

Model of Thai Small and Medium Sized Enterprises' Organizational Capabilities: Review and Verification

Apicha Boonpattarakan

School of Business Administration, Bangkok University

119 Rama IV Road, Klongtoey, Bangkok 10110, Thailand

Tel: 66-2350-3500 ext.1640 E-mail: apicha1961@yahoo.com

Received: March 26, 2012 Accepted: April 12, 2012 Published: July 1, 2012

doi:10.5296/jmr.v4i3.1557

URL: <http://dx.doi.org/10.5296/jmr.v4i3.1557>

Abstract

In today's competitive environment, small and medium sized enterprises (SMEs) must focus on strengthening their organizational capabilities, considered to be a vital ingredient for building firms' competitiveness. A number of factors may be deemed to be the drivers of organizational capabilities. Thus, this study was aimed at investigating and discussing those dimensions and their elements associated with organizational capabilities. The review of the literature indicates that the fundamental approach to build organizational capabilities rest heavily on organizational resources, organizational architecture, and organizational quality. The initial model was developed and proposed. Then, in-depth interviews with twenty Thai SMEs were carried out to verify the proposed model. Based on the in-depth interview results, key modifications were made to adjust the model and make it more practical. Financial resource, marketing resource, operational resource, and human resource are considered to be key elements of organizational resources whereas planning system, information system, compensation system, empowerment structure, learning culture, and teamwork culture are deemed to be key elements of organizational architecture. Finally, quality of the company and quality of products or services are believed to be key elements of organizational quality. Firms who can effectively and efficiently manage these elements of organizational capabilities will be able to compete and succeed in the market in the long run.

Keywords: Organizational Capabilities, Organizational Resources, Organizational Architecture, Organizational Quality, Competitiveness

1. Introduction

Small and medium sized enterprises or SMEs are the dominant form of business in all countries worldwide. They are deemed to have a significant effect on the economic development. SME sector is considered to be the largest provider of employment in most countries around the world as well as a key source for technological and new product development (Fan, 2010). Moreover, SMEs are thought to be the engine of growth and essential for having an efficiently competitive market. They can help create jobs and reduce poverty, provide value-added output, reduce imports and increase exports, and are a source of skill development (Definition of SMEs, 2011).

SME businesses tend to be diverse. However, they seem to have some common characteristics. They may have begun with just one idea or one product and expand their product offerings from that point onwards. The majority of the owners tend to have technical expertise with limited business skills and experience. These owners and their family members are the ones in managerial positions and operate their businesses based on trusts and personal connections, rather than formal business systems and contracts. The SME businesses often have a family-like culture where the owners' values and beliefs are used to run the business and shared by all of the employees. SME owners' visions and managerial styles tend to be bounded by their skills and experience, the pressure of running day-to-day operations, and the constraint of resources. Success or failure of these SME businesses tend to rely on the owners' business connections and their managerial styles (Section 2: Characteristics of SMEs, 2010).

SMEs are unanimously considered the focal point of Thai economy. In 2010, all the business enterprises in Thailand consisted of 2,924,912 businesses. These can be categorized into 2,894,780 small enterprises and 18,387 medium enterprises. In terms of percentage, small and medium sized enterprises (SMEs) made up of 99.60% of all enterprises in Thailand with 98.97% for small enterprises and 0.63% for medium enterprises. Large enterprises comprised a very small percentage of all business enterprises in Thailand (The White Paper on Small and Medium Enterprises of Thailand in 2010 and Trends 2011, 2011). The majority of the SME businesses in Thailand have started out as family businesses. Some may not survive in the market. The report indicates that the survival rate of SMEs in year one is higher than 95% of all SMEs established in that year and has decreased in year 2 and year 3 with the survival rate in year 3 lower than 90%. However, some of these SME businesses have grown and become successful. It appears that they have tried hard to understand the competitiveness of the business and have developed their organizational capabilities to respond to the changing environment and the needs of the market. Those SMEs who have not paid attention to the development of organizational capabilities may face a daunting task to compete and survive in the market in the long run.

Organizational capabilities, as a result, are considered a vital ingredient for building firms' competitiveness. They have been characterized as the most intangible of the company's resources and the most critical aspect of success elements (Spanos & Prastacos, 2004; Tomer, 1987). From a strategic management viewpoint, organizational capabilities can be considered

a source of strengths and competitive advantage (Barney, 1991). Organizational capabilities can be viewed as the foundation in which organizations utilize their strengths to increase competitiveness, contribute to growth, and enhance organizational performance.

In today's intense competition where on-time delivery, speed, quality, and cost are considered essential ingredients to respond to customer needs, organizational capabilities are considered vital to all firms who wish to succeed. Therefore, building organizational capabilities are considered to be the key success factor in doing business. However, previous research has offered relatively little in terms of detailed explanations concerning organizational capabilities, particularly on SMEs (Garengo & Bernardi, 2007) and how they are created (Lei, Hitt, & Bettis, 1996; Verona, 1999). As a result, the objectives of this study are to investigate and discuss the key dimensions of organizational capabilities and their related key elements essential for Thai SMEs as well as to conduct in-depth interviews with twenty SMEs to verify the proposed model of organizational capabilities. Necessary modifications will then be carried out to make the model more realistic and more practical to Thai SMEs.

2. Literature Review

2.1 Organizational Capability

Organizational capability represents the identity of a firm as perceived by both employees and customers. It is the firm's ability to perform better than competitors using a distinctive set of resources, systems, and structures. Generally, organizational capability is believed to form the basis for competitive advantage. Building better products or services, providing products with competitive prices, as well as focusing on technological innovation for improvement can be considered sources of organizational capability. Organizational capability is based on the principle that people in the organizations are significant to the success of the firms because people are the ones who think strategically, manage work, make decisions, and allocate resources. However, people alone will not be sufficient to create capabilities. Firms must have sufficient assets that can be utilized to build competitive advantage. Firms must adapt to the changing environment (i.e., customer needs and wants) by utilizing necessary assets that are essential for establishing work systems, structures, and processes, paving the way for their employees to create organizational competencies (Ulrich & Lake, 1990).

Organizational capability can be conceptualized as the networks of knowledge combining people and assets which, as a whole, will enable organizations to perform their given tasks more effectively. Assets will only become competencies when they are managed efficiently and effectively by people (Tomer, 2003). Organizational capability can be defined as the ability of an organization expressed in terms of human resources such as quality, skills, and competence; physical and material resources such as machines, land, and buildings; financial resources such as money and credit; information resources such as knowledge and databases; as well as intellectual resources such as copyrights, designs, and patents (Organizational Capability, 2010). Tomer (1998) defined organizational capability as the lasting productive capacity of the firm expressed in terms of strategic patterns and activities implemented by the firm. Kaplan and Norton (2004) referred to organizational capability as the ability of an

organization to effectively and efficiently manage the process of change and activities. Stacey (2003) referred to organizational capability as the organization's ability to organize, manage, coordinate, control, and govern sets of activities.

Studies have provided elements of organizational capabilities. Ulrich and Smallwood (2010, p.1) state that "*assets like leadership, talent, and speed are what produce superior market value. A capabilities audit can show you how you measure up – and how to build on your intangible strengths.*" They have identified eleven capabilities that they believe that good and well-managed firms tend to possess and competitive disadvantage will likely to occur with firms who fall below the norm in any of these eleven capabilities. These eleven capabilities are composed of talent, speed, shared mindset/brand identity, accountability, collaboration, learning, leadership, customer connectivity, strategic unity, innovation, and cost efficiency. Barney (1991) identified the firm's systems involving planning, controlling, coordinating, and reporting as the firm's capability. Tomer (1995) stated that the firm's organizational strategy and structure, such as corporate strategy, organizational structure, culture and organizational procedures were reflective of organizational capability. Barney and Hesterly (1999) suggested that organizational capabilities were embedded in teamwork, trust, and close relationships of individuals within the firm. Kaplan and Norton (2004) argued that corporate culture, corporate leadership, shared goals, as well as knowledge sharing were elements of organizational capabilities.

