, Platts & Bourne, 1997). Therefore, a blend of financial and non-financial criteria is vital to describe a stable position of the overall performance of the organization (Hoque & James, 2000).

According to Chenhall (2003), the choice of performance measures is likely to be predisposed by numerous contextual factors within or outside the control of the organisation (e.g., regulatory policy, competitive factors, resource capability etc.). Neely (2002) notes that the choice of performance measures is contingent on firm’s objectives, a clear basis for comparison of performance in line with set standards, and availability of competent and knowledgeable personnel. Evidently, debate regarding the use of financial or non-financial performance measures and the choice of suitable measures reveals that financial and non-financial measures are not substitutes, but that non-financial measure are employed as additives to financial measures (Malgharni, Soomasundaram, & Multaiyah, 2010). Similarly, the past decades, have documented studies that revolutionise the development of performance measurement and offered frameworks to replace traditional accounting based measures. Prominent among these models are balanced scorecard (BSC), performance prism, Malcom bridge quality model etc.

A review of extant literature reveals that research interest on business performance has been recognised as a significant construct in several field of studies, more specifically, it is one of the construct most frequently used as the dependent variable in most social sciences research (Sila & Ebrahimipour, 2005; Richard, Devinney, Yip, & Johnson, 2009). In spite of its relevance, research into firm performance suffers from problems of consensus of definition, selection of indicators and controversy over its dimensionality (Crook, Ketchen, Combs, & Todd, 2008; Richard et al., 2009). Similarly, decision on the ideal level of analysis (individual, group, or organisational wide) that offer the best assessment of firm’s performance is one of the thorniest issues facing research community (Venkatraman & Ramanujan, 1986).

Neely and Adams (2002) observed that many organisations have become preoccupied with business performance measurement, which is partly triggered by the development in information technology which provides tranches of reports and by extension stimulates management interest in measuring too many things. These scholars further maintained that therein lies a contradiction, because how can numerous, and apparently varying, business performance frameworks and measurement methodologies exist? Creating further confusion is that each approach purported to be exceptional and claims comprehensiveness, nonetheless, each suggests a diverse view of performance measurement (Neely & Adams, 2002).

Unarguably, the traditional accounting methods of performance measurement (for example, product costs, material or labour variances etc.) have been very useful as a measure of firms performance, however, they offer little information regarding certain aspects that are critical to the firms’ operations, such as quality or the involvement level of the employees, the timing of production, delivery and client satisfaction, which
contributed to the growth and popularity of non-financial performance measurement methods (Fullerton & Mc Watters, 2002). Likewise, many organizations concentrate on the adoption of non-financial performance measures, but these measures are not without their inherent limitations (Kaplan & Norton, 2001; Ishtiaque, Khan, Akhter, & Fatima, 2007). For instance, while a large body of researchers’ documented positive relationship between non-financial measures and business performance (Hoque & James, 2000; Kaplan & Norton, 2001; Veen-Dirks, Van & Wijn, 2002). Some scholars reported complexity in linking non-financial measures to performance (Fisher, 1995; Ittner & Larcker, 1998). On this note, Hoque (2005) alludes that performance measures are more probable to be external and broader-based, future focused, non-financial and qualitative when the environmental uncertainties are considered high. The argument of these scholars reinforced the basis for the calls and adoption of optimal mix of performance measures. On this note, a number of scholars advocate the need to input all the necessary considerations into performance measures and develop tool to facilitate change when the need arise (Meyer & Gupta, 1994; Ghalayini & Noble, 1996; Bititci, Turner, & Begemann, 2000). To date, research attention regarding the evolution and dynamic of performance measures remains sparsely researched (Neely, 1999).

From the foregoing, the objectives of this paper are three fold: (1) to discuss the trends in business performance measurement, (2) to examine the strengths and weaknesses of the traditional and non-financial performance measures, (3) to highlight how non-financial measure addresses the inherent limitations of the traditional performance measure, and (4) to elucidate how the inadequacies of financial and non-financial measures prompt the development of contemporary performance measurement models. To achieve the aforementioned objectives, this paper seeks to provide answers to the following research questions. (1) What are the trends in business performance measurement? (2) What are the inherent strengths and weaknesses associated with the traditional vis-à-vis non-financial measures? (3) To what extent has the non-financial measure ameliorated the shortcomings of the traditional (i.e. financial) performance measures? (4) How have the inadequacy of financial and non-financial measures triggered the development of contemporary performance measurement models?

