

# Factors Influencing the Operational Excellence of Small and Medium Enterprise in Malaysia

**Mohd Hafeez Al-Amin Abdul Wahab**

Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan  
Kota Bharu, Kelantan, Malaysia  
E-mail: hafeez.a14e011f@siswa.umk.edu.my

**Mohammad Ismail**

Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan  
Kota Bharu, Kelantan, Malaysia

**Mohd Nazri Muhayiddin**

Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan  
Kota Bharu, Kelantan, Malaysia

DOI: 10.6007/IJARBSS/v6-i12/2496 URL: <http://dx.doi.org/10.6007/IJARBSS/v6-i12/2496>

## **Abstract**

Small and medium enterprises (SMEs) have been recognized as an engine for the economy and a generator of employment and growth. However, SMEs are affected by the challenges from the business environment which influence their performance. The competitive and market conditions have force the organization to seek long term success by achieving excellence in the business. The literature shows that there are many factors that can lead to the operational excellence including the internal and external environment factors. The objective of the study is to investigate the factors that influencing the operational excellence on SMEs sectors. The literature shows that the study on operational excellence for the SMEs sectors remains unclear. Literature indicates that there is a need for a study in the context of Malaysian SMEs sectors. This study attempts to combine the internal and external environment factors. This research proposes a conceptual framework that examines the factors that influencing the operational excellence. The outcome of this research may be useful for firms, managers and stakeholders in understanding and adopting efficiency of managing the internal and external environment factors in order to improve performance and achieve the operational excellence.

Keywords: External environment factors, internal environment factors, operational excellence, operation management, small and medium enterprises (SME),

## **1. Introduction**

Business environment today has become more challenging and more complex (Bolboli & Reiche, 2013). The impact of the business environment have forced the organization improve their abilities to respond and adapt to the changes caused by uncertain environmental

conditions (Ahmad, 2012). In order to stay competitive in the business, operation management is considered as one of the key important area which will affect the organizations success (Piercy, 2012; Urban & Naidoo, 2012). Organization need to improve their operations management by considering continuously improving production costs, delivery schedules, manufacturing skills, supplier relations and productivity in all practices (Urban & Naidoo, 2012).

Moreover, the organizations need to rebuild themselves by creating new strategies and ideas to achieve business excellence (Yew & Ahmad, 2014). This is because pursuing excellence will guide the organizations on the right track to attain their objectives and mission (Jaeger et al., 2014). According to Ekmekci (2012), excellence will drive the organization to improve constantly to survive and only those who can stay ahead through excellence are well-positioned in the competition. In order to remain competitive and improve the organizational performance, organizations need to continuously improve and perform to an excellent standard (Araújo & Sampaio, 2013). One of the ways to achieve excellence in the business is by pursuing the operational excellence. Operational excellence is one of the important aspects of business excellence which is an aspect of organizational structure that strives for improvements in key operational performance metrics (Shehadeh et al., 2016).

In Malaysia, SMEs is an important component to the economic growth and have been identified as the key engines of growth to transform Malaysia into a fully developed high-income nation by 2020 (Mahmud & Hilmi, 2014). However, SMEs are affected by the challenges from the business environment which affect their performance. SMEs need to search for new, innovative, flexible and imaginative ways to survive because of globalization and force by the international competition (Mbizi et al., 2013). Additionally, SMEs need strive in pursuing operational excellence in order to improve their productivity and still growth in the business (Lee et al., 2013).

### **1.1 Problem Statement**

Nowadays, achieving operational excellence is a requirement to the organizations. In order to increase the performance and be competitive, organizations are giving more attention to achieve the higher levels of operational performance. This scenario has influence 80% to 90% of 500 companies to implement the operational excellence program, Lean and Six Sigma. Unfortunately, only 30% of the companies achieve their expected results. This is because many organizations have not found a better management system that company can use to manage its operations in order to achieve operational excellence (Seifert & Soto, 2015). In order to achieve the excellence results, an effective management systems is highly needed in the organization (Calvo-Mora et al., 2014).