Numerous studies have also been conducted to grasp a better understanding of elements of organizational capability. It has been shown that organizational capabilities can be derived from marketing know-how (Vorhies, Harker, & Rao, 1999), flexibility (Lee, Beamish, Lee, & Park, 2009), ongoing innovation (Brown & Fai, 2006), organizational learning (Bhatnagar, 2006; Hsu & Fang, 2009; Lee, Lee, & Lin, 2007), information processing and system (Heusinkveld, Benders, & van den Berg, 2009; Service & Maddux, III, 1999), knowledge management (Lee et al., 2007), firms' resources which are based on resource based view (Armstrong & Shimizu, 2007; Barney, 2001; Brouthers, Brouthers, & Werner, 2008; Fahy, 2000; Herrmann, 2008; Olavarrieta & Ellinger, 1997; Smith, Vasudevan, & Tanniru, 1996), marketing resources (Srivastava, Fahey, & Christensen, 2001), human resources (Bacon, 2001), quality (Prajogo, 2007), and internal systems (such as logistics management - outsourcing) (Persson, 1991; Qureshi, Kumar, & Kumar, 2007).

Past studies described in the above have suggested a number of elements associated with organizational capabilities. These elements can be categorized into three major sources of capabilities: organizational resources, organizational architecture, and organizational quality. These three categories or dimensions must be present if firms wish to build a competitive organization. Organizational resources refer to those resources that can be utilized to create strengths for the firm. Organizational architecture refers to organizational systems, structures, and culture that encourage work flow, employee morale and job satisfaction, as well as knowledge sharing. Organizational quality is the last dimension proposed to influence high quality work process and output. It is associated with the quality of the company as a whole as well as the quality of output delivered to the market.

2.2 Organizational Resources

Organizational resources are basically assets or means an organization can utilize to increase productivity and competitiveness. Organizations may utilize different resources to accomplish goals. The resources used by organizations can be in various forms such as people, money, equipment, time, technology, infrastructure, information, knowledge, etc. Those firms who can utilize their available resources more effectively and efficiently than others will be able to achieve their goals and enhance their performance and competitiveness.

Drawing from the school of industrial organization (Stigler, 1968) and the early work of Penrose (1959), scholars proposed a resource-based explanation of organizational productivity and performance. The concept has been expanded and supported by the works of Barney (1986, 1991) and also by those researchers who have been interested in the development of the so-called resource-based view or resource-based theory (Aaker, 1989; Amit & Shoemaker, 1993; Peteraf, 1993; Prahalad & Hamel, 1990). The resource-based view of the firm indicates that the operation of a firm consists of a bundle of resources (Wernerfelt, 1984) including assets, processes, attributes, knowledge, information, know-how, etc. possessed by the firm and that can be used to formulate and implement competitive strategies. These resources will allow the firm to work and to implement its strategies more effectively and efficiently (Olavarrieta, 1996). Firm resources can be tangible or intangible (Hall, 1992) and may have been internally developed inside the firm or externally acquired from the market.

The resource-based view (RBV) of the firm has provided a significant influence to the management literature since the early 1990s (Connor, 2002). Researchers and scholars in the area of the resource-based view (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984) suggest that competitive advantage of the firm could be explained by the differences of the firm's resources and their utilization. A firm may be perceived as a set of tangible and intangible resources that can be combined and utilized to create organizational capabilities (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984). If the first firm owns superior resources relative to the second firm and if the second firm cannot access and utilize equivalent resources, then the first firm is expected to have superior capabilities. Firms competing in the market are more or less interested in building and seeking superior core capabilities, often referred to as core competencies (Prahalad & Hamel, 1990). Superior core capabilities will enable the first firm to gain higher achievement than the second firm (Peteraf, 1993). This in turn implies that the first firm has a competitive advantage over the second firm and has the ability to provide higher value for its customers. The resource-based view further proposes that sustainable competitive advantage can be derived from having a set of resources that can be utilized to create value in the marketplace (Medcof, 2000). Thus, one firm will be able to sustain its competitive advantage over another firm only if the resources that are used to create superior core competencies are durable and inimitable (Barney, 1991; Peteraf, 1993).

Barney (1997) suggests that possessing resources is not enough to create competitive advantage. Firms need to be organized to take full advantage of their resources to attain competitiveness. The resource-based view relies on two fundamental key concepts: resource

differences (i.e., resources possessed by firms may differ) and resource immobility (i.e., the differences may be long lasting) (Mata, Fuerst, & Barney, 1995). In addition, levels of resource utilization are also a key determinant of competitive advantage. Even though several firms may have access to the same resources, their competitive advantage may be different depending on the level of utilization firms put on their resources. Resource differences are the required condition for obtaining competitive advantage. Resource immobility is also the significant condition for building sustainable competitive advantage. This is because competitors would have faced cost disadvantage in acquiring, developing, and utilizing resources, compared to those firms who have already possessed the same resources and utilized those resources to build their competitiveness in the first place.

The three traditional sources of organizational capability consist of economic/financial resource, strategic/marketing resource, and technological resource (Ulrich & Lake, 1990). Economic/financial capability refers to the overall cost of the firm and the price of a product may determine the extent to which customers derive value from an organization. Strategic/marketing capability refers to the firm's commitment to strategic/marketing planning and implementation. The technological capability refers to the adoption of technological tools/equipment and know-how to help increase the efficiency of the business. Drawing from Ulrich and Lake's (1990) conceptual framework, it is proposed that three major resources contributing to the success of the firm consist of financial resource, marketing resource, and technological resource. Financial resource can be defined as the extent to which the fund is sufficient and available for operations. It also encompasses the expertise in financial management that results in the effective use of fund and the effective control of costs (Ulrich & Lake, 1990). Marketing resource can be defined as the extent of knowledge and expertise in strategic marketing planning and execution, including market analysis (i.e., in terms of consumers, competitors, industry, and the environment) and the development and deployment of marketing strategies (Luo, Sivakumar, & Liu, 2005; Vorhies et al., 1999). Along the same line, technological resource can be defined as the extent of equipment, tools, and technological know-how that can be used to develop an efficient organization, render quality products or services, and provide a quality workplace and a quality of life (Eris & Saatcioglu, 2006).

Likewise, people or human assets are also considered a key resource of the firm. It is considered to be one of the five traditional tools for successful management, which consist of man, money, machine, material, and method (Schermerhorn, 2008). Barney (1991) categorized human capital resource, such as experience and training, as part of the firm's resources. Thus, human resource can be defined as the extent of the collective value of the organization's intellectual capital composed of competencies, knowledge, and skills possessed by employees at all levels. This capital is the organization's source of creativity, innovativeness, and competitiveness (Bassi & McMurrer, 2008; Human Capital, 2010; Wright, Mitsuhashi, & Chua, 1998).

2.3 Organizational Architecture

The term "organizational architecture" initially appeared in the book entitled "*Organizational Architecture: Designs for Changing Organizations*" (Nadler, Shaw, & Shaw, 1992). The concept was further investigated and reported in a Harvard Business Review article entitled "*The CEO as Organization Architect*" (Howard, 1992). Organizational architecture involves the creation and management of an organizational framework that covers all formal and informal systems and structures. The focus of organizational architecture is to create an effective framework for organizations that can help generate value to the organizations. The concept of organizational architecture originally emerged from the area of organization design (Nadler et al., 1992). However, the concept of organization design was considered too narrow to be able to explain the complexities of an organization (Nadler & Tushman, 1997). As a result, the concept of organizational architecture was adopted to refer to organizational characteristics and to encourage a "holistic" approach to organization design (Nadler & Tushman, 1988). In this sense, organizational architecture is referred to as the structure and form by which a business operates.

Various explanations have been developed to describe the concept of organizational architecture. Nadler and Tushman (1997) considered organizational architecture to be the design of systems, structures, and culture that help the organization coordinate its works so as to maximize its productivity and effectiveness. Nadler et al, (1992) defined organizational architecture as all the systems, structures, technologies, processes, work practices, and the people. Eikelenboom (2005) categorizes organizational architecture into hard and soft elements. For the hard organization elements, organizational architecture is referred to as the organizational systems and structures which hold organizations together. For the soft sense, it is referred to as the environment of the organization, similar to the notion of corporate culture, which creates a good working atmosphere.