**Theoretical and Literature review**

**Performance Measurement Models**

Over the past two decades, scholars, public accounting entity, international organisations and business practitioners have advocated numerous performance measurement and reference models to achieve excellence in business performance; with a focus on integrating and balancing the needs of all key stakeholders (i.e. employees, customers, suppliers and the society). Essentially, reference models are rigorous criteria which cover non-core practises or processes that are very stable and cut across diverse industries (Vince, 2003). Perhaps, the most broadly renowned business performance models is the balanced scorecard (BSC) introduced by Kaplan and Norton in 1992. BSC is a novel and sophisticated tool which considers not just the financial indices but also the non-financial parameters in evaluating firm’s performance. One of the benefits of this model is that it enables manager to discern performance gaps and how this can be linked to strategy to drive organisational change (Kaplan & Norton, 1996). The BSC measures organisational performance across four balanced perspectives: financial indicators, customer perspective, internal business processes perspective, and learning and growth perspective (Kaplan & Norton, 1996).

The quest to advance knowledge and improve business performance measurement have prompted the United States Department of Commerce to develop Malcom Baldrige National Quality Award (MBNQA) in 1987 to motivate American businesses and other corporate entities to adopt efficient quality control programmes that will broaden their knowledge on how to achieve sustained performance (Garvin, cited in Cristian-Ionuţ & Silvia, 2014). The MBNQA model depicts the relationship consisting of six elements: leadership, strategic planning, customer focus, workforce focus, operations focus and results (Baldrige Performance Excellence Program, 2013)

With the growing interest in performance measurement, Neely and Adams (2000) suggested performance prism model which is a second generation model based on unified perspectives of measurement; the model is depicted by the facets of a prism comprising five interrelated perspectives: stakeholders satisfaction, strategies, processes, capabilities, and stakeholders contribution. According to Neely (2007), performance prism is fashioned as a flexible model which offers a broader or a contracted focus, in line with needs of the organisations. Another notable model documented in the literature is the European Foundation for
Quality Management model (EFQM), this model permits understanding of the cause-effect relationship between what the organisation is doing and the expected outcomes. The EFQM model is a non-predictive framework made up of nine criteria, five of which are enablers criteria (leadership, people, strategy, partnership/resources, and process) and the remaining four criteria are results oriented (customers’ results, people results, society’s results and performance key results (Hassan & Mostafa, 2013). According to Hillman (1994), the enablers are those practices and systems that are essential and necessary for control purpose and to deliver total quality.

**Defining Business Performance**

From theoretical standpoint, business performance can be described along three major dimensions: theoretical, empirical, and managerial (Cameron & Whetten, 1983). In the opinion of Venkatraman and Ramanujan (1986) the aforementioned dimensions tacitly or openly underscore the implications of business performance, simply because of its symmetric relationship with strategy. Empirically, most research undertaken used business performance to study diverse strategic content and issues. Lastly, the managerial dimension is mirrored in the wider treatments of business performance in both traditional and contemporary literature across diverse field of study. Kuye, George and Otoko-Obaro (2014) reported that there is no universal measure that is most suitable for all purposes. Thus, business performance as a construct can be conceptualised from different perspectives, which represents a subset of organisational effectiveness that covers operational and financial outcomes (Santo, & Breto, 2012).

Venkatraman and Ramanujan (1986) conceptualised business performance from the perspective of strategic management, which reflect a subset of organisational effectiveness. The above definition has been described as antecedent of performance or performance indicators (Combs, Cook, & Shook, 2005). The inherent limitation in Venkatraman and Ramanujan (1986) propelled several approaches for conceptualizing business performance. Lebas and Euske (2002) offer a concise definition of performance as performing today what will provide indication to measure important results in the future. Santo and Breto (2012) outlined the possible aspects of firm performance: superior financial performance, profitability, and growth. The above categorisation is in tandem with the views expressed in the studies conducted by Whetten (1987) and Glick, Washburn and Miller (2005).

To arrive at a basis for performance measurement, organisations develop performance indicators which offer a metric or criterion to measure its own effectiveness. Essentially, measurement systems encompass numerous criteria. Therefore, to achieve the desired level of firm’s performance, business organisation must design and implement performance management systems, to coordinate and manage its business activities. The term performance management system (PMS) was formerly used by Beer and Ruh in 1957 and their study laid the foundation for further research work that enrich the application of the concept. According to Macey (2001), performance management is a comprehensive process which permits a firm to actualise its objectives alongside functional strategies and performance management procedures.

Performance management on the other hand, can be conceptualised as a process undertaken by firms to collect information for the current/future need of the organization, compare same with market realities and to embark on the required activities leading to the actualisation of business objectives (Barutcugil, quoted in Yildiz et al., 2011). According to Cristian-Ionuț and Silvia (2014), PMS is the sequence of operations that emphasise the most important features which regulate and influence the actualisation of firm’s predetermined objectives. Given this, performance indicators play an important role as a tool that offers simple and reliable approaches for measuring business performance.