Moreover, today's competitive and market conditions have forced the organization to seek long term success by achieving excellence in the business. However, how to achieve the operational excellence and sustain competitive advantages are the fundamental questions among the organizations (Cesarotti & Spada, 2009; Dahlgard-Park & Dahlgard, 2007; Pellissier, 2009; R. M. Shehadeh et al., 2016; Yew & Ahmad, 2014). Many organizations are seeking the excellence performance in order to be competitive in the business. One of the ways to achieve the excellence result is by using the improvement initiatives and tools such as

excellence model. Unfortunately, many of them have failed to gain the benefits from the improvements initiatives and could not achieve the excellence level due to the lack of clear understanding and appropriate guidelines regarding what, where and how to implement improvements initiatives to achieve the excellence results (Dahlgaard-Park & Dahlgaard, 2007; Kwok & Tummala, 1998; Mohammad, Mann, Grigg, & Wagner, 2009, 2011). Additionally, the practitioners require practical and detailed guidance to achieve the potential benefits of excellence. However, the guidelines or approach regarding the nature of excellence are still unclear and such implementations have followed a trial and error approach (Sharma & Kodali, 2012).

Literature discussions on operational excellence is growing and mostly deals with the overseas situation (e.g Friedli, Basu, Bellm, & Werani, 2013a; Jaeger et al., 2014; Martinich, 2014; Shehadeh et al., 2016) but very lack study studies and discussion in the SME sectors (Antony & Bhattacharyya, 2010; Bhullar et al., 2014; Dahlgaard-Park & Dahlgaard, 2007; Jaeger et al., 2014) particularly in Malaysian SME manufacturing industry context (Yew and Ahmad, 2014). Additionally, the literature on operational excellence is still limited where there is a lack of research that investigate the operational excellence and most of the studies are giving more attention on others performances (Shehadeh et al., 2016). Moreover, previous studies on operational excellence are focusing only on internal environment factors and lack of studies explains the effect of the external environment on operational excellence (Ojha, 2015).

This study attempts to help filling the gap in operation management research and contribute to the existing literature in the body of knowledge on the area of operational excellence. Therefore, the paper aims to examine the internal environment factors that influence the operational excellence on SME sector in Malaysia. Furthermore, the paper will analyze the effect of external environment factors in the relationship between internal environment factors and operational excellence.

## **2. Literature Review**

### **2.1 Operational Excellence**

Assen (2011) defines operational excellence as the design and management to maximize operating profits through continuous operation of an excellent production and delivery system that offering product and services to customers at right value. Duggan (2011) explained that operational excellence is a term that the operation is at the top level of performance and the organization has reached the highest operation can be. Operational excellence is not only about operation performance such as cost, time, quality, and flexibility metrics but also about how operation side of the business support the business growth. It also not just only include of cost reduction and quality improvement but also need to be handle people and resources efficiently.

Russell & Koch (2009) stated that operational excellence is about reaching the height of operational efficiency through doing things better, faster, and cheaper. Traditionally, operational excellence means optimizing business processes, production and manufacturing that aim to satisfy customer demand, improve quality and increase productivity and efficiency.

Today, operational excellence means much wider and it's a key lever for improving profitability and competitive advantage. It's not just about managing day to day operations with efficiency but it is a way to foster continuous improvement (Russell & Koch, 2009; Yew & Ahmad, 2014). Cesarotti & Spada (2009) posited that operational excellence is a comprehensive approach to achieve world class performance in productivity, quality and delivery of products and services. The systematic approach of operational excellence enables organizations to achieve a continuous improvement culture, service excellence and customer orientation and at the same time achieve the customer satisfaction and operational efficiency.

Operational excellence is a balanced management of quality, cost and time and at the same time focusing on the customer requirement. Operational excellence emphasizes on performance and organizations practices that the way organizations to achieve superior performance and continuous improvement. It is a continuing improvement in all dimensions of the production plant and measured by the performance efficiency and effectiveness. To achieve operational excellence, top management must play a role to engage the operational excellence structure and culture to their employees (Friedli, Basu, Bellm, & Werani, 2013). Miller (2014) Operational excellence is the continuously pursuit of better performance and effectiveness in all dimension of the organization. Operational excellence not only concern about production process, consistency and reducing waste but also concern in creating value through interaction performance of employees, customers and supply chain. Hence, operational excellence is not for perfection but to achieve the superior performance and profits by using a systematic approach which is focusing on people and implement the changes by involving customers, constantly innovating, operation continuous improvement and moving at optimal speed.