The elements of organizational architecture are relatively widespread (Eikelenboom, 2005). Most of the time, hard, structural, formal dimensions (such as systems, structures, management processes, spans of control, assignment of decision rights, etc.) are combined with soft, informal organization elements (such as support, cohesion, management practices, employee attitudes, norms, culture, etc.) to create the framework of the organization. Both aspects of hard and soft elements of organizational architecture are considered essential components leading the organization to build competitive advantage. The key hard elements involve the system and structure of organizations, namely, planning system, information system, benefit system, and empowerment structure, whereas the soft elements involve the learning culture of organizations. It is believed that these specific soft and hard elements are key drivers of organizational competitiveness.

2.3.1 The Hard Elements

Organizational systems and structure are considered the hard elements of organizational architecture. The three elements of organization systems considered to be key driving forces include planning system, information system, and benefit system. The output of planning is called a plan, which can be long range, intermediate range, or short range. It is considered the framework within which the firm operates. The planning process enables management to

understand more clearly what they want to achieve, and how and when they should do it (Planning, 2010). Planning also helps forecast the future and makes the future visible (Kotler & Keller, 2006; Krajewski, Ritzman, & Malhotra, 2006). Along the same line, case studies in the information systems literature provide evidence that strategic information systems have been used to gain competitive advantage (Gatian, Brown, & Hicks, 1995). In addition, Eikelenboom (2005) examined the effects of benefits and rewards on organizational behavior and strategic performance. In this light, it is believed that planning system, information system, and benefit system will have an effect on organizational competitiveness. Empowerment structure can be defined as the extent of management practice of decentralization by providing employees with greater accountability and authority so that they can take initiatives and make decisions to solve problems and improve products or services and performance (Chebat & Kollias, 2000; Herrenkohl, Judson, & Heffner, 1999).

2.3.2 The Soft Elements

Organizational culture is deemed to be the key element of organizational architecture. It is believed that learning culture will help enhance organizational capabilities. Learning culture is basically the extent of the organizational culture that fosters constant learning and knowledge acquiring so as to respond to the changing environment. It is the culture that encourages and supports employee learning, thinking, generating new ideas, and disseminates the knowledge throughout the organization (Cook & Yanow, 1993; Popper & Lipshitz, 2000). Organizational learning addresses how organizations adapt to their environments, develop new knowledge, and then achieve competitive advantage. A study shows that it pays to invest in people-focused practices including building learning capacity, knowledge accessibility, and professional development. Organizations that have greater commitment to the learning of their employees seem to enjoy greater financial rewards (Conner, 2010). Organizational learning culture was found to have a positive direct impact on non-financial performance but have a positive, but indirect (through non-financial performance) effect on financial performance (Škerlavaj, Štemberger, Škrinjar, & Dimovski, 2007). Drawing from this line of reasoning, it can be argued that learning culture may have a direct effect on organizational competitiveness.

2.4 *Organizational Quality*

Organizational quality is considered to be an organizational work principle or philosophy, which will drive the organization to work right the first time and every time. Without high standard and high quality of work, those available resources, systems, and structures will not be able to function and be optimally utilized. Therefore, it is necessary for firms to have high standard and high quality work principle or philosophy as one of their key capabilities.

Various definitions of quality have been offered in the literature. The various aspects of definitions encompass customers, manufacturers, products, value, and transcendent. Edwards (1968) defines quality as the capacity to satisfy customers' wants whereas Juran (1988) defines quality as fitness for use by customers. As for manufacturers, quality is referred to as the degree to which a specific product conforms to specification (Crosby, 1973; Gilmore, 1974). In addition, Broh (1982) defines quality as the degree of excellence at an acceptable

price and an acceptable cost. Pirsig (1989) states that quality is something that you know what it is. You believe that something is of good quality if you have a good feeling about it.

A comprehensive concept of quality control and management is the concept of total quality management or TQM. Having observed Japanese success on quality control, western corporations introduced their own version of quality, i.e., total quality management or TQM (History of Quality, 2010). The concept of TQM encompasses organizational culture and attitude that strives to provide customers with quality products and services. The TQM concept requires quality focus in all aspects of the company's operations. Concentration is on doing the right thing the first time and trying to eliminate defects from the work process (Introduction and Implementation of Total Quality Management (TQM), 2010). TQM is therefore a philosophy that everyone in the organization work continuously together to improve the work process and the operations of the company.

The concept of TQM has become a management tool, applicable to both manufacturing and service providing firms. It provides guidance to an organization that fosters continuous improvement. The TQM philosophy emphasizes a systematic, integrated, and organization-wide perspective involving everyone and every function of the firm. It focuses primarily on the satisfaction for both internal and external customers. The key aspects of TQM are the prevention of defects and emphasis on quality at all levels of work. TQM is not a choice but a necessity. It is an integrated effort leading to building competitive advantage by continuously improving all aspects of work (Total Quality Management, 2010).

Total quality management is frequently considered to be a means for achieving competitive advantage. In their study, Douglas and Judge, Jr. (2001) found relatively strong support for the relationship between total quality management practice and the corresponding competitive advantage. Martínez-Costa (2009) analyzed the linkages between total quality management, organizational learning, and performance and found that implementing TQM led to greater performance. By drawing from the market-based theory of competitive advantage, resource-based theory of the firm, and systems theory, Reed, Lemak, & Mero (2000) found that implementation of total quality management (TQM) helps generate a sustainable competitive advantage for the firm. As a result, quality of the company can be referred to as the extent of the adoption of the principle of total quality management as a holistic approach to long term success that views continuous improvement in all aspects of an organization and involves all employees in the organization, and will have an influential effect on organizational competitiveness (Knights & McCabe, 1999).

Product quality/service quality is also deemed to be a key element leading an organization to be competitive in the marketplace. The fundamental definition of product quality/service quality is that the product or service must meet customers' expectations. However, in order to develop a more complete definition of quality, we must consider the key dimensions of product quality/service quality. We follow the concept of product quality suggested by Garvin (1987) who proposed eight dimensions of product quality, i.e., performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality. With regard to service quality, the concept of service quality has been proposed as a key driver of

customer satisfaction (Juran, 1988). Grönroos (1984) and Parasuraman, Zeithaml, and Berry (1985) consider service quality as the difference between customers' expectation and actual performance. Grönroos (1984) suggested three dimensions of service quality, i.e., technical quality, functional quality, and corporate image, whereas Parasuraman et al. (1985) identified five dimensions of service quality. The five dimensions proposed consisted of tangibles, reliability, responsiveness, assurance, and empathy.

Perceived quality is considered one dimension of Garvin's (1987) eight dimensions of product quality. It can be referred to as the positive or negative feelings customers attach to the offerings, based on their past experiences with the products or services. Perceived quality can be used to evaluate the quality of products or services of the company. If the firm's products or services are of higher quality when comparing with competitors, consumers will be more likely to continue their relationships with the company (Charters & Pettigrew, 2006, Eisingerich & Bell, 2008, Garvin, 1987). Both quality of the company and quality of products or services will essentially help enhance the competitiveness of the company.

2.5 Proposed Model of Organizational Capabilities

Based on previous research described above, our initial model was developed by identifying strategic dimensions and their elements associated with organizational capabilities. These strategic dimensions consist of organizational resources, organizational architecture, and organizational quality. Organizational resources are proposed to cover financial resource, marketing resource, technological resource, and human resource. Organizational architecture will be composed of planning system, information system, benefit system, empowerment structure, and learning culture. The last dimension of organizational quality is deemed to consist of quality of the company and quality of products or services. All of the above elements are proposed to influence organizational competitiveness. This leads to the development of the initial model presented in Figure 1.



Figure 1. Initial model of organizational capabilities

3. Research Methodology for Model Verification

We attempted to verify the proposed model presented in Figure 1 by interviewing small and medium sized company executives. The purpose was to check the definition of organizational capability as well as to check whether all of the proposed dimensions and their related elements associated with organizational capabilities were agreed upon. Finally, suggestions to modify the model would be sought to make the model more practical to the business world.