**Measurement and Organisational Performance**

Measurement is the corner stone of organisational performance process, because it explains how the strategy pursued by firms translates to the desired behaviours and results (Kaplan & Norton, 2001). Thus, what is measured becomes obvious, and it forms the basis not only in evaluating the organisation, but in rewarding individual that accomplishes the tasks (Neely, 2002). Measurements, according to Neely (2002) describes the framework for organisational members, indicating how well the firm is doing and synthesise its past, present, and future actions into a cohesive whole, thus, creating a standard, plan, and progress that translates into what an organisation chooses to measure and how they are measured. Performance measures can be conceptualised in a constricted or broader sense (Franko, 2013). In a comprehensive sense, they encompass complete and relative figures, while in a contracted sense, they embrace only relative figures. There are other approaches for categorisations of measures in contemporary literature, i.e. complete or incomplete measures, responsive or non-responsive measures. In addition, performance measures may be
linked to inputs, process, performance, or feedback; while some are lined to the firm’s strategy (Vince, 2003). Accordingly, measures according to him may be classified into leading or lagging. While lagging measures offer feedback on historical performance, leading indicators are intended to measure future performance.

A measure or metric, according to Simmons (2000), is a quantitative value that can be adopted for comparison purposes. For instance, a measure can be linked to itself over time, compared with a pre-stated target or assessed along with other measures. It is further suggested that measure adopted for the purpose of comparison, needs not represent an absolute value (Simmons, 2000). Generally, performance measures can be categorised into financial and non-financial (Scanlon, 2009). Financial performance measures (FIPM) are indices used to evaluate financial performance aspects such as debt-equity ratio, gearing ratio, profitability, acid test ratio etc. The non-financial performance measures (NFPM) on the other hand, are elements that assess non-financial performance of an organisation; these include among others customer satisfaction and employee retention. Thus, by using FIPM, value-or numerical figures are compared, while in NFPM, subjective or qualitative are adopted to describe the phenomena, hence, FIPM can be specified in absolute and relative figures, while NFPM are expressed as perceived value (Scanlon, 2009).

Financial and Non-financial Measures of Performance

As earlier noted, measures are characteristically categorised as financial or non-financial. Using Simmons’ (2000) postulations, financial measures can be termed objective, while the non-financial measures are considered subjective. He advocates further that objective measures can be autonomously measured and proved, while subjective measures cannot. Also, financial measures are usually related to an account statement in a trading profit and loss accounts, balance sheet, such as cash at bank, bad and doubtful debts etc. Non-financial measures, on the other hand, are not stated in the company accounts. Besides, measuring firm’s financial performance using financial measures is tacitly simple, because there are procedures and instructions that govern financial measures (Simmon, 2000). In sharp contrast, non-financial performance measures cannot be linked to the same rules or guidelines. Instead, non-financial performance measures are often connected to target settings, inducements and reward systems (Otley, 2001).

In general, the traditional management accounting literature supports the use of financial performance measures in evaluating business performance (Kaplan & Norton, 2001). On the strength of the aforementioned, Merchant (1998) and Neely (2002) maintained that financial performance measures are useful in the following key areas: communicate financial goals, present complete summary of performance, isolate top management from operating decisions at the business units levels, present a succinct position on the state of the business and to save costs for external financial reporting purposes since they are already available. Similarly, accounting scholars reinforced the idea that non-financial performance measures are good indicators for current or future financial performance evaluation (Ittner & Larcker, 1998; Hughes, 2000).

The growing lopsided relationships between the book worth and the real market value of firm reveal that business organisations possess some valuable assets (e.g. employee) which are not accommodated in their balance sheet. According to Johnson and Kaplan (1987), financial accounting information is more appropriate for external purposes; thus, its usefulness for business performance assessment internally is questionable. Hatem (2011) observes that the financial measures are deficient; and do not fully capture managerial performance. Brael, Jones, and Zimbelman (2009) claimed that non-financial measures can be adopted to curtail the risk of revenue frauds. McNair, Lynch and Cross (1990) state that non-financial measures are relevant for operational control purposes. Franke (2013) observes that although crafting non-financial measures is useful and has wider applications, it has little potency in forecasting the present or future reality of the organisation; additionally, the information power of non-financial measures is limited, thus, cannot perfectly replace the financial measures. Correspondingly, scholars have advanced argument that the traditional performance measures which rely solely on financial data are short term, lagging indicators and are not succinct in addressing the present and future performance of the firms (Tangen, 2004; Valiris & Chytas, 2005). Moreover, financial measures according to Eccles and Pyburn (1992), create behavioural challenges, and are oriented internally rather than externally (Merchant, 1998). As expressed by Neely (2002), proactive and top performing organisations incorporate financial and non-financial measures to enhance their performance. Against this backdrop, performance measures combining
financial and non-financial indicators are much more relevant in contemporary business environment (Neely & Adams, 2000).