## **2.2 Operational Excellence Success Factors**

The literature on operational excellence (i.e Asif, Fischer, de Bruijn, & Pagell, 2010; Bigelow, 2002; Ojha, 2015; Seidl, 2007) indicates that the internal and external environment factors are the core success factors towards the operational excellence. The internal and external environment are the important aspects that will influence the organization improvement and it is a very crucial aspect to organization in order to compete in the industries (Ojha, 2015).

## **2.3 Internal Environmental Factors**

The internal environmental factors are the factors that being control by the organizations. To attain the excellence result, it is important for organization to strengthen the internal factors which will reward the organization to achieve an improvement in overall performance (Calvo-Mora et al., 2014; Gadenne & Sharma, 2009). Internal environment is one of the critical elements where it will affect the organization management systems to achieve the excellence results. According to Calvo-Mora et al., (2014), the excellence results of an organization are determined by the internal management systems where appropriate management systems are very important and highly needed to the organization to achieve the excellence performance.

### **2.3.1 Leadership Style**

Leadership is the key components in achieving excellence. Moreover, leadership is main criteria in the European Foundation for Quality Management (EFQM) Excellence Model (EFQM, 1999). According to Friedli et al., (2013a) leadership is fostering change and ensuring stability in operational excellence and the basic requirement needed to the leaders are required to establish structures, planning for improvements, organizing activities, establishing routines, caring about people, communicating, coaching, supporting and motivating employees. According to Bass (1999), leadership is subdivided into transformational, transactional leadership and passive leadership ('laissez faire'). Among these leadership styles, transformational leadership is more effective than other types of leadership styles. Transformational leadership has a positive relationship with effectiveness across different context compared to the transactional leader which has more ambiguous relationship with effectiveness. Transformational leadership behaviour also influences the changes in employees' efforts towards effectiveness compared to the transactional leadership behaviour (Abdullah, Shamsuddin, & Wahab, 2012; Lowe et al., 1996). Bass (1999) explained that the transformational leadership refers to the leader transforms the follower from their own self-interest through idealized influence (charisma), inspiration, intellectual stimulation or individualized consideration. It increases the follower's maturity level and concerns on the achievement, self-actualization, and the well-being of others, the organization, and society. Transformational leaders transform followers' attitudes, beliefs and values by motivate them to attain performance (Rafferty & Griffin, 2004).

The leadership style has been found to be one of the factors that is positively influences the operational excellence. Additionally, previous studies have that showed the effect of on the performance and operational excellence (e.g. Hines & Yu, 2009; Jaeger et al., 2014; Ojha, 2015; Romano, 2003; Seidl, 2007; Susanti et al., 2015; Yew et al., 2013). In view of the importance of the leadership style, it is expected that it will influence the operational excellence. Therefore, the following hypothesis is proposed.

H1 : The transformational leadership style has positive influence on operational excellence.

### **2.3.2 Human Resource Practices**

Human resources (HR) are recognized as one of the most important assets in an organization where it can produces valuable benefits to the organization. In the resourced-based view of an organization, HR provides rare and unique source of competitive advantage. HR may lead an organization to achieve and retain competitive advantage through their employees' competencies and skills (Barney, 1991). According to Yew & Ahmad (2014), HR is an intellectual capital which can include skills, knowledge and competencies that organization process and channelize to sustained the organizational excellence. HR has strategies and practices that work as a tool for the organization in order to achieve superior performance.

According to Pfeffer (1998), firm's human resources are the larger sources which can contribute to the competitive advantage. HR systems which is HR practices are designed to enhance employee's skills, commitment and productivity (Datta, Guthrie, & Wright, 2005). An

effective performance of HR practices such as employee recruitment and selection procedures, incentive compensation and performance management systems and extensive employee involvement and training will improve the employee's knowledge, skills, abilities, motivation and enhance retention of quality employees (Huselid, 1995). HR is the most important component for an organization and it is a major source of achieving competitive advantage. HR management is a challenging task and it should be supported by HR practices. HR practices refer to the organizational activities to manage weak human resources and enhance the resources towards organizational objectives (Pirzada et al., 2013).

