Int. J. Production Economics 154 (2014) 59–71

Contents lists available at ScienceDirect

Int. J. Production Economics

journal homepage: www.elsevier.com/locate/ijpe

Impact of operational and marketing capabilities on firm performance: Evidence from economic growth and downturns

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ARTICLE INFO

Article history:
Received 28 August 2013
Accepted 31 March 2014
Available online 13 April 2014

Keywords:
Operational capability
Marketing capability
Functional importance
Economic downturns
Competitive advantage
Resilience

ABSTRACT

This paper examines how the importance given to operations and marketing functions impacts their capabilities and, consequently, overall firm performance. Using the resource-based theory (RBT) and top management team literature as a foundation, we explore the relationship between business factors under different economic conditions using panel data, to test whether the importance given to the operations and marketing functions leads to capability development in those functions. We also test whether these capabilities explain performance differentials between firms in different economic conditions. Our results show that marketing and operational capabilities both improve firm performance, though operational capability is more important during economic downturns. Also, we find that the importance given to operations and marketing functions impacts their capabilities during periods of economic growth. Our results have key implications for operations strategy, capability development, and resilience in the face of economic downturns.

1. Introduction

One of the chief functions of top management in a professional setting is allocating scarce resources between organizational sub-units in order to maximize firm performance. The importance placed on particular functions, such as operations and marketing, can have significant implications for decision-making and resource allocation within a firm, and can make a lasting impact on the firm's bottom line. The greater the importance given to a function, the greater is its influence, impact, and role in corporate-level decisions. Yet, top management scholars have not studied the implications of giving or withholding importance to key functions. Instead, researchers have focused on characteristics of the top management team and governance mechanisms, such as boards of directors (Hambrick, 2007). The objective of this paper is to address this gap by studying how the importance given by top management to operations and marketing functions impacts the capabilities of these functions and overall firm performance in changing economic conditions.

Marketing and operations are two key business functions that create value for the firm (Nath et al., 2010). A cursory study of annual reports from top performing firms in the Fortune 500 and *Business Week*'s Top 50 suggests that top management teams often highlight operational and marketing issues in letters to shareholders. And some companies shift their focus to operations during economic downturns. For example in 2008, Abercrombie & Fitch was treating its brand as a strategic asset, and presenting its strategy as protecting and growing the brand (Abercrombie and Fitch, 2008). However, it declared that 2009 was to be a transitional year; they planned to reduce store openings in order to focus on cost structure and efficiencies (Abercrombie and Fitch, 2009). In contrast to Abercrombie & Fitch, through the late, 2000s McDonald's consistently highlighted a commitment to operational excellence in its annual reports. McDonald's financial performance in 2008 was far above par, with a 17% growth in operating income, even while other firms were facing declines. In fact, it was one of just two companies on the Dow Jones to post a stock market gain in 2008, a year when both Dow Jones and S&P fell significantly ("McDonald's 2008 Annual Report, 2008"). L'Oreal, one of the leading multi-national cosmetics firms, is strongly driven by marketing and brand strength. In 2007, L'Oreal became the third largest advertiser in the world. A review of its annual reports suggests that L'Oreal is a company that is simultaneously pursuing operational-, marketing-, and brand-related goals year after year. In 2010, L'Oreal's annual reports mention that it was enjoying the

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http://dx.doi.org/10.1016/j.ijpe.2014.03.025
0925-5273/

fruits of its continued focus on operations and marketing efficiency, which drove its strong financial performance throughout 2008–2010. Such anecdotal evidence leads us to inquire whether the importance given to certain areas (or functions) of the firm has a significant impact on capability development of those areas. Such a relationship would have important implications for senior managers, for example in forming function-level strategies, and for researchers in understanding where certain business capabilities come from. This motivates our first research question: Does top management importance lead to greater functional capability?

Recent developments in the markets for business services, including marketing (advertising and market research), logistics (3PLs, professional warehousing), and custom manufacturing services, mean that firms can buy (or rent) some operational and marketing capabilities off-the-shelf from factor markets (Barney, 1986). This implies that operational and marketing capabilities are not rare or inimitable, and hence not important for competitive advantage (Barney, 1991). If, on the other hand, the operations or marketing task is more than what can be outsourced or purchased, then firms that ignore operations or marketing could lose important capabilities, and hence, their business may suffer. Because of time compression diseconomies, and learning and path dependencies, a firm may not be able to create capabilities 'just-in-time' (Dierickx and Cool, 1989). It is important to evaluate the importance and significance of operational and marketing capabilities because firms have often incurred irreparable damage by outsourcing activities that formed the basis of their competitive advantage (Barthelemy, 2003; Pisano and Shih, 2009). Based on this conclusion, our second research question is: Do operational and marketing capabilities still explain performance differentials in the era of outsourcing?