**Trends in Business Performance Measurement**

Until recently, performance measurement and evaluation for firms was implemented with modest and limited methods using only financial measures (Neely, 2002). However today, with the developments in the performance management information systems as well as the use of improved numerical and mathematical approaches, many models and approaches have been advanced in measurement and assessment of performance using numerous criteria and multiple dimensions. Specifically, business performance measurement is made up of the formal information-based routines and processes managers adopt them to sustain or alter organisational activities (Simmons 2000). A typical performance measurement helps organisations in setting business goals and provides feedback on the progress over a given period of time.

According to Mike and Neely (2003), obstacles to business performance measurement system can be resolve through four supporting factors: people, process, systems and culture. These scholars further highlight six elements that influence the development of an organisation’s measurement systems: data acquisition, data collation, data sorting, data analysis, data interpretation, and data dissemination. Merchant (1998) notes that performance measurement serves as diagnostic tool for acquiring relevant information that are relevant to the actualisation of organisational objectives. Bititci, Suwignjo and Carrie (2001) maintained that performance measurement involve methodical collection, analysis and reporting of data/activities to be utilised by business organisation in making strategic decision. Spitzer (2007) notes that performance measurement can alter the resilience and competitive inoculation of business organisations; by providing a strategic road map of where the organisation is to where it hopes to be in future.

Neely Gregory and Platts (1995) stated that performance measures are the essence of organisations, because without them important decisions will be done by rule of thumb, which may inhibit the actualisation of firm’s objectives. According to David (2009), functional head need to be assigned goals, given measures and targets that are integrated within their functions in order to evaluate levels of achievement, re-assess priorities and deploy resources across the functional areas of business; all these may be difficult if not impossible to achieve without measuring performance. Parmenter (2010) outlines the underlying characteristics of effective and efficient performance measures, these include: aligning daily accomplishments to strategic objectives; creating a fit between vital measures and those with limited application; ensure that a flawed purpose is designed and aligned to time period; design measures that are accessible and verifiable; motivate employees; and combine leading and lagging indicators to ensure optimal performance.

**Methodology**

This study employed descriptive and explanatory research approach, using secondary source of information. The benefits of working with secondary information are that they are economical, and offer insight into diverse aspects of the phenomena under investigation (Cnossen, 1997). Descriptive research, according (Whiting, cited in Onakaka & Olusoji, 2014) is pre-planned, and develops from the creative investigation, which assists researchers in comprehending the phenomena under investigation. Explanatory research approach on the other hand, assists in providing clear clarification about phenomenon of interest (Aghayere & Ojo, 1997). Therefore, the research approach for this study relies purely on review of literature (non-empirical) which is based on the pre-existing body of knowledge relating to the phenomena under investigation. The choice of this approach serves two major purposes in this study: (1) to establish the theoretical foundation for the research and (2) to align the current study into perspectives regarding the state of literature.

**Discussion and Conclusion**

This paper examines financial and non-financial business performance measurement with a view to explicate systematic paradigm shift in performance measurement and how different performance measures – financial and non-financial may contribute to effective performance process and management. The popular saying that “what gets measured, gets done”, allude to the critical importance of measurement in today’s organizations. Undoubtedly, without measurement, a firm cannot determine its position, where it ought to be and what it need to do to get there. The evidence provided in this paper showed that the
dynamic and competitive nature of business environment necessitates the need for business organisations to pay a great deal of attention on how develops and measure performance. To accomplish this lofty motive, one of the major tasks to be carried out is to develop and implement performance measures that can enhance decision making and improve business performance. Fundamental consideration on business performance measures is the need to ensure that the right things are being measured so as to align business activities to strategies and objectives. Correspondingly, good measurement systems must mirror the context and goals of the organisation.

Given that there is no optimal mix of performance measure, there is need to complement financial measures with non-financial measures (such as customer satisfaction and retention, measure of employee among others) to enhance business performance. Taken as a whole, this study notes that each of the performance measure has its peculiar strengths and weaknesses. Although financial performance may be measured more precisely, while non-financial performance evaluations may have lesser measurement precision. However, the pace of information technology has enhanced the presentation and analysis of financial and non-financial performance measures concurrently (Neely, 2002). Nevertheless, the two measures (financial and non-financial) have offers substantial benefits to business organisations, by offering them the capability to respond proactively to the dynamics of the business environment. This paper offers basis to advance argument that there is no general performance measures that is applicable to all organisations in all situations, however, specific measures need to be conceived for particular situations. This paper signal caveats regarding the assertion that non-financial measures are better than traditional financial measures. Hence, rather than pondering on choice dilemma, the challenge is to select the best combination of measures among the two alternatives. Therefore, to guide researchers and business practitioners, performance management system must be design to measure firm’s performance alongside key customer desires, clear-cut strategic objectives, fundamental processes that drive performance and issues that are vital to performance measures benchmark, and establish a basis for evaluating and rewarding performance.
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