EXAMINE THE IMPACT OF MARKETING ACTIVITIES ON THE ACTIVITIES AND FINANCIAL PERFORMANCE OF RETAIL KERMANSHAH

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ABSTRACT
Drawing upon the resource-based view of the firm, this study investigates the relationships among marketing activities, operations activities and financial performance. Using archival data of 186 retail firms in the Kermanshah, we find that that marketing activities has a significant impact on operations activities, and that operations activities is significantly and positively related to retail efficiency. The results also suggest that operations activities fully mediates the relationship between marketing activities and financial performance. The findings of this study provide practical insights for practicing managers to consider when developing functional activities in order to achieve superior financial performance.

Keywords: Marketing Activities, Operations Activities, Financial Performance, Retail Kermanshah.

INTRODUCTION
The resource-based view of the firm attributes superior financial performance to organizational resources and activities (Bharadwaj, 2000). Activities have been broadly defined as “complex bundles of skills and accumulated knowledge that enable firms to coordinate activities and make use of their assets” (Day, 1990). Song, Benedetto, and Nason (2007) stated that each firm has a distinctive set of resources and activities, and some types of activities will be more closely related to superior performance than others. Grant (2002) described a hierarchy of organizational activities, where specialized activities are integrated into broader functional activities such as marketing and operations activities. A growing number of researchers have explicitly emphasized the importance of integrating operations and marketing perspectives in gaining competitive advantage (Calantone, Dröge, & Vickery, 2002; Hausmana, Montgomery, & Roth, 2002; Nath, Nacchiapan, & Ramanathan, 2010; O'Leary-Kelly & Flores, 2002; Song et al., 2007). Although the integrated roles of the functional activities have become more critical than ever in achieving competitive advantage (Ho & Tang, 2004; Nath et al., 2010), marketing and operations functions have been examined separately in the management literature (Karmakar, 1996). The marketing literature has always focused on creation of customer demand and how to provide customers a unique value proposition, such as proposing that a firm can enhance its financial performance by improving its marketing activities (Vorhies & Morgan, 2005). Operations management researchers, on the other hand, have focused on management of supply to fulfill customer demand, such as examining the effect of operations activities on firm performance (Terjesena, Patelb, & Covin, 2011). Porter (1985) argued that all functional areas of business contribute towards delivery of products and services but marketing and operations are the two key functions that create value for customers. There is a growing body of literature arguing the important role of integration of marketing and operations functions in improving firm performance (Balasubramanian & Bharadwaj, 2004; Hausmana et al., 2002; Ho & Zheng, 2004; Roth & van der Velde, 1991; Wheelwright & Hayes, 1985). Mismatch between the two functions lead to production inefficiency and customer dissatisfaction, whereas a proper fit lead to sustainable competitive advantage (Ho & Tang, 2004). It is widely accepted among business leaders that ability to integrate such cross-functional expertise is vital to both competitive advantage and long-term success (Wind, 2005). Surprisingly, no other empirical studies have looked into the actual linkage between marketing activities and operations activities and their impacts on financial performance. Hence, in the
present study, we seek to clarify the relationships among the three constructs holistically. We adopt a resource-based perspective for theory development and hypothesis framing purposes. The resource-based view describes how an individual firm's resources (e.g. tangible and intangible assets and organizational activities) affect its financial performance (Barney, 1991; Wernerfelt 1984). Resources that are valuable, rare, and inimitable can lead to competitive advantage when strategically selected and deployed (Barney, 1991; Grant, 1991). Over the last few years, the resource-based view has been extensively adopted in both the marketing and operations management literature (Paiva, Roth, & Fensterseifer, 2008). Using the archival financial data of 186 retail firms in the Kermanshah, we explore the links among marketing activities, operations activities, and financial performance. The remainder of this paper is organized as follows. First, a brief literature survey on concepts relevant to this study is provided, and research hypotheses are developed. Second, the design of this study and the methodological procedures are described. Third, the findings of the study are presented and discussed, and a set of theoretical and managerial implications are drawn. Lastly, we conclude with a summary of findings and conclusions along with the main limitations and scope for future research.

