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# Mechanism of Benchmarking and Its Impact on Organizational Performance

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**Abstract**

This paper investigates the importance of benchmarking as a tool that can enhance organizational performance. The purpose of this study is to discuss the most important studies of benchmarking and its effect on organizational performance. Benchmarking has spread fast and become one of most used competitive technique that improve the performance of an organization by identifying, understanding, and adapting good practices from other organizations. The main use of benchmarking is to find best practices and then trying to apply them for the sake of achieving the organization's goals. Many researchers examined the relationship between benchmarking and organizational performance. Therefore, this article is an attempt to review published studies in the literature and to pave the road for future empirical studies in different contexts.

## 1. Introduction

It has been argued by many authors that organizational performance is the key factor for successful businesses, business effectiveness, efficiency, and outcomes (Randeree & Al Youha, 2009; Boyatzis & Ratti, 2009; Deshpande, Farley, & Webster, 1997; Ryan, Emmerling & Spencer, 2009). Therefore, the performance of any organization depends largely on the employed techniques and tools, which should be flexible enough to accommodate change and achieve organizational goals. In the literature, many tools and techniques can help in enhancing organizational performance such as Benchmarking. Benchmarking is considered as one of the top recommended technique for enhancing organizational performance and attaining competitive advantages (Coburn, Grove, & Fukami, 1995; Elnathan, Lin, & Young, 1996). It is a tool used by organization to learn best practices from other organizations to enhance performance and maintain continuous improvement. In other words, organizations can improve their performance by learning from similar or different organizations (Watson, 1993; Whiting, 1991).

The popularity and effectiveness of benchmarking reflects its inclusion in excellence awards like the Balridge Quality Award (Hackman & Wageman, 1995) that is positively reflects in the expansion of its use in different organizations. This clearly has been shown in management literature (Vaziri, 1993), which argues that benchmarking assists organizations to improve performance by determining their attainable goals and choosing appropriate methods to achieve such goals (Drysdale, 1997; Ittner & Larcker, 1995).

Many researchers referred to benchmarking as a fundamental tool for continuous improvement (e.g., Deming & Edwards, 1982; Graham, 1994; Paulo et al., 2012; Peter, Feeny & Harris, 2007; Venetucci, 1992). It aims to identify and apply improvements (Andersen & Pettersen, 1996), and enhance performance (Doyle, 1996) by comparing and measuring the organization against others.

Moreover, benchmarking helps organizations to identify the gaps in its performance when compared with another organization. Camp (1989) noted that nothing would happen, unless something is done to close the gap or surpass the gap identified during the process of benchmarking.

In various organizations such as Xerox, Toyota, AT&T, Ford, Southwest Airlines, and General Electric, benchmarking is used to bring significant improvements in performance, raise profits, control costs and improve their services (Inger, 1993).

Literature is full of practical experiences about benchmarking and its usage such as information technology (Bean & Gros 1992; Bemowski, 1991), warehousing (Tucker, Zivan & Camp, 1987), manufacturing (Crespy, Miller & Becker, 1993; Walsh, 1992), health care (Gardner, 1992; Northcott & Llewellyn, 2005; Wait & Nolte, 2005), facility management (Johnson, 1992) food service industry (Johnson & Champers, 2000) and construction industry (Presley & Meade, 2010).

## 2. Benchmarking

The history of benchmarking can be traced back to the 1800s in the context of textile mills (Bogan & English, 1994), and it has undergone many developments especially with the emergence of quality management principles. The use of benchmarking as an effective and practical management tools began in the 1980s by Xerox Corporation because of losing its market share and feeling a lot of pressure from its competitors, especially Japanese companies (Camp, 1989; Elmuti & Kathawala, 1997; Geber, 1990; Pryor, 1989; Shetty, 1993; Spendolini, 1992). Successful lessons learned from Xerox motivated many other organizations to adopt this new approach in order to raise the level of performance, production efficiency and consequently, for the sake to get competitive advantage (Camp, 1989).

Benchmarking has spread fast and become one of most used competitive technique (Chen, 2002). It is widely used as a tool to improve performance (Yasin, 2002), eliminate the process of trial and error, enhance efficiency of developing new products (Hong et al., 2014), and improve customer satisfaction (Brah, Lin Ong, & Madhu Rao, 2000).