In order to verify the proposed model of organizational capabilities, in-depth interviews were conducted to obtain information. Twenty small and medium sized enterprises were selected from the business database of the Department of Business Development, Ministry of Commerce, Thailand. The top executives of these enterprises were approached and requested for their cooperation in the interview process. We adopted judgmental sampling to select qualified enterprises for the verification. We selected twenty enterprises for the in-depth interviews. Ten medium sized enterprises (five manufacturing enterprises and five service enterprises) and ten small sized enterprises (five manufacturing enterprises and five service enterprises) were selected. The classification of small and medium sized enterprises is based on the Promotion of SMEs by the Small and Medium Enterprise Promotion Act 2000 (2010) which is presented below in Table 1.

Table 1. Classification of small and medium sized enterprises

Type of Business	Fixed Assets (Million Baht)	
	Small	Medium
Manufacturing Sector	≤ 50	> 50 but ≤ 200
Service Sector	≤ 50	> 50 but ≤ 200

Source: Promotion of SMEs by the Small and Medium Enterprise Promotion Act 2000 (2010).

The questionnaire used for the in-depth interviews is developed by considering the following key points.

- The definition of organizational capabilities
- The classification of three dimensions of organizational capabilities
- Elements associated with each dimension of organizational capabilities
- The definition of each element.
- The effect of organizational capabilities on organizational competitiveness

The questionnaire for the in-depth interviews is presented in Appendix 1.

4. Results

Most of the results are consistent with the literature review. All of the interviewees agreed that organizational capabilities had to do with the strengths and the expertise of the organizations to compete successfully in the market. It is a necessity that all firms regardless of their size must possess organizational capabilities and competencies in order to compete efficiently and effectively in the market. The interviewees said that the fundamental resources were essentially needed for the organizations to be successful. The ways the organizations were set up were believed to be an important ingredient for the success of the organizations. The ways the organizations were set up included good working systems, good information technology, good and hard-working employees, employee involvement, top management's competence, supporting working environment, emphasis on working together as a team, and the good and acceptable quality of products or services.

They all agreed that organizational resources, organizational architecture, and organizational quality were key dimensions leading the firms to possess competitive advantage. Seventeen interviewees said that all four elements of resources, i.e., financial resource, marketing resource, technology resource, and human resource, were primary resources all firms needed to have. Fifteen interviewees pointed out that the word "technological" may be confusing since it might include information system proposed in the dimension of organizational architecture. They suggested that technological resource in this case should have to do with manufacturing or service providing technology, which should consist of manufacturing or service providing machines, equipment, and tools.

Regarding the dimension of organizational architecture, the interviewees perceived organizational architecture to be the framework and design of the organization which involved the administrative systems, the layout of the organization, the management principles (such as chain of command, decentralization, and decision making), and the ambience of the organization. The comments of the interviewees coincide with the review of the literature which categorizes organizational architecture into the system, structure, and the cultural environment of the organization. They all agreed with all the elements proposed in the model as key elements of organizational architecture. However, twelve of the interviewees suggested that the word “benefit” should be changed to “compensation” to specifically reflect all the tangible and intangible incentives and rewards given to employees. In addition, one extra suggestion from half of the interviewees was that the culture part should also include teamwork culture since working together as a team was a significant step in driving the company to achieve its desired goals in the long run.

Organizational quality was also perceived to be a key dimension driving organizations to be the frontrunner in the industry. The interviewees agreed that building the quality atmosphere for the whole company was deemed to be an essential element for successful organizations. All of them indicated that quality of products or services was fundamentally important if firms would like to be able to compete in the market. Five interviewees said that quality of employees was also an important part of the company. However, the researcher clarified that quality of employees was already captured by the human resource element of organizational resources.

All of the interviewees agreed that all of the elements in the proposed model had an influential effect on organizational competitiveness. Without the right ingredients, it is difficult for firms to compete successfully in the market.

The results of the in-depth interviews were used to modify the initial model. “Technological resource” was changed to “operational resource” to specifically capture the resources used for manufacturing or service providing purposes. These resources include efficient and technological advanced machines, equipment, and tools used in the manufacturing process or service providing process. The word “benefit” was perceived to be too broad and, as a result, the word “compensation” was used instead. Besides, teamwork culture was included as an additional element of organizational architecture. Working together as a team would help unify all members of the organization and, as a result, leading the organization to achieve higher and more effective desired outcome and performance.

The modified model is presented in Figure 2 and the conceptual definitions of all the key elements associated with the three dimensions of organizational capabilities are provided in Table 2.

Organizational Capabilities

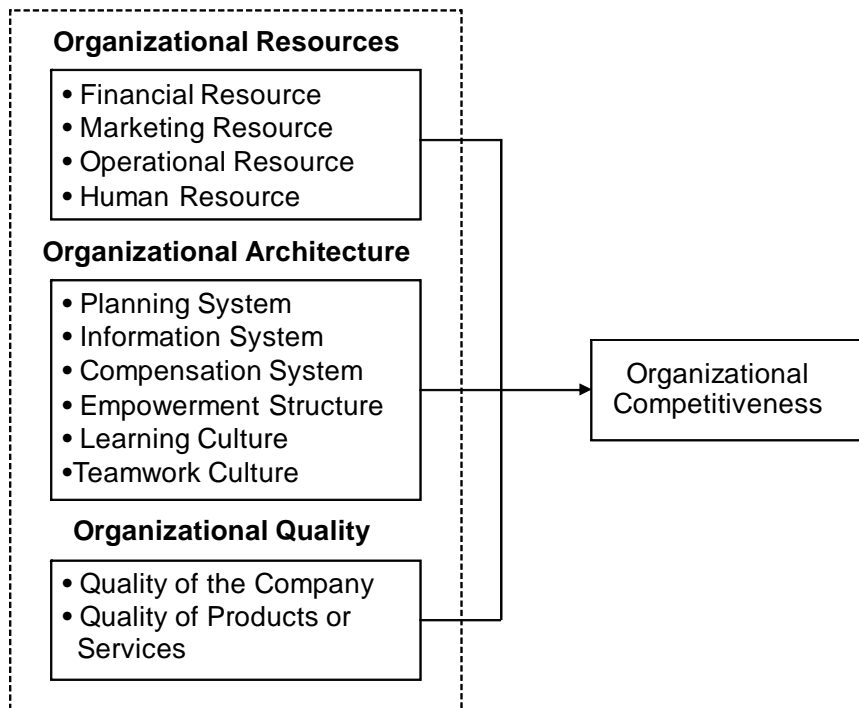


Figure 2. The modified model of organizational capabilities

Table 2. Conceptual definitions of all the elements in the modified model

Elements	Conceptual Definition
Financial Resource	The extent to which the fund is sufficient and available for operations. It encompasses the expertise in financial management that results in the effective use of fund and the effective control of costs (Ulrich & Lake, 1990).
Marketing Resource	The extent of knowledge and expertise in strategic marketing planning and execution, including market analysis (consumers, competitors, industry, and the environment) as well as the development and deployment of marketing strategies (Luo et al., 2005; Vorhies et al., 1999).
Operational Resource	The extent of efficient and modern machines, equipment, and tools that are used to develop an efficient manufacturing process or service providing process (Eris & Saatcioglu, 2006).
Human Resource	The extent of the collective value of the organization's intellectual capital composed of competencies, knowledge, and skills possessed by employees at all levels. This capital is the organization's source of creativity, innovativeness, and competitiveness (Bassi & McMurrer, 2008; Human Capital, 2010; Wright et al., 1998).