Theoretical background and research hypotheses

Resource-based view and activities

The resource-based view considers a firm as a bundle of resources and activities (Wernerfelt, 1984). It is an influential framework for understanding how competitive advantage is achieved through intra-firm resources and activities (Corbett & Claridge, 2002). In general, resources refer to tangible and intangible firm assets that could be put into productive use (e.g. Amit & Schoemaker, 1993; Grant, 1991). Activities is defined as the ability of the firm to use its resource “to affect a desired end” (Amit & Schoemaker, 1993). It is like “intermediate goods” generated by the firm using organizational processes to provide “enhanced productivity to its resources” (Amit & Schoemaker, 1993). Compared to resources, activities are embedded in the dynamic interaction of multiple knowledge sources and are more firm-specific and less transferable thus leading to competitive advantage (Peng, Schroeder, & Shah, 2008). Activities can be broadly categorized into those that reflect the ability to perform basic functional activities of the firm and those that guide the improvement and renewal of the existing activities (Collis, 1994). The resource-based view argues that firms will have different nature of resources and varying levels of activities. A firm's survival depends on its ability to create new resources, build on its activities platform, and make the activities more inimicable to achieve competitive advantage (Day & Wensley, 1988; Peteraf, 1993). The resource-based view has been widely used in the marketing literature to understand the interaction between marketing and other functional activities and their effects on performance improvement (Dutta, Narashiman, & Surendra, 1999; Song et al., 2007; Song, Droge, Hanvanich, & Calantone, 2005). Previous studies (e.g. Dutta et al., 1999; Nath et al., 2010; Terjesena et al., 2011; Vorhies & Morgan, 2005) have found that there is a significant relationship between functional activities and firm performance. In addition, the resource-based view suggests that heterogeneity in firm performance is due to ownership of resources that have differential productivity (Makadok, 2001). Dutta et al. (1999) defined a firm's activities as “its ability to deploy resources (inputs) available to it to achieve the desired objectives (outputs)”. Thus, the present study uses an input–output framework in the form of efficiency frontier function to understand the optimal conversion of a firm's resources to its objectives (Nath et al., 2010). Day (1994) also suggested that “it is not possible to enumerate all possible activities, because every business develops its own configuration of activities that is rooted in the realities of its competitive market, past commitments, and anticipated requirements”. For the purposes of this study, we will focus on two important organizational activities (marketing and operations) (Day, 1994; Song et al., 2007) and investigate their effects on financial performance. As noted earlier, the resource-based view a firm as a bundle of resources and activities, some types of functional activities (such as marketing and operations) will influence firm performance (Day, 1994; Song et al., 2007). Drawing upon the resource-based view, we develop a conceptual framework (see Fig. 1) investigating that how a firm exploits its critical activities in marketing and operations to improve financial performance.
Marketing activities
Marketing activities is defined as the integrative process, in which a firm uses its tangible and intangible resources to understand complex consumer specific needs, achieve product differentiation relative to competition, and achieve superior brand equity (Day, 1994; Dutta et al., 1999; Song et al., 2005, 2007). Marketing activities include knowledge of the competition and of customers, as well as skill in segmenting and targeting markets, in advertising and pricing, and in integrating marketing activity (Song et al., 2007). A firm develops its marketing activities when it can combine employees' knowledge and skills with the available resources (Vorhies & Morgan, 2005). Firms that devote efforts and resources to interacting with customers can enhance their “market sensing” abilities (Narsimhan, Rajiv, & Dutta, 2006). Such activities, once built are very difficult to imitate for competing firms (Day, 1994). Thus, marketing activities is considered to be one of the most important sources of competitive advantage (Nath et al., 2010). The marketing literature suggests that firms use activities to transform resources into outputs based on their marketing mix strategies and such marketing activities is related to their business performance (Vorhies & Morgan, 2003). Song et al. (2007) argued that marketing activities helps a firm build and maintain longterm relationship with customers and channel members. Marketing activities creates a strong brand image that allows firms to achieve superior firm performance (Ortega & Villaverde, 2008). Empirical studies have found a significant relationship between marketing activities and financial performance (Dutta et al., 1999; Nath et al., 2010; Song et al., 2005; Vorhies & Morgan, 2005). For instance, Nath et al. (2010) found that marketing activities has a significant impact on business performance. Vorhies and Morgan (2005) also found that marketing activities is positively and significantly related to firm performance. Using the above arguments, the following hypothesis is proposed.