In relation to that, benchmarking has numerous definitions in literature. One of the most common definitions was provided by Camp (1989) where he defined it as “the search for the best industry practices which will lead to exceptional performance through the implementation of these best practices”. Kumar, Antony, and Dhakar (2006) pointed out that benchmarking aims to improve the performance of an organization by identifying, understanding, and adapting good practices of other organizations. Moreover, it is seeking to find best practice and then trying to apply to achieve the organization's goals. Furthermore, Maire, Bronet, and France (2005) stated that benchmarking aims to compare and contrast certain identified areas of organizational performance with others, which would enable organizations to identify gaps and weaknesses in order to take appropriate remedial actions. Although, there are many definitions in the literature, but there is no agreed definition of benchmarking. In general, it is defined as an effective tool used to search for best practices from other organization in order to apply these practices in the organization in order to gain some benefits. Other definitions focus on how benchmarking can improve performance by finding, choosing, and adapting the best practices and processes in outstanding organization.

Several organizations have adopted benchmarking as a part of TQM approach (Wynn-Williams, 2005) and one of significant continuous process tools. Rohlfer (2004) revealed that benchmarking refers as a search of best practices and applying them in order to cover identified gaps, achieve required improvements and accomplish continuous process improvement in an organization towards gaining competitiveness.

There are many types of benchmarking. According to Codling (1996) benchmarking is classified into three types, namely, internal, external and best practice. Andersen and Pettersen (1996) classified benchmarking into four primary types, namely; internal, competitive, functional and generic, while Elmuti and Kathawala (1997) differentiated between four types of benchmarking, namely, internal, competitive, functional or industry benchmarking, and process or generic benchmarking.

The process of how to conduct benchmarking process is another concern where each process contains a number of steps. For instance, Xerox approach of benchmarking involves ten stages, and TRADE approach contains five steps. Regardless of the differences in the numbers of steps in each approach, most of them employed similar steps, which start with planning and analysis, choosing the right partnership, getting the best practices, and then applying the proposed improvements.

Benchmarking is not just seeking to make changes, but its main objective is to add value to the organization. In other words, if the benchmarking activities do not add any value to the organization, they should be discontinued (Mollaee, Rahimi, & Tavassoli, 2009). Furthermore, comparing data and copying the best practices from other organizations are not considered as benchmarking. Instead, benchmarking is a broad process that seeks to know strengths and weaknesses in organization to apply the best practices that are learned from other organizations (Camp, 1989).

As one of the total quality management results benchmarking seeks to achieve many benefits (Blackiston, 1996). Elmuti and Kathawala (1997) argued that benchmarking, as a strategic tool, aims to increase productivity and individual design, enhancing learning, changing the culture of an organization and growth potential, tool for performance assessment, tool for continuous improvement, and tool for improving performance. In addition, Mollaee and Rahimi (2009) argued that benchmarking aims to achieve continuous improvements through applying five steps:

**Step one**: Deciding what to benchmark by making priorities and determining a certain process.

**Step two**: Analyzing the starting position and the aim by identifying measurement tools that enable to determine the improvement that occurred.

**Step three**: Selecting a suitable partner.

**Step four**: Getting the required information from the partner.

**Step five**: Applying the lessons learned and taking action to improve.

In line with this vein, benchmarking is an attempt to achieve superior performance by searching for the best practices of others and trying to adopt these practices to suit the conditions of the organization. Kanji and Asher (1996) stated that benchmarking assists organizations to concentrate and be closer to markets and customers.

According to Boxwell (1994), benchmarking process, in any organization, falls into three approaches namely, training approach, management approach and comprehensive approach. Training approach is often used to enhance competitive awareness in people while management approach is used to fill the gaps or handle weaknesses besides improving process in grassroots level. The comprehensive approach of benchmarking is focusing on setting up an inclusive benchmarking process in the organization. Regardless of the approach being used in any organization, there are two points in common. The first point is that organizations are not satisfied of the status quo, and the second point is that organizations are looking forward to enhancing their competitiveness (Boxwell, 1994). In other words, benchmarking approaches assist organizations to look outside the box and seek best practices to accomplish goals.

## 3. Organizational Performance

Organizational performance is considered as one of the most extensive dependent variable used in organizational research in recent times but it remains as one of the most obscure and loosely outlined constructs (Richards et al., 2008). Barney (2001) pointed out that the organizational performance aims to coordinate efforts and assets in order to work together to accomplish an organization's goal, and so long as those assets achieve value; the organization will continue to exist. Organizational performance represents a major concern for any organization, and therefore, defining and measuring performance is not an easy task due to different definitions provided and existing contentious among researchers.