Planning System	The extent of basic management function involving formulation of one or more detailed plans. The planning system includes identification of goals or objectives to be achieved, formulation of strategies, development of action plans, and implementation, direction, and monitoring of all the steps in the proper sequence (Phillips & Moutinho, 2000; Planning Definition, 2010).
Information System	The extent of the system used in the gathering, processing, storing, and dissemination of information. The technologies used comprise computer technology and data communications technology. Computer technology provides most of the storage and processing capabilities while data communications provide the means for dissemination and access of information (Belohlav, Raho, & Drehmer, 1990; Information System Discipline, 2010; Messner, 2007; Pollack, 1982).
Compensation System	The extent of the tangible and intangible incentives to compensate employees for their work. The salary, wages, and financial welfare given to employees for the work they do are tangible compensation, whereas other forms of intangible compensation, such as recognition and awards, can also be offered to attract and retain employees (Tremblay & Chênevert, 2008).
Empowerment Structure	The extent of management practice of decentralization by providing employees with greater information, accountability, and authority so that they can take initiatives and make decisions to solve problems and improve products or services and performance (Chebat & Kollias, 2000; Herrenkohl et al., 1999).
Learning Culture	The extent of organizational culture that fosters constant learning and knowledge acquiring so as to respond to the changing environment. It is the culture that encourages and supports continuous employee learning, critical thinking, and risk taking with new ideas, and disseminates the new knowledge throughout the organization (Cook & Yanow, 2003; Popper & Lipshitz, 2000).
Teamwork Culture	The extent of organizational culture that fosters the environment for group work. It is the culture that emphasizes the value of working as a team. It is believed that working as a team will provide more productive results than working individually (Montes, Moreno, & Morales, 2005)
Quality of the Company	The extent of the adoption of the principle of total quality management as a holistic approach to long-term success that views continuous improvement in all aspects of an organization. It involves everyone in the organization and encompasses all functions of the organization (Knights & McCabe, 1999).
Quality of Products or Services	The extent of the perception that the firm's products or services are of higher quality when comparing with competitors. (Charters & Pettigrew, 2006, Eisingerich & Bell, 2008, Garvin, 1987).

5. Discussion and Implication

Organizational capabilities can be created, built, and maintained, and are considered to be vital to the success of the organization. It enhances the strength, the efficiency, the effectiveness, and the competitiveness of the organization. Organizational capabilities are

deemed to be the fundamental sources of organizational competitiveness. Organizational capabilities include a variety of dimensions. Organizational resources, organizational architecture, and organizational quality are key dimensions driving the company to become a competitive firm in the market.

Sustainable competitive advantage can be derived from having a set of resources that can be utilized to create value in the market. The proposed elements of organizational resources in the model are consistent with past studies. Enz (2008) suggests that financial resources, human resources, and marketing resources have an effect on building competitive advantage in the Outback Steakhouse in Korea. A number of studies have investigated and proposed that human capital resource could provide firms with a source of competitive advantage (Barney, 1991; Wright, McMahan, & McWilliams, 1994). In addition, operational resources vital to the manufacturing process or service providing process are also considered to be a vital ingredient for building competitive advantage (Newton, Dalglish, & Douglas, 2003). Those firms who possess these four essential resources and can effectively utilize them will be able to enhance their performance and competitiveness in the market. Financial resource provides firms with the necessary working capital to manage day-to-day operations. Marketing resource provides firms with the ability to acquire customers and compete in the market. Operational resource provides firms with machines, tools, and equipment necessary to manufacture good quality products or provide good quality services. Human resource is sometimes deemed to be the heart of organizational success. Without good quality employees, firms will not be able to effectively and efficiently manage their work and drive the company to become successful.

Organizational architecture is basically an organizational framework that creates a working environment that fosters success. It helps ensure that all aspects or components of an organization can function cohesively to achieve its goals. Organizational architecture encompasses organizational system, organizational structure, and organizational culture. The three key elements of organizational systems include planning system, information system, and compensation system. Planning system provides a direction for accomplishing objectives. It is considered to be one of the firm's capabilities (Barney, 1991). Planning helps identify objectives, formulate strategies, and action plans that will lead to achieve the desired outcomes (Phillips & Moutinho, 2000). With a good planning system, firms will be able to perform their work more effectively since they know what they have to do to become competitive and successful in the market. Information systems refer to the way the organization gathers, processes, stores, uses and disseminates information through the utilization of information system technology (i.e., software and hardware). A primary function of an information system is to provide relevant information for managing work and making better decisions. As a result, information system is the extent of the system used in the gathering, processing, storing, and dissemination of information. In order to be successful and competitive, firms must invest in modern and valuable information system technology. Good information system technology will provide firms with information about the market and their customers as well as information regarding their competitors. This information will help enable companies to manage, work, and compete more effectively.

Compensation given to employees is also considered a key motivational element that helps stimulate employees to work harder and work more efficiently for the company. Compensation system is believed to be a vital element of organizational architecture (Dess, Rasheed, McLaughlin, & Priem, 1995). It refers to the extent of the tangible and intangible incentives the organization uses to compensate employees for their work. It can be used to attract and retain employees. Organizations must consider the compensation aspect of the company and try to provide valuable incentives to their employees.

Another key element related to organizational architecture is the empowerment structure. Employee empowerment has received extensive attention during the past few years. Employee empowerment has become an important structure in many organizations; it is a cornerstone for driving the organization to produce effective and efficient work (Harvey & Brown, 2001). To motivate employees to work harder and better, firm must adopt a decentralization structure that gives employees the authority to make decisions, to contribute ideas, to exert influence, and to be responsible for their work. Employee empowerment will help achieve greater performance, produce better results, and greatly enhance employees' commitment and morale. These outcomes in turn are expected to have an impact on organizational competitiveness (Lawler & Mohrman, 1998).

Organizational learning culture is also considered an essential element affecting work effectiveness and efficiency. Firms that value learning tend to outperform those who do not. In a learning culture, people take responsibility and support one another. They share experience and learn from mistakes as well as successes. Good ideas are heard, acted on, and rewarded. Thus, learning culture will help enhance employees' knowledge which, in turn, will make employees work more effectively. Teamwork culture is also deemed to be a vital element driving the organization to be successful. Teamwork culture can be created and built. It is a work culture that values cooperation of all members of the organization. In a teamwork culture, people believe that working collaboratively will help produce a more effective outcome. The ways people in the organization think, plan, make decisions, and act will be better and more productive when they work cooperatively. Teamwork culture can be created and fostered. Training employees to understand the value of working as a team will help. In addition, emphasis on group work in organizations will also help foster the teamwork culture.

Two aspects of quality, i.e., quality of the company and quality of products or services, are expected to be key elements affecting organizational competitiveness. Quality of the company is considered to be vital for creating a quality environment for the company. It is based on the concept of total quality management which emphasizes a management philosophy that seeks to integrate all organizational functions (i.e., marketing, accounting and finance, engineering, production, etc.) and make them work together to meet customer needs. It is a philosophical concept that focuses on doing the right thing the first time. Likewise, product or service quality is deemed to be the main source of competitive advantage, with 70 percent of privately held businesses ranking it as a strong or very strong source (Quality is number one source of competitive advantage for privately held businesses, 2010). In their study, Kroll, Wright, and Heiens (1999) conclude that product quality can enhance competitive advantage, leading to increased returns. Higher product or service quality leads

to higher degrees of competitiveness. Emphasis on producing good quality products or providing good quality services will enable the company to successfully respond to the market needs. It is a necessity for firms who would like to become competitive and successful to render customers with good quality products or good quality services. Quality must come first and must come with an acceptable price.

In today's intense competition, SME businesses must strive for building competitive advantage. The fundamental approach is to build organizational capabilities within the firm. This study proposes a practical model for building organizational capabilities. SME businesses must focus on having sufficient and good resources. Financial resource, marketing resource, operational resource, and human resource are considered key resources the firm needs to seek and manage. Organizational architecture is another dimension of organizational capabilities. Companies must first have a good framework and a good design for the organization before they can effectively and efficiently drive the operations of the company. Planning system, information system, compensation system, empowerment structure, learning culture, and teamwork culture are deemed to be key elements associated with organizational architecture. The planning, information, and compensation systems must be carefully designed and the structure must render employees with authority for making decisions. Building learning culture and teamwork culture will help create a good working environment that supports effective and efficient work. Quality is also an important dimension for success. Without good quality products or good quality services, firms will not be able to compete successfully in the market. To be able to produce good quality products or services, firms must first create a good quality working environment. In order to make it work, all employees of the company must value the concept of quality and work continuously to improve the quality of products or services as well as to improve the quality of the overall work process.

