Benchmarking of Performance Measurement System to Support Cost Competitive Advantage and Financial Performance - A Conceptual Paper

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***Abstract*---**The performance measurement system (PMS) developed as strategic orientation aimed at providing information to enhance the company's strategic outcomes. This study examines how benchmarking of PMS support financial performance. Thus, based on in-depth review on existing literature on the PMS, this paper develops a proposed theoretical framework. Specifically, the objectives of this paper are three folds; Firstly, it attempts to unravel the various perspectives and define benchmarking of PMS and suggest on how it could be further developed. Secondly, employing resource-based view theory as its underpinning theory. Finally, it's possible performance are put forth to legitimize the development as an important remedial to the PMS in aiding company's long –term survival.

***Keywords*---**Benchmarking Information, Cost Competitive Advantage, Financial Performance, Performance Measurement System.

I. Introduction

THE modern business environment is characterized by radical changes due to technological developments, increase competition, and the developments of customers‟ desires and needs. Recent studies in the management accounting and management control systems have found that the formulation of a clear strategies priority necessary but not enough, it must be supported by an appropriate control system, organizational structure, and management accounting information systems to achieve competitive advantages and ensure high-performance consequences (Shank &Govindarajan, 1993; Chenhall & Langfield-Smith, 1998).

Manufacturing companies were pressured to find ways to be more effectively in lower costs (Adler et al., 2000). Performance measurement system (PMS) described as an integral part of the contemporary management accounting system which provides information to encourage managers to think strategically about how their activities fit with other parts of the company, and to assist them in managing their company‘s operations (Ittner, et al., 2003; Ullrich & Tuttle, 2004; Choe, 2003). The changing nature of value creation complicates the performance measurement process whereby the focus now is on managing intangible assets (e.g. customer relationships, innovative products/services, high-quality and responsive operating processes) which are non-financial in nature, rather than managing tangible assets (e.g. fixed assets and inventory) which are financial in nature (Kaplan & Norton, 2001). As well as, the increased competition has forced companies to continually monitor their products and services as well as that of the competitors. Therefore, studies have advocated that positioning and differentiating strategies are a key for survival (Mia & Clarke, 1999). A common understanding has developed that there exists a „traditional‟ approach which exhibits reliance upon financial measures and a more balanced or „contemporary‟ approach, which acknowledges a wide range of financial and non-financial measures (Kaplan and Norton, 1992). Hence, the evidence is mixed on whether the importance placed on performance measures positively affects performance consequences (Wouters, et al., 1999). In fact, some researchers, argue that the gaining a competitive advantage might be led to achieve high performance, for example, (Raduan, et al., 2009; Bustinza, et al., 2010). It must provide a clear strategy in the organization; it is a necessary but not a sufficient condition. Chenhall (2005) has examined the relationship between strategic PMS and the achievement of competitive advantage as a strategic outcome (delivery, flexibility and low costs) as indicators of competitive strategy in the areas of product differentiation and low cost-price. On the other hand, in the long-term the competitive strategy should be reconsidered as a tool of compaqny's ability to meet the competitive environment through improve poor in the performance, not as a goal per se. Bustinza, Aranda and Gutierrez (2010) have noted that, the company's ability to adapt to changing market conditions is a mechanism for reducing uncertainty, making this capability a catalyst for obtaining competitive advantages that allow companies to achieve higher levels of performance. However, there is an ambiguity about the relationship between competitive advantage and its superior performance (Ma, 2000). Ma (2000) makes three observations regarding competitive advantage that, the competitive advantage does not equal to superior performance, but it is a relational term; and context-specific. Some researchers have attempted to define the theoretical properties of PMS such as Chenhall (2003); Ittner, et al. (2003). Simon and Guilding (2008) mentioned that, the studies that develop and test hypotheses concerning factors relating to strategic management accounting adoption are still incomplete, and therefore, should be encouraged. However, there are numerous studies, which have been done, but the finding of those studies was

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inconclusive as have noted there some researchers claim that their findings are conflicting. Anyway, so far, a few of researchers are focused on benchmarking of MAS (e.g. Mia and Clarke (1999)). Hence, little is known about the benchmarking of PMS. On another hand, there is a need for ways of renewed conceptualization and better benchmarking of PMS, which might help explain how the systems have beneficial direct and indirect effects on performance. Although the study of performance management has accumulated a great knowledge of the effects of the PMS on performance, the actual mechanism of these effects is not fully understood (Pavlov & Bourne, 2011).