The literature investigating the effect of HR practices on firm performance is growing. Previous empirical research has identified a number of the best HR practices that has the potential to improve and sustain the organizational performance. The HR practices such as recruitment and selection, training and development, performance appraisal and compensation are the universal use of HR practices in an organization (Yew & Ahmad, 2014) and was acknowledged as the key HR practices which are the best reflect HR practice (Shehadeh et al., 2016). Moreover, these HR practices also has been found have a significant effect on various settings such as on operations management settings across countries and industries (Ahmad & Schroeder, 2003; Vlachos, 2008).

Furthermore, previous studies showed that HR practices have been found to have positive relationship on the performance and significantly influence the operational excellence in the previous study (e.g. Abdullah et al., 2010; Cesarotti & Spada, 2009; Jaeger et al., 2014; Martinich, 2014; Moorthy et al., 2012; Ojha, 2015; Seidl, 2007; Yew et al., 2013). Therefore, the following hypothesis is proposed.

H2 : The human resource practice has a positive influence on operational excellence.

### **2.3.3 Organizational Culture**

Organizational culture refers to the collection of shared assumptions, values and beliefs which is reflected in organizational practices and objectives and at the same time helps organizational members to understand the organizational function and provide them norms for behavior in the organization (Lewis & Boyer, 2002; Liu, Ke, Wei, Gu, & Chen, 2010; Rohit & Webster Jr, 1989; White, Varadarajan, & Dacin, 2003). Organizational culture is the feeling and understanding of members in the group and expresses in the organization. Organizational culture is the source of energy and hope of an organization. It can make leaders and members to understand and identify their role in an organization (Schein, 2004; Yeh, 2008). Marković (2008) defined organizational culture as a set of shared values and norms by the people and groups in an organization and that control the way they interact with each other and with stakeholders outside the organization. Organizational culture can be considered as the attitudes, experiences, norms, beliefs and values of an organization (Summerill, Pollard, & Smith, 2010).

Moreover, the organizational culture is an important factor to the organization which will affect the performance of the organization. Organizational culture influence and control the way the interaction between people and between groups of people in an organization and the

interaction with stakeholders outside the organization (Summerill et al., 2010). Previous studies have showed that organizational culture has an effect on the performance and the operational excellence (e.g Jaeger et al., 2014; Ojha, 2015; Romano, 2003; Yew et al., 2013). According to the findings from the previous studies, the following hypothesis is proposed.

H3 : The organizational culture has a positive influence on operational excellence.

## 2.4 External Environment Factors

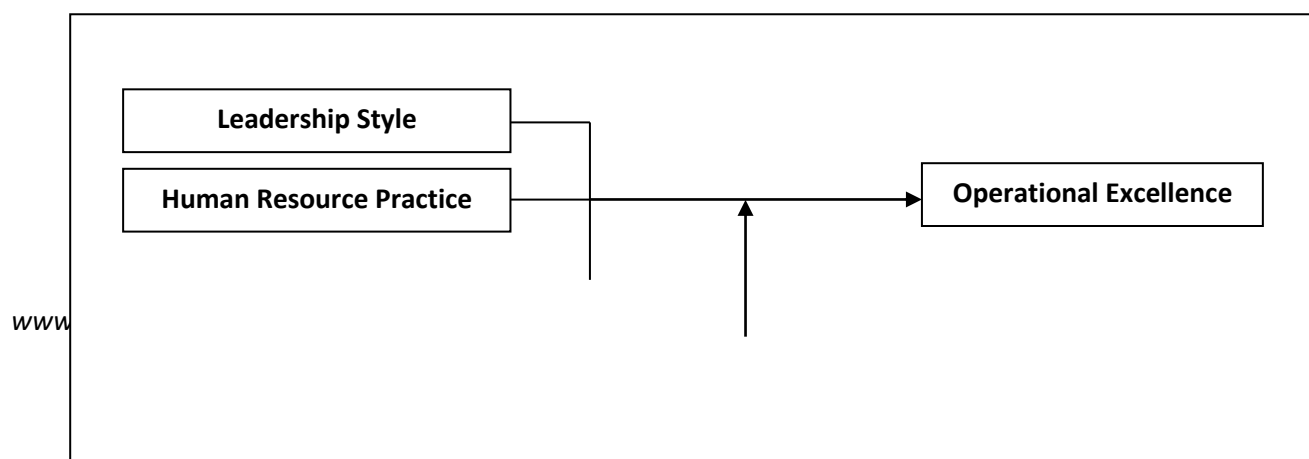
External environment refers to the external setting in which an organization works. External environmental factors have been found as factors that influence the organizational direction, action, structure and internal processes (Samuel, 2013). Longoni & Cagliano (2015) stated that environmental is one of the key competitive priorities in the area of operations for companies that will influence the operations on company profits, the natural environment, workers and the community. Environmental can be a source of competitive advantage in the short and long term when integrating into innovative strategies that enhance different operational and sustainability capabilities. A proper alignment between external environment factors with organization's strategies, capabilities and resources will determine the firm's competitiveness (Beer et al., 2005). Additionally, Li & Atuahene-Gima (2001) has suggested that external environment factors will moderate the relationship between organizational strategies and organization's performance.