6. Conclusion

To drive for competitiveness, SMEs in Thailand must try to establish organizational capabilities. Past literature has suggested varying factors that can be implemented to build organizational capabilities. Review of the literature suggests that organizational resources, organizational architecture, and organizational quality are key dimensions of organizational capabilities. In-depth interviews were carried out to verify the initial model. We selected twenty SME businesses for the in-depth interviews. Ten medium sized enterprises with five manufacturing enterprises and five service enterprises as well as ten small sized enterprises with five manufacturing enterprises and five service enterprises were selected for the interviews. The purposes of the interviews were to investigate and verify the initial model, particularly the definition of organizational capability as well as the three proposed dimensions and their related elements as presented in Figure 1. The results of the in-depth interviews indicate that interviewees agreed significantly with most parts of the model. Some suggestions were provided to make the model more practical and realistic. The term "technological resource" was changed to "operational resource" to reflect the machines, tools, and equipment used directly for manufacturing process or service providing process. The term "benefit system" was changed to "compensation system" to directly reflect the tangible

and intangible incentives given to employees. In addition, teamwork culture was added as another key element of organizational architecture. Successful firms will depend heavily on group work rather than individual work. The final outcomes suggest that financial resource, marketing resource, operational resource, and human resource are key elements related to the dimension of organizational resources whereas planning system, information system, compensation system, empowerment structure, learning culture, and teamwork culture are considered key elements associated with the dimension of organizational architecture. The quality dimension of organizational capabilities includes the quality of the company as a whole as well as the quality of products or services. Firms who possess these elements and have the ability to manage these elements more effectively and efficiently than others will be able to compete successfully in the market. The contribution of this study is the development of the model for Thai small and medium sized enterprises' organizational capabilities. The model provides guidance and directions for those Thai SMEs who wish to enhance their organizational capabilities and, as a result, leading to improved organizational performance and competitiveness. Future research may wish to concentrate on collecting quantitative data from a large sample size to verify the model as well as comparing the quantitative data collected from manufacturing firms with those from service providing firms.

References

- Aaker, D. A. (1989). Managing assets and skills: A key to sustainable competitive advantage. *California Management Review*, 31(2), 91-106.
- Amit, R., & Shoemaker, P. J. H. (1993). Strategic assets and organizational rent. *Strategic Management Journal*, 14(1), 33-46. <http://dx.doi.org/10.1002/smj.4250140105>
- Armstrong, C. E., & Shimizu, K. (2007). A review of approaches to empirical research on the resource-based view of the firm. *Journal of Management*, 33(6), 959-986. <http://dx.doi.org/10.1177/0149206307307645>
- Bacon, N. (2001). Competitive advantage through human resource management: Best practices or core competencies? *Human Relations*, 54(3), 361-372. <http://dx.doi.org/10.1177/0018726701543005>
- Barney, J. B. (1986). Strategic factor markets: Expectation, luck and business strategy. *Management Science*, 32(10), 1231-1241. <http://dx.doi.org/10.1287/mnsc.32.10.1231>
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <http://dx.doi.org/10.1177/014920639101700108>
- Barney, J. B. (1997). *Gaining and sustaining competitive advantage*. Reading, MA: Addison-Wesley.
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643-650. <http://dx.doi.org/10.1177/014920630102700602>

- Barney, J. B., & Hesterly, W. (1999). Organizational economics: Understanding the relationship between organizations and economic analysis. In R. Clegg, & C. Hardy (Eds.), *Studying organization: Theory & method* (pp. 109-141). London: Sage Publications.
- Bassi, L. J., & McMurrer, D. P. (2008). Toward a human capital measurement methodology. *Advances in Developing Human Resources*, 10(6), 863-881. <http://dx.doi.org/10.1177/1523422308325611>
- Belohlav, J., Raho, L., & Drehmer, D. (1990). Perceptions of information system domains as a function of professional status. *Journal of Information Science*, 16(6), 359-367. <http://dx.doi.org/10.1177/016555159001600604>
- Bhatnagar, J. (2006). Measuring organizational learning capability in Indian managers ad establishing firm performance linkage: An empirical analysis. *The Learning Organization*, 13(5), 416-433. <http://dx.doi.org/10.1108/09696470610679965>
- Broh, R.A. (1982). *Managing quality for higher profits*. New York: McGraw-Hill.
- Brouthers, K. D., Brouthers, L. E., & Werner, S. (2008). Resource-based advantages in an international context. *Journal of Management*, 34(2), 189-217. <http://dx.doi.org/10.1177/0149206307312508>
- Brown, S., & Fai, F. (2006). Strategic resonance between technological and organizational capabilities in the innovation process within firms. *Technovation*, 26(1), 60-75. <http://dx.doi.org/10.1016/j.technovation.2004.08.008>
- Charters, S., & Pettigrew, S. (2006). Conceptualizing product quality: The case of wine. *Marketing Theory*, 6(4), 467-483. <http://dx.doi.org/10.1177/1470593106069932>
- Chebat, J. C., & Kollias, P. (2000). The impact of empowerment on customer contact employees' roles in service organizations. *Journal of Service Research*, 3(1), 66-81. <http://dx.doi.org/10.1177/109467050031005>
- Conner, M. (2010). Create a learning culture. [Online] Available: <http://www.fastcompany.com/resources/learning/conner/072505.html> (November 28, 2010).
- Connor, T. (2002). The resource-based view of strategy and its value to practicing managers. *Strategic Change*, 11(6), 307-316. <http://dx.doi.org/10.1002/jsc.593>
- Cook, S. D. N., & Yanow, D. (1993). Culture and organizational learning. *Journal of Management Inquiry*, 2(4), 373-390. <http://dx.doi.org/10.1177/105649269324010>
- Crosby, P.B. (1973). *Quality is free*. New York: McGraw-Hill.
- Definition of SMEs. (2011). [Online] Available: <http://www.ismed.or.th/SME2/src/bin/controller.php?view=first.First> (August 8, 2011).
- Dess, G. G., Rasheed, A., McLaughlin, K.J., & Priem, R.L. (1995). The new corporate architecture. *Academy of Management Executive*, 9(3), 7-20. <http://dx.doi.org/10.5465/AME.1995.9509210261>

- Douglas, T. J., & Judge, Jr., W. Q. (2001). Total quality management implementation and competitive advantage: The role of structural control and exploration. *The Academy of Management Journal*, 44(1), 158-169. <http://dx.doi.org/10.2307/3069343>
- Edwards, C. D. (1968). The meaning of quality. *Quality Progress*, 1(10), 36-39.
- Eikelenboom, B. (2005). *Organizational capabilities and bottom line performance*. Delft: Eburon B V
- Eisingerich, A. B., & Bell, S. J. (2008). Perceived service quality and customer trust: Does enhancing customers' service knowledge matter? *Journal of Service Research*, 10(3), 256-268. <http://dx.doi.org/10.1177/1094670507310769>
- Enz, C. A. (2008). Creating a competitive advantage by building resource capability: The case of outback steakhouse Korea. *Cornell Hospitality Quarterly*, 49(1), 73-78. <http://dx.doi.org/10.1177/1938965507311648>
- Eris, E. D., & Saatcioglu, O. Y. (2006). A system look for technological innovation: Firm based perspective. *European and Mediterranean Conference on Information Systems (EMCIS)*, July 6-7, Costa Blanca, Alicante, Spain, 1-6.
- Fahy, J. (2000). The resource-based view of the firm: Some stumbling blocks on the road to understanding sustainable competitive advantage. *Journal of European Industrial Training*, 24(2), 94-104. <http://dx.doi.org/10.1108/03090590010321061>
- Fan, Q. (2010). Importance of SMEs and the role of public support in promoting SME development. [Online] Available: <http://info.worldbank.org/etools/docs/library/49256/fan.pdf> (August 22, 2010).
- Garengo, P., & Bernardi, G. (2007). Organizational capability in SMEs performance measurement as a key system in supporting company development. *International Journal of Productivity and Performance Management*, 56(6), 518-532. <http://dx.doi.org/10.1108/17410400710757178>
- Garvin, D. A. (1987). Competing on the eight dimensions of quality. *Harvard Business Review*, 65(6), 101-109.
- Gatian, A. W., Brown, R. M., & Hicks, Jr., J. O. (1995). Organizational innovativeness, competitive strategy and investment success. *The Journal of Strategic Information Systems*, 4(1), 43-59. [http://dx.doi.org/10.1016/0963-8687\(95\)80014-H](http://dx.doi.org/10.1016/0963-8687(95)80014-H)
- Gilmore, H. L. (1974). Product conformance cost. *Quality Progress*, 7(5), 16-19.
- Grönroos, C. (1984). A service quality model and its marketing implications. *Journal of the Academy of Marketing Science*, 18(4), 36-44.
- Hall, R. (1992). The strategic analysis of intangible resources. *Strategic Management Journal*, 13(2), 135-144. <http://dx.doi.org/10.1002/smj.4250130205>

