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**INFORMATION TECHNOLOGY CAPABILITY AND CORPORATE
COMMUNICATION IN SME FOOD INDUSTRIES**

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ABSTRACT

During this decade, technology has been recognized as one of the important factors for maintaining competitiveness in a global business environment. Malaysia, as a developing country, is moving towards to become internationally technological based manufacturing sectors using technological capabilities. Since the productivity of the organization is highly dependent on the technology capability, managers need to do their best to communicate effectively with their employees in order to facilitate the sharing information that substantially for contribute to the commercial success. Communication is important in connecting employees and employers, or employees and customers in the process of services in manufacturing. Due to an increase in global competition, rapid technological development and changes in customer demand, this makes the performance of food and beverage firms (F&B) has become increasingly dependent on continuous improvements to introduce new products and processes. Therefore, this study interested to focus on the information technology and corporate communication that has been considered as a pre-quisite to improve productivity in food industries. Even though technology is widely implemented and studied in many industries by researchers, IT capability in manufacturing industry is limited and indicated a major gap in SME's. Furthermore, IT capability highlights the importance in SME's. This study is a survey research and quantitative research. There are two methods for collecting data that are through an online survey and the distribution of a questionnaire through several manufacturing firms. Due to the importance of the services in the manufacturing sector, this study to explore the contribution towards the business development in manufacturing industries. Hence, the study also discusses the role of IT capabilities in supporting manufacturing practices, especially in the context of food industries.

Keywords: IT capability, corporate communication, productivity, competitiveness, food industries, manufacturing sectors

INTRODUCTION

As stated by Carbonara (2005), IT plays a role in improving communication, delivering information and knowledge sharing, exchange between the organization and the organizational learning process, which supports the innovation process. Desouza, Awazu, Jha, Dombrowski, Papagari, Baloh & Kim (2008) mentioned that the use of IT, for example, online surveys, discussion forums, an e-mail, allow firms to improve the communication with customers, making it easier to state their needs and priorities, and increased feedback from customer in contributing to the development of new products. Many studies also associate IT and communications. However, Egbu, Gaskell and Howes (2001) linking IT capability as a major communications tool. To conclude other studies is to what extent IT to support communication is not explicitly stated. Therefore, regarding the relationship between IT capability and communications, the contribution to IT capability have not been explore and discuss in detail from the previous study. This study more to point of view without any empirical research been conducted. In addition, recent advances in technology have improved the ability of employees to stay connected to both work and social exchange (Watson, Narasimhan & Rhee, 1998). Therefore, it is important to understand the contribution of IT capabilities to facilitate communication and collaboration in practice and information systems research.

The government also aims to promote manufacturing-related services such as product design, research and development (R&D), cold chain storage for food processing industry and central utility supply. This initiative will help to extend the value chain and increase the country's demand for Malaysian goods and services. Many manufacturing sector rely on technology to enhance performance. Hence, this shows critical for Malaysia's manufacturing firms to accelerate the transformation of the sector which depends on low-cost labor for the sector that thrives on information technology (IT) capability and creating high-paying jobs. IT capability defined as the process of acquiring technical knowledge through learning organization (Rosenberg & Frischtak, 1985). By using technology capabilities it can be considered as the enabler for effective communication (Abeyasinghe & Paul, 2004). Hence, this paper aims to present the conceptual background on the information technology and corporate communication that has been considered as a pre-quisite to improve productivity in food industries.

LITERATURE REVIEW

Technology

Technological factors are referred to as innovation characteristics in some studies of organizational adoption (Premkumar & Roberts, 1999). Technology characteristics differ according to the nature, purpose, scope and benefits of each technology (Markus & Keil, 1994; Kaplan & Sahwney, 2000; Swanson, 1994). Different industries have different technology requirements. Technology characteristics can be described by both, either internal or external technological factors that are relevant to the organizations. Tornatzky and Fleischer, (1990)

mentioned that the technology context focuses on how features of the technologies themselves can influence the adoption of new innovation process. Lin (2014) agreed with those statements by mentioning that the main focus of technological context is on how technology characteristics influence the adoption decision. Awareness of the new technology also will play a major role to the adoption decision. Without noticing about the existence of new technology available in the market, adopters will not have a chance to adopt it.