H1. Marketing activities has a positive impact on financial performance.

Operations activities
Operations activities is defined as the integration of a complex set of tasks performed by a firm to enhance its output through the most efficient use of its production activities, technology, and flow of materials (Dutta et al., 1999; Hayes, Wheelwright, & Clark, 1988). Superior operations activities increases efficiency in the delivery process, reduces cost of operations and achieves competitive advantage (Day, 1994). Operations activities are fundamental proficiencies that enable firms to achieve production-related goals such as consistent product quality, cost reduction, volume and product flexibility, and delivery dependability and speed (Boyer & Lewis, 2002; Swink & Hegarty, 1998; Terjesena et al., 2011; White, 1996). Superior operations activities have been long recognized as a source of competitive advantages and superior performance outcomes (e.g., Peng et al., 2008; Terjesena et al., 2011; Vickery, Droge, & Markland, 1993). It argues that a firm can achieve competitive advantage by handling an efficient material flow process, careful utilization of assets, and acquisition and dissemination of superior process knowledge (Tan, Kannan, & Narasimhan, 2007). Among the operations activities most commonly, strongly, and positively associated with competitive success are those contributing to a firm's ability to compete on the bases of time, flexibility, lowcosts, and product quality (White, 1996). Some empirical studies have identified the important effect of operations activities on firm performance (Nath et al., 2010; Rosenzweig, Roth, & Dean, 2003; Terjesena et al., 2011). Using a sample of 167 Kermanshah-based high technology manufacturing firms, Terjesena et al. (2011) found that that firm performance (such as sales growth, return on sales, and return on assets) is significantly predicted by operations activities that promote low operating costs and product quality. Rosenzweig et al. (2003) found that enhanced competitive activities (such as product quality, cost, process flexibility, and delivery reliability) generally improve business performance. Using archival data of 102 Kermanshah-based logistics companies, Nath et al. (2010) also found that operations activities significantly impacts business performance (such as profitability).
Based on the above argument and the results of these empirical studies, we propose the hypothesis below.

H2. Operations activities has a positive impact on financial performance.

Marketing and operations activities

The interdependence of manufacturing and marketing, in general, has been widely recognized for a long time (St John & Hall, 1991). Some previous studies (e.g. Dutta et al., 1999; Srinivasan, Lovejoy, & Beach, 1997) have identified the high complementarity between marketing and operations activities. Hill (1994) stated that “the links between design, manufacturing, and markets are the very essence of a business”. Customer needs to generate the product's functional specification, which in turn generates the product specification (Hill, 1994). In the predominant marketing research paradigm, the marketing function generates a spectrum of product concepts as a bundle of well-defined attributes, with price included as an attribute (Srinivasan et al., 1997). However, there is little empirical research that has directly explored the linkage between marketing activities and operations activities. Based on a review of the literature, in this study, we would argue that marketing activities is an antecedent of operations activities. A firm's marketing activities can strengthen its ability to develop innovative operations processes. Marketing activities spans processes that are established within organizations to decipher the trajectory of customer needs through effective information acquisition, management, and use (Krasnikov & Jayachandran, 2008). It involves the processes that enable a firm to build sustainable relationships with customers (Day, 1994), which in turn will lead to improved operations activities such as new product development and more flexible delivery. Previous studies (e.g. Dutta et al., 1999; Gatignon & Xuereb, 1997) have highlighted the important role of marketing in improving operations activities, for example, viewing marketing activities as important determinants of new product development and success. Operations activities is “the skills and knowledge that enable a firm to be efficient and flexible producers or service providers that use resources as fully as possible” (Krasnikov & Jayachandran, 2008). Overall, operations activities has been viewed as focusing on efficient delivery of high quality products/services, cost reduction, and flexibility improvement (Tan et al., 2007). Operations activities can draw on marketing activities to further its goals (Dutta et al., 1999). A superior marketing activities can provide high-quality consumer feedback to operations function. For example, operations can use inputs and get feedback from marketing function on various customer-ready prototypes, which in turn will enhance the