Even though the organizational performance's concept is very popular in literature, it is complicated to find unified definition due to its various meanings. Cameron (1986) stated that organizational performance is a paradoxical concept because in some cases it may appear that the performance is good, whereas from another point of view, it might indicate otherwise. Therefore, according to Moullin (2007) organizational performance is considered as a measurement tool for the effectiveness of organization's management and how it can deliver the value to its customers and stakeholders. Another definition by Daft (2006) stated that organizational performance is the organization's ability to accomplish its strategy, goals and objectives as well its resources effectively and efficiently.

Evaluating organizations mainly depend on organizational performance, which makes researchers, managers and practitioners to focus on it as an essential factor in organization's success. Similarly, Perotti and Suarez (2002) pointed out that the performance is comparable to three factors, namely: economy, efficiency, and effectiveness of a particular activity or program, while Lahiri, Kedia, and Mukherjee (2012) argued that it is the capability of organization to accomplish its plan by utilizing its resources effectively and efficiently. Moreover, Kaplan and Norton (2005) argued that determining organizational performance should include financial and non-financial measures. In addition, performance measures can involve behaviors and relative measures, learning, education and training concepts as well as instruments, such as management development and leadership training for building necessary skills and attitudes of performance management (Recardo & Wade, 2001). Similarly, Hansen and Wernerfelt (1989) identified two essential factors of research that determine organizational performance, one of these factors are based on economic tradition which focus on external market, features organization's sector, its position in the market and quality of its resources. The other factor focuses on the behavioral and sociological patterns such as organizational culture, motivation, Human resource policies, Job design and Leadership (Chien, 2004).

Moreover, Doyle (1996) argued that measures of organizational performance are different based on the nature of the organization itself. Some organizations consider that profitability is the most important measurement indicator in business organizations. Nash (1983) supported this point of view; where he stated that profitability is the appropriate indicator to determine success of the organization and to know to what extent can fulfil its goals. On the other hand, Galbraith and Schendel (1983) pointed out that using profit margin, return on assets and return on equity are given a clear picture of organization's performance. They argued that profitability does not measure all aspects.

In relation to that, Nicholas (1998) argued that focusing on financial criteria did not measure all aspects of organizational performance, which ignored to focus on the organization's customers, improving internal process and maintaining competitive advantage. In other words, no one measure alone is valid for measuring organizational performance (Cameron & Whetten, 1983). This view supported by Kaplan (1984) where he pointed out that financial measures suffer significant shortcomings in measuring performance especially in a competitive business environment, where they do not reflect the current reality of the organization and do not clarify its capability to maintain a profit in the future (Bruns, 1998). Therefore, non-financial measures will tackle these shortcomings of financial measure (Kristensen & Westlund, 2004).

As a tool for measuring performance, Balanced Scorecard (BSC) was created by Kaplan and Norton (1992) to handle issues of measuring performance by focusing on all perspectives of organization namely, customer perspectives and innovation, financial perspectives, internal business perspectives, and learning and growth perspectives.

BSC provides an effective tool to measure performance and solve measuring issues. Many studies proved this concern, where they found a positive relationship between BSC and improving of organizational performance (Hoque & James, 2000; Malina & Selto, 2001). Furthermore, BSC aims to assist managers to set long-term strategy in order to manage performance by focusing of all aspects of performance, which will ensure customer value as well as accomplish organizations objectives (Kaplan & Norton, 2001).

Improving organizational performance is an essential goal for all organization, therefore, implemented performance effectively leads to achieve organization’s objectives providing value and better services to customers, as well as improving its efficiency and effectiveness (De Waal & Kerklaan, 2004).

**4. The Relationship between Benchmarking and Organizational Performance**

The rapid evolvement of business environment requires the adoption of new strategies, approaches and measures to face challenges in the turbulent environment and gain competitive advantage (Hayes et al., 2005). In response to these requirements, plenty of organizational theories, improvements tools and methodologies have been developed (Yasin, 2002). Benchmarking is amongst such developments (Cook, Seiford, & Zhu, 2004) that should be closely related to environmental change and those traditional approaches to business improvement (Neely et al., 2001).

A number of studies have been undertaken to investigate of benchmarking and its impact on organizational performance (Ahire, Golhar, & Waller, 1996; Gadenne & Sharma, 2009; Magd, 2008; Powell, 1995; Samson &, Terziovski, 1999; Talib, Rahman, & Qureshi, 2011), and as an effective tool to continuous improvement (Dawkins, Feeny, & Harris, 2007; Debnath & Shankar, 2008; Sinclair & Zairi, 2001).

An empirical study by Pemberton, Stonehouse, and Yarrow (2001) was conducted to investigate the relationship between benchmarking and organizational learning through a survey of over 700 companies from the manufacturing and service sectors in northeast England. They concluded that there is a positive impact of benchmarking on organizational performance.