Definition and concept of IT Capability

Based on the fact Ross, Beath and Goodhue (1996) IT capabilities is the ability of a firm to install, integrate and use IT-based resources. Furthermore, Bharadwaj (2000) has explained in depth about the ability of IT through an organization's information technology functions, and has defined the firm's ability to drive and use IT-based resources with combination other resources and capabilities. This capacity reflects the ability of these firms to combine resources to promote superior performance (Amit & Shoemaker, 1993). IT efficiency can be categorized into three dimensions: IT knowledge, IT objects and IT operations (Tippins & Sohi, 2003). A high level of IT experience enables organizations to be innovative in service delivery and cost control strategies that will enhance performance and meet customer requirements (Bhatt & Grover, 2005).

In addition, the importance of IT is to survive and ensure the success of the organization. From word processing to the network, Internet and e-commerce, IT has been a driving force in the global economy today. Firms often invest in IT for activities such as accounting, payroll, supply chain management, human resources and various other functions (Rao, Metts & Monge, 2003). Although small firms are reluctant to invest in IT, however, big firms think it is very important and beneficial (Stimmel, 2001). While, small firms are concerned about the resource requirements related to IT investments (Pool, Parnell, Spillan, Carraher & Lester, 2006).

However, IT capability may allow long-term survival of small firms in several ways. These include providing access to external knowledge and financial resources, generate more social network relationships and creating trust and legitimacy through the widespread dissemination of information (Morse, Fowler & Lawrence, 2007). Therefore, information technologies help to remove the synchronisation of time and location between service provider and customer.

The role of IT capability in improving performance

Previous studies have shown that the ability of IT to provide the basis for competitive advantage and improve service performance (Santhanam & Hartono, 2003; Bhatt & Grover, 2005). Based on the fact Tippins and Sohi (2003) the ability of IT to reduce transaction errors, improve consistency in performance and improve service reliability. The assessment showed that the ability of IT to improve service quality, create a link of knowledge, and to identify and share the expertise of their organization (Quinn, Baily, Herbert & Willett, 1994). Bharadwaj (2000); Li, Chen and Huang (2006) was devoted to the importance of the relationship between IT capabilities and IT expenditure (IT investments) and productivity/performance, with the effects of IT capabilities as a mediator. IT capability by itself is not effective to provide the basis for sustainable competitive advantage because it is able to replicate. Therefore, the impact of IT on

firm performance cannot be measured directly, but can only be measured by examining the effect of indirectly.

In this study, factors of corporate communication includes elements of intangible and tangible resources. Furthermore, this study using IT objects, IT knowledge and IT operations as a key component to measure IT capabilities. This dimension indicates the specialization of resources in the firm cannot be used for effective IT architecture without adequate objects, operation and knowledge. Therefore, the ability of IT can understand the existing operations because it can lead to changes in business processes.

Corporate Communication

Corporate communication is a method in which the firm with medium and large size communicating with employees, shareholders and customers. Corporate communications department needed by firms to promote effective communication between both internal employees and external audiences. Although it is a corporate communications department, indoor and outdoor activities should be separated. This is because both require a different approach to managing them. Corporate communications manager responsibilities usually involves the following adjustments balance between internal and external audiences, to deal with all the public relationship (PR) issues (the firm introduced the useful of media or special events) and the organization of conferences. All these obligations is necessary to create a corporate culture, corporate identity and brand equity through the media inside and outside.

Effective communication process is dependent on the background of the firm and the will to succeed in the long term (Purves, 2005). Communication is to understand the interaction with other people every day to exchange information. At the organizational level, communication can be divided into external and internal communications. Internal communication is the communication that occurs between the organization's management and internal stakeholders (Welch & Jackson, 2007), while the external communications also focus on audiences outside the organization (Saunders, 1999). Internal communications manager is responsible for the plan's strategic goals (publication) and motivate employees. External communications manager responsibility is more to dealing with outsiders such as publicity and social activities. As mentioned by Lundkvist and Yakhlef (2004) the process of communication and social interaction with customers is the key to successful products and services. This means that when more communication going on, a lot more issues to be addressed are highlighted (Turkel, 2004). The relationship between employees and customers involved with the attitudes, perceptions and behavior (Horrihan, 2010). In addition, adverse experiences occurring between employees and customers will affect customer attitudes.