Figure 1: Conceptual framework.
likelihood of the final product being acceptable to consumers while being produced at as a low cost as possible (Dutta et al., 1999). Operations activities should be developed in the context of the marketing activities. Using a sample of 117 leading retail banks, Roth and van der Velde (1991) showed how critical success factors are used to link operations and marketing in service firms. They suggested that the marketing strategy embodies the management of demand, i.e., identifying, understanding, and creating need satisfying products and services, and that the operations strategy concerns the management of supply, i.e., the production and delivery of products and services. O'Leary-Kelly and Flores (2002) also argued that the “time differential” exists between marketing and operations decisions, in that marketing based decisions are typically a source of input for the operations-based decisions. For example, in a typical marketing–operations planning cycle, the marketing/sales planning decisions serve as a primary input for the operations planning decisions which then follow (Vollmann, Berry, & Whybark, 1997). It can be argued that marketing and operations must not only be structurally aligned for competitive advantage, but also that marketing plays a pivotal role in affecting operations strategy and activities. The firm's marketing activities (such as market knowledge about customer needs and past experience in forecasting and responding to these needs) can proactively generate operations activities in terms of quality, delivery, flexibility and cost. Based on the above argument, we propose the following hypothesis.

**H3. Marketing activities has a significant impact on operations activities.**

**METHODOLOGY**

**Data**

We chose retail firms in the Kermanshah to test our conceptual framework. All the data required for this study were obtained from the Financial Analysis Made Easy (FAME) database (Bureau van Dijk Electronic Publishing, https://fame.bvdep.com/). Initially, we obtained top 500 retailers based on their turnover in 2010. Out of that, 314 firms did not have complete information. So, the final sample consisted of 186 retailers in the Kermanshah and these retail firms operated their business in both food and nonfood sectors, such as supermarket retailing, home appliances, DIY and home improvement, and fashion retailing. The results of demographic characteristics of these 186 firms are reported in Table 1.

**Data envelopment analysis (DEA)**

The resource-based view proposes that a firm uses its resources (inputs) to generate business performance (outputs) through functional activities (process transformation) (Nath et al., 2010). Thus, in this study, we evaluated operations and marketing activities and retail efficiency using Data Envelopment Analysis (DEA) (Cooper, Seiford, & Tone, 2007; Ramanathan, 2003). DEA is a mathematical programming technique commonly used for estimating the efficiencies with which different decision-making units (DMUs) (schools, hospitals, retailers, etc.) are able to convert their resources (usually called inputs in the DEA literature) to good performance (usually called outputs). To calculate efficiency scores employing DEA, two different assumptions can be made, i.e. constant return to scale (CRS) and variable returns to scale (VRS). The VRS efficiency score measures pure technical efficiency, i.e. a measure of efficiency without scale efficiency. On the other hand, the CRS efficiency score represents technical efficiency which measures inefficiencies due to the input/output configuration and the size of operations (Cooper et al., 2007). Scale efficiency can be computed by the ratio of CRS efficiency to VRS efficiency. Hence, scale efficiency of a DMU operating in its most productive scale size is one.

**Measures**

We measured functional activities of firms in terms of their efficiency in transforming marketing and operations resources (function specific inputs) to marketing and operations objectives (function specific outputs). The measures used in this study for marketing activities, operations activities, and financial performance are reported in Table 2 and described in more detail below. Marketing activities is an integrative process, in which a firm uses its resources to achieve its market related needs of business (Vorhies & Morgan, 2005). Thus, we used the input–output framework to measure marketing activities and archival financial data is the best way to do it. Following the work of Nath et al. (2010), we used sales
as the output measure. Using sales as an output for marketing activity is also supported in the marketing literature (Kotabe, Srinivasan, & Aulakh, 2002; Slotegraff, Moorman, & Inman, 2003). We used three inputs as measures of marketing resources: stock of marketing expenditure, intangible resource, and relationship expenditure. In the input–output classification, marketing activities of a firm measures how close it is to the sales frontier given in a set of resources. Thus the closer is the sales value realized by the firm from the sales frontier, the better is its marketing activities (Nath et al., 2010). We used input-oriented CRS DEA model (Cooper et al., 2007) to measure the efficiency of such transformation for the retailers. The DEA efficiency score measures marketing activities of each retailer. Drawing upon the resource-based view, we also employed the input–output framework to measure operations activities of a firm. We used cost of operations as the output measure (Dutta et al., 1999; Narsimhan et al., 2006). In accordance with Nath et al.'s (2010) work, we used two inputs to measure operations resources: cost of capital and cost of labor. The retail industry is highly labor intensive.