In another study, Kumar and Chandra (2001) studied various prevalent benchmarking approaches in some successful organizations. They found that benchmarking is an effective tool to accomplish continuous improvements in business operations, where it provides the necessary information, helps to know shortfalls in performance and ultimately, sets the priorities that in turn results, in achieving objectives.

Furthermore, Fletcher and Smith (2004) reported that the relationship between benchmarking and organizational performance is positive. They elaborated that benchmarking can clarify the current state assessment and give a clear view of performance drivers, costs and quality, which enable the organization to enhance performance, improve customer satisfaction, and reduce non-value added activities (Kaynak, 2003), facilitate continuous improvement (Wong & Wong, 2008), and enhance teamwork (Prajogo & Brown, 2004).

Meanwhile, Maiga and Jacobs (2004) investigated the impact of benchmarking measurements on organizational performance based on data collected from 157 US manufacturing companies through survey questionnaire as an instrument. They found that three benchmarking measurements namely annual rate of growth in sales;

profitability and return on assets have positive and significant effect on organizational performance. Along a similar line of contention, Wong and Wong (2008) pointed out that benchmarking is an important tool for organizations to achieve excellence and get competitive advantage as it helps in enhancing continuous improvement process and renewal of organizational culture.

Additionally, Adebanjo, Abbas and Mann (2010) examined benchmarking as an improvement technique. They collected a survey from 453 respondents from over 40 countries. The results of their study revealed that benchmarking is an effective approach for all types of organizations.

In the context of India, Panwar et al. (2013) studied the adoption and implementation of benchmarking in automotive companies. They conducted a survey for 300 respondents. The results revealed that benchmarking is an effective approach to raise performance and gain knowledge of competitors

Recently, Kerandi et al. (2014) examined the relationship between benchmarking and its impacts on organizational performance in commercial banks in Kenya using random sampling technique. They concluded that practicing of benchmarking helps in performance improvement.

In a study of the same caliber, Boniface (2014) examined the relationship between benchmarking and process improvement mechanism, and its impacts on performance improvement of municipalities in the Eastern Cape Province. A questionnaire was used as an instrument to collect data from 100 respondents. The findings showed that benchmarking positively affects performance of the municipalities in the Eastern Cape Province.

In addition to the above studies, Al-Tarawneh (2014) investigated the effect of using benchmarking in the Jordanian banking sector, where he distributed questionnaires to 12 different commercial banks. The findings revealed that benchmarking helps managers to make decisions and this is reflected by the enhanced organizational performance.

Although benchmarking is a very effective tool and has a direct impact on organizational performance, many researchers have argued that it has several weaknesses and limitations. One of common problems is that benchmarking concentrate on data instead of processes used to lead to the data (Muschter, 1997), and another is the insufficient funds that hinder undertaking benchmarking or implementing adopted improvement (Zairi, 2003), which is reflected on effectiveness (Prajogo & Brown, 2004; Thiagarajan, Zairi, & Dale, 2001; Wong & Wong, 2008; Zairi, 2003), especially in small organizations (Bergin, 2000). Furthermore, Prajogo and Brown (2004) pointed out that there are many limitations of benchmarking including; the selection of appropriate set of performance measures is an inappropriate process, selection of the right partner (some information cannot be obtained from the partner) (Thiagarajan, Zairi, & Dale, 2001) and lack of support and commitment of top and middle management. Therefore, without management support, benchmarking will fail, and all procedures undertaken will become merely a formality.

Additionally, Dervitsiotis (2000) found that applying benchmarking in an organization that wants to achieve a paradigm shift might face serious limitations. Similarly, Ungan (2004) said that implementing best practices do not often reach an acceptable level as expected. In relation to this, Anderson and McAdam (2004) argued that traditional benchmarking focuses on the output stage and ignores the input stage. Therefore, they suggested that benchmarking must be developed to be more forward looking dynamic ratios instead of being forward looking static measures. Furthermore, Collins et al. (2006) argued that data analysis, as a part of benchmarking process needs more refinement.

According to Yasin (2002), theoretical approaches to benchmarking from 1986 to 2000 revealed that at the earlier stage of benchmarking, focus is limited to the process and/or activity, while recently focus expanded to cover strategies and system. The study highlighted weakness of theoretical developments, which are needed to guide multi-faceted orientations.

Moreover, the empirical study by Hwang, Tan and Sathish (2013) used a survey on the Singapore construction industry to study the relationship between application of performance measurement and benchmarking. The study found that benchmarking represents only 10% in the field. They concluded that competitive nature of the industry and sensitivity issues influenced the obtained results.