- Harvey, D., & Brown, D. (2001). *An experiential approach to organization development*. Upper Saddle River, NJ: Prentice Hall.
- Herrenkohl, R. C., Judson, G. T., & Heffner, J. A. (1999). Defining and measuring employee empowerment. *Journal of Applied Behavioral Science*, 35(3), 373-389. <http://dx.doi.org/10.1177/0021886399353008>
- Herrmann, A. M. (2008). Contrasting the resource-based view and competitiveness theories: How pharmaceutical firms choose to compete in Germany, Italy, and the UK. *Strategic Organization*, 6(4), 343-374. <http://dx.doi.org/10.1177/1476127008096362>
- Heusinkveld, S., Benders, J., & van den Berg, R. J. (2009). From market sensing to new concept development in consultancies: The role of information processing and organizational capabilities. *Technovation*, 29(8), 509-516. <http://dx.doi.org/10.1016/j.technovation.2009.02.003>
- History of Quality (2010). [Online] Available: <http://www.bpir.com/total-quality-management-history-of-tqm-and-business-excellence-bpir.com/menu-id-69.html> (November 28, 2010).
- Howard, R. (1992). The CEO as organizational architect: An interview with Xerox's Paul Allaire. *Harvard Business Review*, 70(5), 107-121.
- Hsu, Y. H., & Fang, W. (2009). Intellectual capital and new product development performance: The mediating role of organizational learning capability. *Technological Forecasting & Social Change*, 76(5), 664-677. <http://dx.doi.org/10.1016/j.techfore.2008.03.012>
- Human Capital (2010). [Online] Available: http://en.wikipedia.org/wiki/Human_capital (August 31, 2010).
- Information System Discipline (2010). [Online] Available: <http://www.answers.com/topic/information-systems> (August 31, 2010).
- Introduction and Implementation of Total Quality Management (TQM) (2010). [Online] Available: <http://www.isixsigma.com/library/content/c031008a.asp> (November 28, 2010).
- Juran, J. M. (1988). *Quality control handbook* (4th ed.). New York: McGraw-Hill.
- Kaplan, R. S., & Norton, D. P. (2004). Measuring the strategic readiness of intangible assets. *Harvard Business Review*, 82(2), 52-63.
- Knights, D., & McCabe, D. (1999). Are there no limits to authority?: TQM and organizational power. *Organization Studies*, 20(2), 197-224. <http://dx.doi.org/10.1177/0170840699202002>
- Kotler, P., & Keller, K. L. (2006). *Marketing management* (12th ed.). Upper Saddle River, NJ: Prentice Hall.

- Krajewski, L. J., Ritzman, L. P., & Malhotra, M. K. (2006). *Operations management: Processes and value chains* (8th ed.). Upper Saddle River, NJ: Prentice Hall.
- Kroll, M., Wright, P., & Heiens, R. A. (1999). The contribution of product quality to competitive advantage: Impacts on systematic variance and unexplained variance in returns. *Strategic Management Journal*, 20(4), 375 – 384. [http://dx.doi.org/10.1002/\(SICI\)1097-0266\(199904\)20:4<375::AID-SMJ15>3.0.CO;2-Y](http://dx.doi.org/10.1002/(SICI)1097-0266(199904)20:4<375::AID-SMJ15>3.0.CO;2-Y)
- Lawler III, E., & Mohrman, S. (1998). Employee involvement, reengineering, and TQM: Focusing on capability development. In S. Mohrman, J. Galbraith, E. Lawler III, & Associates (Eds.), *Tomorrow's organization - Crafting winning capabilities in a dynamic world* (pp.179-207). San Francisco, CA: Jossey-Bass.
- Lee, S. H., Beamish, P. W., Lee, H. U., & Park, J. H. (2009). Strategic choice during economic crisis: Domestic market position, organizational capabilities and export flexibility. *Journal of World Business*, 44(1), 1-15. <http://dx.doi.org/10.1016/j.jwb.2008.03.015>
- Lee, C. P., Lee, G. G., & Lin, H. F. (2007). The role of organizational capabilities in successful e-business implementation. *Business Process Management*, 13(5), 677-693. <http://dx.doi.org/10.1108/14637150710823156>
- Lei, D., Hitt, M. A., & Bettis, R. (1996). Dynamic core competences through meta-learning and strategic context. *Journal of Management*, 22(4), 549-569. <http://dx.doi.org/10.1177/014920639602200402>
- Luo, X., Sivakumar, K., & Liu, S. S. (2005). Globalization, marketing resources, and performance: Evidence from china. *Journal of the Academy of Marketing Science*, 33(1), 50 - 65. <http://dx.doi.org/10.1177/0092070304265050>
- Martínez-Costa, M. (2009). The effectiveness of TQM: The key role of organizational learning in small businesses. *International Small Business Journal*, 27(1), 98-125. <http://dx.doi.org/10.1177/0266242608098348>
- Mata, F. J., Fuerst, W. L., & Barney, J. B. (1995). Information technology and sustained competitive advantage: A resource-based analysis. *MIS Quarterly*, 19(4), 487-507. <http://dx.doi.org/10.2307/249630>
- Medcof, J. (2000). The resource based view and transnational technology strategy. *Journal of High Technology Management Research*, 11(1), 59-74. [http://dx.doi.org/10.1016/S1047-8310\(00\)00021-3](http://dx.doi.org/10.1016/S1047-8310(00)00021-3)
- Messner, W. (2007). Justifying information system value: Development of a method for measuring customer advisory system effectiveness. *Business Information Review*, 24(2), 126-134. <http://dx.doi.org/10.1177/0266382107078865>
- Montes, F. J. L., Moreno, A. R., & Morales, V. G. (2005). Influence of support leadership and teamwork cohesion on organizational learning, innovation and performance: An empirical examination. *Technovation*, 25(10), 1159-1172. <http://dx.doi.org/10.1016/j.technovation.2004.05.002>

- Nadler, D. A., Shaw, M. S., & Shaw, R. B. (1992). *Organizational architecture: Designs for changing organizations*. San Francisco, CA: Jossey-Bass, Inc., Publishers.
- Nadler, D. A., & Tushman, M. L. (1988). *Strategic organization design: Concepts, tools, and processes*. Glenview, IL: Scott & Foresman.
- Nadler, D. A., & Tushman, M. L. (1997). *Competing by design: The power of organizational architecture*. Oxford: Oxford University Press.
- Newton, C., Dalglish, C., & Douglas, E. (2003). Technological resources, organizational resources and sustained competitive advantage. *16th Annual Conference of Small Enterprise Association of Australia and New Zealand*, September 28 - October 1.
- Olavarrieta, S. (1996). Market attractiveness, resource-based and evolutionary approaches to strategy: A comparison. In E. Wilson & J. Hair (Eds.), *Developments in marketing science* (pp.34-38).
- Olavarrieta, S., & Ellinger, A. E. (1997). Resource-based theory and strategic logistics research. *International Journal of Physical Distribution & Logistics*, 27(9/10), 559-587.
- Organizational Capability (2010). [Online] Available: <http://www.businessdictionary.com/definition/organizational-capability.html> (August 31, 2010).
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50. <http://dx.doi.org/10.2307/1251430>
- Penrose, E. (1959). *The theory of the growth of the firm*. Guildford, London and Worcester: Billing and Sons Ltd.
- Persson, G. (1991). Achieving competitiveness through logistics. *The International Journal of Logistics Management*, 2(1), 1-11. <http://dx.doi.org/10.1108/09574099110804625>
- Peteraf, M. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179-191. <http://dx.doi.org/10.1002/smj.4250140303>
- Phillips, P. A., & Moutinho, L. (2000). The strategic planning index: A tool for measuring strategic planning effectiveness. *Journal of Travel Research*, 38(4), 369-379. <http://dx.doi.org/10.1177/004728750003800405>
- Pirsig, R.M. (1989). *Zen and the art of motorcycle maintenance*. London: Transworld.
- Planning (2010). [Online] Available: <http://en.wikipedia.org/wiki/Planning> (November 28, 2010).
- Planning Definition (2010). [Online] Available: <http://www.businessdictionary.com/definition/planning.html> (August 31, 2010).
- Pollack, G. R. (1982). Information system design and implementation: Strategies for success. *Journal of Applied Gerontology*, 1(1), 104-114. <http://dx.doi.org/10.1177/073346488200100114>

Popper, M., & Lipshitz, R. (2000). Organizational learning: Mechanisms, culture, and feasibility. *Management Learning*, 31(2), 181-196.
<http://dx.doi.org/10.1177/1350507600312003>

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79-91.