Furthermore, previous studies have shown that the external environment has a significant relationship with the performance (e.g. Barkauskas et al., 2015; Garcia-Zamora et al., 2013; Hillemane, 2012; Mukulu, Oyugi, & Mwarania, 2011). In addition, the role of external factors as a moderator in the relationship with performance has been recognized in the previous studies (e.g Allred & Swan, 2005; Garcia-Zamora et al., 2013; Hashim, 2000; Jabeen & Mahmood, 2015; Priem, Rasheed, & Kotulic, 1995; Wang, Chen, & Chen, 2012). Therefore, the hypothesis of this study is proposed.

H3 : The external environment has a significant moderating effect on the relationship between internal environment factors and operational excellence.

## 2.5 Conceptual Framework

Based on the discussion in the previous literature, the research model will be developed for SME in Malaysia which consists of internal and external environment factors. Figure 1 show a proposed model used in this study.



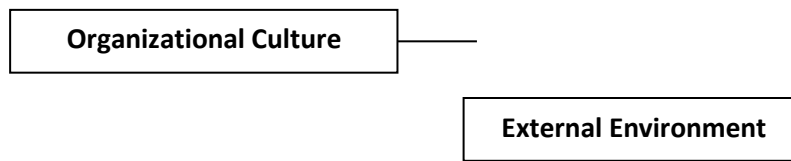


Figure 1: Conceptual framework

### 3. Discussion and Conclusions

This paper provides the conceptual understanding on the factors that influencing operational excellence on SMEs in Malaysia. The literature and previous studies were leads the development of a conceptual framework which consists of the internal and external environment factors to the operational excellence. The internal environment factors that influencing operational excellence comprise of leadership style, organizational culture and human resource practices. The paper describes a linkage that the internal environment is likely to contribute positively to the operational excellence and the external environment factors will moderate the relationship between the internal environment factors and the operational excellence.

The paper provides an understanding to owner or managers of the SMEs in Malaysia about the effect of the internal and external environment factors on the operational excellence in order to improve their performance which then leads to the achieving the operational excellence to their business. The literature shows that there is a need for a study in the context of SME in Malaysia. Previous studies on operational excellence mostly focusing on big company context and still lack of study in the SMEs context. Additionally, the most empirical research on operational excellence has been conducted in developed countries. The managerial decisions on the factors or strategy to attain the operational excellence in the context of SMEs like Malaysia is remain unclear. Therefore, this study expected contribute to filling this gap, add to the existing literature and provide support for the past theories on the moderating effect of the external environment that affect the operational excellence.

#### Corresponding Author

Associate Professor Dr Mohammad Ismail is a Senior Lecturer at the Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan, Malaysia. He can be contacted at: [mohammad.i@umk.edu.my](mailto:mohammad.i@umk.edu.my).

Dr Mohd Nazri Muhayiddin is a Senior Lecturer at the Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan, Malaysia. He can be contacted at: [mnazri@umk.edu.my](mailto:mnazri@umk.edu.my)

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