Existing research indicates that managing during recessions is challenging and differs significantly from managing under conditions of economic munificence or growth (Ang et al., 2000; Campello et al., 2010; Geroski and Gregg, 1996). Economists like Schumpeter (1942) have long argued that economic downturns have a cleansing effect, where inefficient organizations and obsolete products are eliminated. In contrast, other economists like Ouyang (2009) have shown that in addition to eliminating inefficient firms, recessions also eliminate superior firms or firms with great future potential if these firms lack the resources and skills necessary to survive adverse economic conditions.

Yet, there is a scarcity of research on what capabilities and strategies help companies survive economic downturns (Gulati et al., 2010). To this point, Srinivasan et al. (2005) conclude that academic research on managing during recessions "offers weak and equivocal insights" (p. 110). In specific functional service areas, such as marketing, there are a small number of studies pertaining to the profit impact of advertising expenditure and marketing strategies during recessions (Lilien and Srinivasan, 2010; Rollins et al., 2014; Srinivasan et al., 2005, 2011). These studies show mixed evidence regarding the efficacy of advertising during recessions, and conclude that financial cutbacks limit marketing activities. Studies also show the possibility of generating profits through aggressive marketing strategies under certain conditions. However, with the exception of Abrahamsen and Hartwig's work on the impact of recession on inventories (2011), there have been no studies in the operations area.

Addressing this gap is urgent, as firms that are ill-prepared for the effects of economic downturns may not survive. Our third research question addresses a portion of this important gap: Do the effects of operational and marketing capabilities, and top management importance on profits, vary based on different economic conditions?

Below, we investigate these topics in greater depth: Section 2 summarizes relevant literature and develops our theoretical framework. Section 3 documents the measurement of the constructs and the empirical methods used. Section 4 presents the results of our empirical study. Section 5 concludes by exploring implications of the results for managers and for research in operations strategy, capability development, and resilience in the face of economic downturns.

2. Relevant literature and theoretical development

Resource-based theory (Amit and Schoemaker, 1993; Barney, 1991; Peteraf and Barney, 2003; Peteraf, 1993) and top management team research (Hambrick and Mason, 1984; Hambrick, 2007) provide the theoretical lens to develop and test hypotheses around our research questions.

2.1. Marketing and operational capabilities from the RBT perspective

Operational and marketing capabilities can be sources of competitive advantage for firms (Hsu et al., 2009; Ketokivi and Schroeder, 2004; Nath et al., 2010; Vorhies and Harker, 2000). The resource-based theory (RBT) defines value as the difference between the maximum price consumers are willing to pay and the cost of production (Peteraf, 1993; Peteraf and Barney, 2003). From the RBT perspective, the value of functional capabilities will be based on their marginal contribution to the firm's rents, such as through sales growth or cost reduction. The marginal contribution to the firm's rents can be determined by comparing the outputs that impact rents with the inputs or resources used in generating those outputs. Based on Peteraf and Barney (2003), we define functional capability in general as the ability of the function to achieve desired outcomes (e.g., sales growth) to the maximum possible extent by using inputs and resources (e.g., advertising budget) in the most efficient manner.

Functional capability is essentially the efficiency of the function in contributing towards the value created by the firm while using resources (or inputs). This view is derived from the resource-based theory (RBT), as RBT "is an efficiency-based explanation of performance differences" (Peteraf and Barney, 2003, p. 311). Marketing and operations are two of the central and most important functions that create value for the firm (Nath et al., 2010). In simplified terms, "marketing is the creation of customer demand; operations management is the supply and fulfillment of that demand" (Ho and Tang, 2004, p. 429).

2.1.1. Operational capability

Operational capability is defined as "the integration and coordination of a complex set of tasks" (Dutta et al., 1999, p. 551). These tasks include transformation of inputs such as materials and technologies into outputs.

Considerable research has shown that different operational technologies, such as quality practices, are of fundamental importance in explaining firm performance and in achieving strategic goals (Bessant et al., 1999; Fawcett et al., 1997; Ketokivi and Schroeder, 2004; Shah and Ward, 2003; Ward et al., 1994). However there have been relatively few studies showing the impact of operational capability as a whole on firm performance (Hsu et al., 2009; Robb et al., 2008). Research suggests that the ability to handle complexity within manufacturing and logistics systems is a core competency of firms that has a significant impact on their performance (Perona and Miragliotta, 2004). In addition to coordination and managing complexity, the operations function is also involved in the development and improvement of manufacturing, supply, and logistics processes.

Some researchers have focused exclusively on the quality improvement and product development aspect of operational