Motivated by the aforementioned background, proposed theoretical framework is that attempts to answer main objectives. Firstly, it attempts to unravel the various perspectives and define PMS and suggest on how it could be further developed. Secondly, employing resource-based view theory as its underpinning theory this paper attempts to identify the extent of company's competitive advantage is influenced by the benchmarking of PMS. Finally, the perceived possible performance consequences of the PMS will be put forth to legitimize the development as an important remedial to a traditional PMS in aiding companies' long-term survival.

The remaining section of the paper is organized as follows: the immediate section presents literature review relating to the development of the proposed theoretical framework, inherited by the paucity of PMS in the literature, development in management accounting that lead to PMS information requirements is briefly dwelled. It followed by the concept of benchmarking of PMS. As well as, the concept of cost competitive advantage. The remaining sections presented the conceptual framework and propositions of the current paper. In the final section, some implications to the theory and practice conclusion are presented.

II. Literature Review

A. Benchmarking of PMS

A PMS provides benchmarking information in order to compare its competitive parcel of products and services against its competitors. Kaplan, (1983) noted that the benchmarking information can provide feedback on various aspects of performance, such as costs and cost structures, inventory levels, market share, sales volume, profitability, and productivity (Mia & Clarke, 1999).

Comparative performance information which are related to trend in performance of organization during previous years and its explanation, and comparing organization's performance with similar companies' performance in industry (Mia & Clarke, 1999).

The original definition for benchmarking is the searching for best practices in the industry, and implementation of industry's best operational practices, for achieving the superior performance. The organization can use MAS (including PMS) which provides benchmarking information to scan its environment and identify any change in the industry and in competitors' strategies, in order to compare its competitive parcel of products and services, and its performance against its competitors or previous years. The definition of benchmarking practice of measuring the performance of a organization (or performance of business units) against the performance of previous years or other organization in the same sector. The benchmarking is the process of evaluating and emulating the products, services, and processes of best practices in the industry, and implementation of industry's best operational practices and best performing companies (Mia & Clarke, 1999). A report comparing companies current years' performance on market share, sales volume to that of previous years or with those of similar companies in the industry, is an example of such feedback. Benchmarking information can provide feedback on various aspects of performance, such as market share, sales volume, profitability, and productivity (Mia & Clarke, 1999; Attiany, 2014), which might be led to improve organizational performance.

The PMS provides benchmarking information in order to compare its competitive parcel of products and services against its competitors. As Kaplan, (1983) noted that the benchmarking information can provide feedback on various aspects of performance, such as costs and cost structures, inventory levels, market share, sales volume, profitability, and productivity (Mia & Clarke, 1999). The company can use MAS (including PMS) which provides comparative information to scan its environment and identify any change in the industry and in competitors' strategies, in order to compare its competitive parcel of products and services, and its performance against its competitors or previous years. By using comparative information, a business can more easily identify its strengths and weaknesses and, then take an appropriate decision. In one of the original texts on benchmarking, the definition for benchmarking is the search for best practices in the industry that lead to superior performance. More recently, however, benchmarking is seen as a systematic way to identify, understand, and creatively evolve superior, services, designs, equipment, processes, and those practices that improve an company's real performance.

B. Cost Competitive Advantage

In today's business, creating new forms of competitive advantage has become a main concern for management as the business environment continues to change rapidly and unpredictably (Boon-itt, 2009). Based on this challenge, an effective manufacturing strategy must take into account the competitive advantage of the companies over their competitors. In practice, the competitive advantage is usually reflected in its superiority in production and performance consequences (Day & Wensley, 1988). The competitive advantage must also be first identified and evaluated to achieve company's strategic goals. In relation to operations management, the certain aspects of competitive advantage such as cost, quality, and time, which use as the competitive weapons. According to Porter (1980), competitive advantage is the extent to which a company is able to create a defensible position over its competitors. The way a company chooses to improve its competitive advantage should ideally create significant difficulties for others to imitate, which results in a long-term or sustainable competitive advantage. Models of market globalizations maintain that business companies operate within increasingly competitive, global environments (Bustinza, et al, 2010; Porter, 1990) .Porter (1985) suggests that businesses are compelled to compete by differentiating their products based on product quality or low-cost. Others claim that company focusing strategies on product features must do so without a price premium.

