

Chapter 52

Information and Communication Technology for SMEs' Competitiveness

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ABSTRACT

Competitiveness of a firm is its capacity to achieve its targets. These targets are likely to be expressed in a variety of terms depending on the context (Barney 2002). Within a macroeconomic perspective, a competitive firm develops and sustains a level of performance that contributes to the Gross Domestic Product (GDP), employment opportunities, and the wealth of the people. From an entrepreneurial perspective, a competitive firm needs to survive in the market and to achieve market share and profitability. This paper deliberates regarding the theory of competitive advantage and discusses the role of Information and Communications Technology (ICT) for augmenting SMEs' competitiveness.

INTRODUCTION

Competitiveness of a firm is its capacity to achieve its targets. These targets are likely to be expressed in a variety of terms depending on the context (Barney, 2002). Within a macroeconomic perspective, a competitive firm develops and sustains a level of performance that contributes to the Gross Domestic Product (GDP), employment opportunities, and the wealth of the people. From an entrepreneurial perspective, a competitive firm needs to survive in the market and to achieve market share and profitability. The success of a competitive firm can be measured by both objective and subjective criteria. Objective criteria include return on investment, market share, profit and sales revenue, while subjective criteria include enhanced reputation with customers, suppliers, and competitors, and improve quality of delivered services (Barney 2002). A study of the SMEs in the Netherlands adopted a resource-based approach to identify the source of competitive advantage in a sample of 63 firms representing manufacturing and service sectors (Tilley & Tonge 2003). According to this study, "front runners" were distinguished from

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“back members” by the way in which they combined three sets of competencies: market, technological and organizational. Wickham (2001) also apply the resource-based theory in their analysis of competitive advantage in entrepreneurial firms.

Although there are many economists who used the concept of competitive advantage before, Porter's work (1980, 1985, and 1990) is still the starting point for any discussion of competitive advantage (Jones, 2000). Barney (2002) argues that the term of competitive advantage did not appear in Porter's work until the year 1985, while Penrose (1959) and Ansoff (1965) used the concept of competitive advantage before that time. With this brief introduction, this paper based on in depth literature review, secondary published sources and contextual analysis deliberates regarding the theory of competitive advantage and discusses the role of Information and Communications Technology (ICT) for augmenting SMEs' competitiveness.

LITERATURE REVIEW

Barney (2002) discusses four approaches to measure the firm's competitiveness. These measurements are firm's survival, stakeholder approach, simple accounting measures, and adjusted accounting measures. Porter (1985) indicates that a firm experiences a competitive advantage when “its actions in an industry create economic value and when few competing firms are engaging in similar actions.” De Wit and Meyer (1999) and Buffam (2000), indicate that a firm has a competitive advantage when it has the means to edge out rivals when competing for the favour of customers. Barney (2002) explains that a firm experiences a competitive parity when the firm's action creates economic value applied in several other firms engaging in a similar action. An important goal of a business enterprise is to optimize shareholders' returns. However, optimizing short-term profitability does not necessarily ensure optimal shareholders returns since shareholder value represents the net present value of expected future earnings. One of the techniques that reflect the shareholders return is the concept of the Balanced Scored Card (BSC) as an indicator for the firm's competitive advantage.

Resource-based theories of strategy have become increasingly influential in the recent years and most writers take their inspiration from the work of Penrose (1957). Whereas Porter (1980) intended to see the competitiveness of the firm as a result of its market position, resource-based theorists do claim that if firms within an industry are doing well, the reason for this is their core competencies. Core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies as explained by Prahalad and Hamel (1990). Prahalad and Hamel (1990) focus on the resources, capabilities and competences of the organization as the source of competitive advantage rather than the environment, as in the traditional approach. Penrose, in her work 'The Theory of the Growth of the Firm (1959) is often credited with the idea of the resource-based view. Also, the work of Selznick (1957) stressed the role of distinctive competences and Chandler (1962) demonstrated the importance of organizational structure in the utilization of a firm's resources. Rumelt (1997) adopts the resource-based view. Senge (1990) and Argyris (1994) stress the acquisition of competences through internal mechanisms of individual and collective learning.

The resource-based theory becomes more and more subject of critique under the pressure of globalization. Some of these critiques are:

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