SME Industries

Malaysia as many other economies is dominated by a large proportion of small and medium enterprises (SMEs). In the manufacturing sector alone, SMEs constituted 96.6 per cent (37,866) of the total number of establishment, contributed 35.0 per cent (RM192 billion) to total manufacturing output, and involved mostly in textiles and apparel (23.2 percent), metal and non-metallic mineral products (16.7 percent) and food and beverages (15.0 per cent) (Aris, 2007).

Due to the large contribution of the sector to the economy, according to Jutla, Bodorik and Dhaliqua, 2002; Singh, Garg and Deshmukh (2010), competitiveness and development of SMEs must be sustained over time. Intense competition under the global economic framework requires SMEs to reconsider their competitive position with their local and foreign rivals. The fact that the share of SMEs has increased in the development countries suggests that efficient SMEs have actually been able to deploy new strategies in order to maintain or even enhance, their competitiveness in a globalised economy. SMEs account for over 95 per cent of enterprises and 60-70 per cent of employment, and generate a large share of new jobs in OECD economies. Service industry dominates the world economy and innovation play an important role for ensuring the continual growth of service sectors (Gallouj & Weinstein, 1997).

According to OECD (2005) defines that SMEs as companies with subsidiaries, independent with a small number of employees. Table 1 shows the definitions of SME for manufacturing sector varies from one country to another.

Table 1.

Definitions of SME for manufacturing sector

Country	Small	Medium
Malaysia	Employees: ≥ 5 & ≤ 50 Revenues: \geq RM250,000 & $<$ RM10 million	Employees: ≥ 51 & ≤ 150 Revenues: \geq RM10 million & \leq RM25 million
Thailand	Employees: ≤ 50 Fixed Assets: \leq Baht 50 million	Employees: 51 - 200 Fixed Assets: $>$ Baht 50 million & \leq Baht 200 million
EU	Employees: < 50	Employees: ≥ 50 & < 250
World Bank	Employees: ≤ 50 Total Assets / Sales: \leq USD 3 million	Employees: 51 - 300 Total Assets / Sales: $>$ USD 3 million & \leq USD 15 million

SME play a significant role in developing economies by generating new employment opportunities and making significant contributions to the national or global economy. Most of SMEs are characterized by dynamism, flexibility and innovative power that being able to adapt on the fly to changes in the economy (Pislaru, Modreanu & Citu, 2012).

RESEARCH METHODOLOGY

This study is a survey research and quantitative research. It outlines the procedures necessary to obtain information for structuring and solving research problems (Malhotra, 1996). The quantitative method used to collect data is actually the usage of questionnaire as the instrument to gathered and collect data from the respondent. There are two methods for collecting data. The first is through an online survey in which the firm has obtained a list of Federation of Malaysian Manufacturers (FMM). The second is the distribution of a questionnaire through several manufacturing firms that focus on the food industry in Malaysia.

CONCLUSION

As a conclusion, information technology management is important for the survival, growth, development of SMEs and businesses in the service industry. The present study was conducted to find out the role of technology in the development and growth of small and medium sized firms. The results indicate that the Malaysian SMEs management is aware of the role technology plays in the growth of the firms. The government also needs to promote manufacturing-related services such as product design and central utility supply. This initiative will help to extend the value chain and increase the country's demand for Malaysian goods and services.

Meanwhile, communication is important in connecting employees and employers, or employees and customers in the process of services in manufacturing. This is to ensure that productivity is improved according to the standard set. Since the productivity of the organization is highly dependent on the technology capability, managers need to do their best to communicate effectively with their employees to improve productivity. Nevertheless, only when the organization is fully aware of the principles of effective communication, they will be able to achieve their goals and improve their performance.

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