Competitive advantage can be defined as a positional superiority, based on the provision of superior customer value and the achievement of lower relative costs, and the resulting market share and profitability performance (Day & Wensley, 1988). Competitive advantage is the extent to which an company is able to create a defensible position over its competitors, and it comprises capabilities that allow an company to differentiate itself from its competitors and is an outcome of critical management decisions, (Porter, 1985). The strategic positioning of an company reflects the company's ability to generate competitive advantage (Kim, Song, & Koo, 2008). According to Porter (1991) performance is determined by industry structure and the company's strategic position in the industry; strategic position is a function of business strategy (i.e., product differentiation or cost leadership). Such competencies should lead to the marketplace positional advantages through competitive strategies such as product differentiation and cost leadership, which considered as product characteristics. And the different strategic positioning will lead to different company's performance (Kim, et al., 2008). To sustain company's competitive advantage require administrative procedures that encourage invention and creativity, targeted on combinations of product features (Clark & Fujimoto, 1991). Furthermore, contemporary strategies place demands on production processes to provide a capacity to manufacture products with enhanced features but at low cost (Shank & Govindarajan, 1993; Cooper, 2000).

The product attributes with low costs is manufacturing-based competitive advantage. Whereas, it is used to differentiate it with the existing definition of basic of competitive ability, and they are more suitable and importantly for manufacturing industrial, particularly in transition economic. In addition to the empirical literature has been quite consistent in identifying cost of product as important competitive advantage (Tracey, et al., 1999; Rosenzweig, et al., 2003; Li, Ragu-Nathan, et al., 2006; Boon-itt, 2009). The cost competitive advantage is ability to providing a standard product at a lower cost than competitors and charging either the same (or a lower) price than competitors (cost-based).

C. Financial Performance

The concept of performance is related to the survival and success of a company. Even though literature on performance is very extensive but there is still a lack in consensus about the meaning of the term. The financial and non-financial measures can be used to operational performance, but the use of financial measures is the more common, even, to some extent, extent in the certain company, Examples of financial measures are return on investment (ROI), return on assets (ROA). Further, the financial reports have been produced a daily basis.

III. Theoretical Framework

Based on the conceptualization of the respective variables presented above, the propositions are developed and presented below. The proposed theoretical framework is depicted in figure 1.

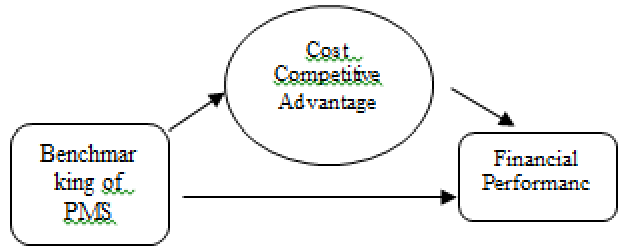

Fig. 1 Proposed Theoretical Framework

IV. Hypotheses Development

A. The Relationship between Benchmarking of PMS and Financial Performance

PMS can play a key role in strategy implementation by helping to translate company's strategy into desired behaviors and results, communicate expectations, monitor progress, provide feedback, and motivate employees to improve performance (Chenhall, 2003; (Chenhall & Langfield-Smith, 1998; Kaplan & Norton, 2001; Ittner, et al., 2003).

This aspect would appear an important aspect of effective PMS, as results of the association between performance consequences and its PMS, which have been ambiguous; the evidence is mixed at best on whether the importance placed on the PMS positively affects performance (Kaplan & Norton, 1992; 1996; Ittner & Larcker, 1998; Wouters et al., 1999). Despite, some studies have provided support for the association (Pavlov & Bourne, 2011). Benchmarking of PMS involves the comparison of an organization with its competitors on relevant factors, including financial and non-financial performance. Comparing the way an company performs a specific activity with that of its competitor enables that company to learn how to improve performance or even identify some best practices linked to company excellence (Donthua, Hershbergerb, & Osmonbekov, 2005). Thus, through Benchmarking information, company can more easily, identify its strengths and weaknesses and then, take appropriate strategic decisions, which lead to improvement its performance. Therefore, it is hypothesized that:

H1**:** The high level of benchmarking of PMS will lead to increase the level of financial performance.

B. The Relationship between Benchmarking of PMS and Cost Competitive Advantage

The benchmarking is important in the manufacturing industry because of the competition are facing, whereby PMS can assist the manufacturing industry in their pursuit of cost of their products. Numerous researchers claimed that strategic PMS plays an important role in assisting a company to gain high leveled of cost competitive advantage (Fitzgerald, Johnston, et al., 1991; Kaplan & Norton, 1992; 1996; Simons, 2000; Chenhall R., 2005; Campbell, et al., 2006; Attiany, 2014).