In a more recent study, Adewunmi, Omirin, and Koleoso (2015) examined the benchmarking challenges in Nigerian Facilities management. They found that implementation of benchmarking faces many obstacles such as, lack of understanding of the exercise of benchmarking, unwillingness to change, weakness of data from other organizations and poor execution of the benchmarking exercise.

Also focused on benchmarking, Northcott and Llewellyn’s (2005) study examined benchmarking as a practical tool in UK National Health Service. They revealed that benchmarking is still unclear and that the correlation between benchmarking and internal and external quality results is weak.

Although benchmarking is considered as one of the most effective continuous improvement tools as evidenced by studies and its use leads to significantly improved performances in organizations, its implementation is still faced with several obstacles in different frameworks (Andersen & Moen, 1999; Kozak & Nield, 2001; Watson, 1993), and principles (Zairi, 1994). These obstacles affect successful implementation (Francis & Holloway, 2007; Moriarty, 2011; Wolfram, Mann, & Samson, 1997). Moreover, other studies are not of the consensus of the classification of benchmarking. Added to this, some of the techniques used in deploying benchmarking possess considerable weaknesses. These critiques show that while benchmarking is a useful tool, there are still concerns about how and why it is deployed. Therefore, there is a need for conducting studies to explain the present state of the use of benchmarking (Adebanjo, Abbas, & Mann, 2010).

## 5. Underpinning Theory

This study's framework is based on underpinning theories including resource based view, market orientation, and learning. Resource-based view (RBV) is an approach that considers resources as key to achieving excellent performance (Rothaermel, 2012). The theory was coined by Williamson (1991), who proposed it as an efficiency approach to achieving efficiency and effectiveness in organizations. This eventually leads to sustainable competitive advantage. RBV has become one of the dominant theories to analyze sustained competitive advantage (Bridoux, 2015). It is an efficiency perspective which means organizations can create a competitive advantage by exploiting resources to improve efficiency and effectiveness (Barney, 1991). The importance of these resources would differ based on their significance to the organization and their creation of added value (Barney, 1991), which leads to future competitive advantage (Black & Boal, 1994).

Makadok's (2001) stated that the effect of RBV in competitive advantage lies in the resources, which enhance competitive advantage. Therefore, an organization needs to develop the technique of choosing the resources with considerable potential value.

RBV considers the firm as a set of resources and capabilities, where such resources are classified into tangible and intangible resources (Day, 1994). Oliver (1997) and Makadok (2001) considered the intangible resources as the most important for sustaining competitive advantage due their nature. Intangible resources can include employee's skills, reputational assets, social and culture, knowledge and information.

RBV theory posits that organization's capabilities should not be portable and imitable (Peteraf, 1993) and they should be continuous, tacit, specific and complex (Dutta, Kamakura, & Ratchford, 2004) in order to obtain a sustainable competitive advantage. Thus, it can be stated that benchmarking contains all previous advantages that can comprise the basis of sustainable competitive advantage (Dickson, 1992).

Meanwhile, organizational learning theory (OLT) supports the value of benchmarking firm capabilities through providing research and other knowledge channels (Celuch, Kasouf, & Peruvemba, 2002), which means that benchmarking can enhance the awareness in the organization and lead to gaining better performance (Camp, 1995). According to Huber (1991), OLT posits the creation of new ideas that are capable of improving the organization's strategy. According to Dickson (1992), market-based learning is a basis to gain sustainable competitive advantage, where organization's market inspection has to be on time and organized in comparison to those of competitors, to enable this perspective. Weerawardena and O'Cass (2004) argued that market-based learning authorizes the organization to link its capabilities to the external environment to achieve a proactive step by expecting the market needs before its competitors, and to improve its relationships with customers and stakeholders. Additionally, Vorhies and Morgan (2005) added that benchmarking contributes to decreasing the extent of perceptual bias, enhancing motivation, and achieving the opportunities of market surveillance (Levinthal & Myatt, 1994).

## 6. Conclusion

This paper contributes to the existing body of knowledge. The impact of benchmarking on organizational performance and knowledge of the nature of problems and obstacles that confront organizations during implementation of benchmarking through a review of literature and empirical studies. Although conflicting studies exist, majority of them reported that benchmarking affects positively on organizational performance, and it has become an effective performance improvement tool that assists in gaining competitive advantage. However, empirical studies are still needed to investigate the mentioned relationship. Moreover, there is lack of benchmarking studies dedicated to the public sector firms' performance especially in Arab and Middle East region. Therefore, empirical studies are needed in the context and culture of Arab countries.

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