Prajogo, D. I. (2007). The relationship between competitive strategies and product quality. *Industrial Management & Data Systems*, 107(1), 69-83.
<http://dx.doi.org/10.1108/02635570710719061>

Promotion of SMEs by the Small and Medium Enterprise Promotion Act 2000 (2010). [Online] Available: : http://www.sme.go.th/cms/c/journal_articles/view_article_content?article_id=PUB-KNOWL-C01-3&article_version=1.0 (August 31, 2010).

Quality is number one source of competitive advantage for privately held businesses (2010). [Online] Available: http://www.gti.org/Press-room/quality_is_number_one_source_of_competitive_advantage_for_privately_held_businesses.asp (November 28, 2010).

Qureshi, M. N., Kumar, D., & Kumar, P. (2007). Modeling the logistics outsourcing relationship variables to enhance shippers' productivity and competitiveness in logistical supply chain. *International Journal of Productivity and Performance Management*, 56(8), 689-714. <http://dx.doi.org/10.1108/17410400710833001>

Reed, R., Lemak, D. J., & Mero, N. P. (2000). Total quality management and sustainable competitive advantage. *Journal of Quality Management*, 5(1), 5-26.
[http://dx.doi.org/10.1016/S1084-8568\(00\)00010-9](http://dx.doi.org/10.1016/S1084-8568(00)00010-9)

Schermerhorn, J. R. (2008). *Management* (9th Ed.). Somerset, NJ: John Wiley & Son, Inc.

Section 2: Characteristics of SMEs (2010). [Online] Available: http://www.med.govt.nz/templates/MultipageDocumentPage_____2698.aspx (August 22, 2010).

Service, R. W., & Maddux III, H. S. (1999). Building competitive advantage through information systems: The organizational information quotient. *Journal of Information Science*, 25(1), 51-65. <http://dx.doi.org/10.1177/016555159902500106>

Škerlavaj, M., Štemberger, M. I., Škrinjar, R., & Dimovski, V. (2007). Organizational learning culture - the missing link between business process change and organizational performance. *International Journal of Production Economics*, 106(2), 346-367.
<http://dx.doi.org/10.1016/j.ijpe.2006.07.009>

Smith, K. A., Vasudevan, S. P., & Tanniru, M. R. (1996). Organizational learning and resource-based theory: An integrative model. *Journal of Organizational Change*, 9(6), 41-53.
<http://dx.doi.org/10.1108/09534819610150512>

Spanos, Y. E., & Prastacos, G. (2004). Understanding organizational capabilities: Towards a conceptual framework. *Journal of Knowledge Management*, 8(3), 31-43.
<http://dx.doi.org/10.1108/13673270410541024>

- Srivastava, R. K., Fahey, L., & Christensen, H. K. (2001). The resource-based view and marketing: The role of market-based assets in gaining competitive advantage. *Journal of Management*, 27(6), 777-802. <http://dx.doi.org/10.1177/014920630102700610>
- Stacey, R. D. (2003). *Strategic management and organizational dynamics: The challenge of complexity*. Essex: Pearson Education Limited.
- Stigler, J. (1968). *The organization of industry*. Homewood, IL: Irwin.
- The White Paper on Small and Medium Enterprises Of Thailand in 2010 and Trends 2011 (2011). [Online] Available: <http://eng.sme.go.th/Lists/EditorInput/DispF.aspx?List=15dca7fb-bf2e-464e-97e5-440321040570&ID=811> (November 10, 2011).
- Tomer, J. F. (1987). *Organizational capital: The path to higher productivity and well-being*. New York: Praeger Publishers.
- Tomer, J. F. (1995). Strategy and structure in the human firm: Beyond hierarchy, toward flexibility and integration. *Journal of Socio-Economics*, 24(3), 411-431. [http://dx.doi.org/10.1016/1053-5357\(95\)90015-2](http://dx.doi.org/10.1016/1053-5357(95)90015-2)
- Tomer, J. F. (1998). Beyond the machine model of the firm, toward a holistic human model. *Journal of Socio-Economics*, 27(3), 323-340. [http://dx.doi.org/10.1016/S1053-5357\(99\)80093-6](http://dx.doi.org/10.1016/S1053-5357(99)80093-6)
- Tomer, J. F. (2003). Personal capital and emotional intelligence: An increasingly important intangible source of economic growth. *Eastern Economic Journal*, 29(3), 453-470.
- Total Quality Management (2010). [Online] Available: http://en.wikipedia.org/wiki/Total_quality_management (November 28, 2010).
- Tremblay, M., & Chênevert, D. (2008). Influence of compensation strategies in Canadian technology-intensive firms on organizational and human resources performance. *Group & Organization Management*, 33(3), 269-302. <http://dx.doi.org/10.1177/1059601107313310>
- Ulrich, D., & Lake D. (1990). *Organizational capability: Competing from the inside out*. New York: John Wiley & Sons.
- Ulrich, D., & Smallwood, N. (2010). *Capitalizing on capabilities*. [Online] Available: <http://kwork.org/Stars/Ulrich/Capabilities.pdf> (August 22, 2010).
- Verona, G. (1999). A resource-based view of product development. *Academy of Management Review*, 24(1), 132-142.
- Vorhies, D. W., Harker, M., & Rao, C. P. (1999). The capabilities and performance advantages of market-driven firms. *European Journal of Marketing*, 33(11/12), 1171-1202. <http://dx.doi.org/10.1108/03090569910292339>
- Wernerfelt, B. (1984). A resource based view of the firm. *Strategic Management Journal*, 5(2), 171-180. <http://dx.doi.org/10.1002/smj.4250050207>

Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *International Journal of Human Resource Management*, 5(2), 301-326. <http://dx.doi.org/10.1080/09585199400000020>

Wright, P. M., Mitsuhashi, H., & Chua, R. S. K. (1998). HRM in multinationals' operations in china: Building human capital and organizational capability. *Asia Pacific Journal of Human Resources*, 36(2), 3-14. <http://dx.doi.org/10.1177/103841119803600202>

Appendix

Appendix 1. Questionnaire for In-depth Interviews

This interview involves the concept of organizational capabilities. Organizational capabilities are considered to be the firm's ability to perform better than competitors using a distinctive set of resources, systems, structures, and the like. Generally, organizational capability is believed to form the basis for firms' competitive advantage.

Questions

1. In your opinion, what do you think is the definition of organizational capabilities?
2. Based on the literature, organizational capabilities can be categorized into three dimensions of capabilities consisting of organizational resources, organizational architecture, and organizational quality. Do you think these three dimensions are sufficient components to build organizational capabilities? Why?
3. In your opinion, are there other dimensions that should be added to the organizational capabilities? Why?
4. Let's look at organizational resources first, what do you think should be the definition of financial resource, marketing resource, technological resource, and human resource?
5. What do you think about those four elements associated with organizational resources? What other elements do you think should be added to the dimension of organizational resources?
6. Now, let's consider organizational architecture, do you think it is appropriate to classify organizational architecture into system, structure, and culture?
7. What do you think should be the definition of planning system, information system, benefit system, empowerment structure, and learning culture?
8. What do you think about those elements associated with organizational architecture? What other elements do you think should be added to the dimension of organizational architecture?
9. Concerning organizational quality, what do you think should be the definition of quality of the company and quality of products or services?

10. What do you think about the two elements associated with organizational quality? What other elements do you think should be added to the dimension of organizational quality?
11. Do you think these three dimensions of organizational capabilities will have an influential effect on organizational competitiveness? Why?
12. Do you have any other suggestions regarding the model? Please explain.

Copyright Disclaimer

Copyright reserved by the author(s).

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).