More specifically, and according to Hambrick (1983); Shrivastava (1983) strategy researchers have stressed that information acquisition provides potentially useful ideas related to external and internal opportunities and threats that are relevant to formulating innovative strategy to gain competitive advantage in low costs (Chenhall, 2005). According to Zhang and Lado (2001) the potential contributions of an information system to competitive advantage can be understood in terms of their impact on the development and utilization of distinctive organizational effectiveness. Roslender and Hart, (2002) report that, the recent history of attempts to generate accounting information to support the pursuit of sustainable competitive advantage by businesses.

The using of information assists managers in positioning their company in the competitive market, and company's proper positioning in the competitive market is crucial to its ability to subsequently sustain the package of product attributes it offers to customers and achieving a cost advantage over competitors is the basis for such as positioning (Bromwich & Bhimani, 1994). There are associations between information type and the development and implementation of strategy. And the use of an information system for strategic purposes can provide a variety of competitive advantages (Choe, 2003). In addition, numerous researchers claimed that PMS plays an important role in assisting a company to achieve high level of competitive advantage (Fitzgerald, Johnston, et al., 1991; Kaplan & Norton, 1992; 1996; Simons, 2000; Chenhall R., 2005).

PMS provides benchmarking information in order to compare its competitive parcel of products and services in trim of cost (Mia & Clarke, 1999; Attiany, 2014). Therefore, it is hypothesized that:

H2: The high level of benchmarking of PMS will lead to increase the level of cost competitive advantage.

C. The Relationship between Low Cost Competitive Advantage and Financial Performance

Cost competitive advantage is wo main area of competitive advantage, and it is an important capability for an organization to survive and succeed in a competitive market, cope with the market competition (Porter, 1985) and to enhance company's performance (Day & Wensley, 1988; Porter, 2001; Hawawini, et al., 2003; Kim, et al, 2008; Auzairv, et al, 2013). The strategic positioning has affected on the company's performance (Hawawini, et al., 2003; Porter, 2001; Kim, Song, & Koo, 2008; Bustinza, et al., 2010). As well as, cost competitive advantage affects positively on the performance (Rosenzweig, et al., 2003; Kristal, et al., 2010; Majeed, 2011)

H3: The high level of cost competitive advantage will lead to high level of performance.

V. Methodology

This study will intend to collect data on the interested relevant variables in this study by using the questionnaire method. This method is believed to be a convenient means of collecting data from different respondents at a remarkably limited period of time and with extended geographical coverage that is, collecting data as compared to interview.

This method is believed to be the most convenient way to collect data in this type of research. The targeted population of this study will be the manufacturing companies in Libya. The unit analysis is the company the chosen unit of analysis on the organizational level will enable comparison between findings of this study with previous research finding. Structural equation modeling (SEM) as a statistical technique will be used to order, sort and analyzed the data will be collected from the survey.

VI. Expected Contribution And Conclusion

This paper has advanced a proposed theoretical framework attempting to answer pertinent objectives. Inherited by its little progress to data, this paper unraveled benchmarking of PMS various conceptualization and its claimed information characteristics and subsequently, the extent of the benchmarking of PMS design among Libyan manufacturing companies. By investigating the level of benchmarking of PMS in Libya it will shed lights on PMS development. It is assumed that high level of benchmarking of PMS will indicate the high level of comparative information that is provided. Theoretically, it could infer how PMS should be further developed and promoted, while practically it could assist companies in designing their PMS for particular improving their financial performance.

This paper also attempts to identify the association the benchmarking of PMS and cost competitive advantage and financial performance by employing resource-based view (RBV) theory as its underpinning theory. It is hoped that it will shed some lights in relation to the PMS information "as company's resource" and competitive advantage and long-term strategic outcomes. Finally, perceived possible financial performance of using PMS comparative information has also put forth to legitimize the development as an important remedial to the PMS as an important means to achieve companies' long-term survival via improve its competitiveness. By investigating on the strategic outcomes, it will reveal the implication of certain PMS comparative information on the certain strategic outcomes (financial performance). Theoretically, it could assist academic to develop PMS design for certain competitiveness and the financial performance that intended to be improved. For companies in turn, it will imply that to address certain performance issues, they could focus on certain PMS comparative information.

In summary, the proposed study attempts to enrich the current knowledge on PMS, MAS, MCS, and company's competitiveness and strategy literatures from developing country's perspective generally, and Libya perspective, in particular. The benchmarking of PMS is of value to company, which intends to sustain their competitiveness and consequently, to the long-term financial performance.

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