Table 1 - Profile of 186 retail firms

<table>
<thead>
<tr>
<th>Retail sector</th>
<th>Number of firms</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>38</td>
<td>20.4</td>
</tr>
<tr>
<td>Non-food</td>
<td>148</td>
<td>79.6</td>
</tr>
<tr>
<td>Firm age (year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–20</td>
<td>88</td>
<td>47.3</td>
</tr>
<tr>
<td>21–50</td>
<td>54</td>
<td>29.0</td>
</tr>
<tr>
<td>51–100</td>
<td>37</td>
<td>19.9</td>
</tr>
<tr>
<td>More than 100</td>
<td>7</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Table 2 - Variables and measures

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measures</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing capability</td>
<td>Sales, general and administrative expenses</td>
<td>252,949,924</td>
<td>542,514,742</td>
</tr>
<tr>
<td>Inputs</td>
<td>Stock of marketing expenditure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible resources</td>
<td>Intangible assets</td>
<td>148,428,790</td>
<td>507,814,239</td>
</tr>
<tr>
<td>Relationship expenditure</td>
<td>Cost of receivables</td>
<td>40,000,833</td>
<td>323,783,405</td>
</tr>
<tr>
<td>Outputs</td>
<td>Sales</td>
<td>1,785,724,010</td>
<td>6,053,155,520</td>
</tr>
<tr>
<td>Operations capability</td>
<td>Turnover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inputs</td>
<td>Cost of capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of labor</td>
<td>Remuneration</td>
<td>211,613,623</td>
<td>661,550,476</td>
</tr>
<tr>
<td>Outputs</td>
<td>Cost of operations</td>
<td>1,430,041,548</td>
<td>5,476,373,163</td>
</tr>
<tr>
<td>Financial performance</td>
<td>Total assets</td>
<td>1,158,246,193</td>
<td>4,096,310,017</td>
</tr>
<tr>
<td>(retail efficiency)</td>
<td>Actual value</td>
<td>12,358,919</td>
<td>39,018,653</td>
</tr>
<tr>
<td>Inputs</td>
<td>Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employees</td>
<td>Return on assets</td>
<td>10,420</td>
<td>8,670</td>
</tr>
<tr>
<td>Outputs</td>
<td>Return on capital employed</td>
<td>22,178</td>
<td>23,193</td>
</tr>
</tbody>
</table>

a Value in thousands of GBP.

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Operations activities is the closeness of the firm to the cost frontier. Similarly, we used input-oriented CRS DEA model (Cooper et al., 2007) to measure the efficiency of such transformation for retail firms. The DEA efficiency score measures operations activities of each firm. As mentioned earlier, the present study employed DEA (Cooper et al., 2007; Ramanathan, 2003) as a tool to measure input–output transformation. To measure retail efficiency, we used two inputs in this study, namely, total assets and number of employees (Nath et al., 2010; Yu & Ramanathan, 2008, 2009) (see Table 2). We chose two output measures return on assets and return on capital employed which directly reflect how well a retail firm is able to convert its inputs to generate superior profitability (Nath et al., 2010). We used input-oriented CRS DEA model (Cooper et al., 2007) to measure the efficiency of such transformation. We used two control variables: firm age and retail characteristic (food and non-food sectors). Firm age is the number of years since firm formation. Firm age was controlled in the current analyses because older retailers may possess more fully developed functional activities (Terjesen et al., 2011). Older firms will be more likely to overcome performance threatening liabilities. The effects of services and functional activities on improved retail efficiency are different among retailers (e.g. grocery retailers vs. clothing and footwear retailers).

RESULTS
To test the hypothesized links in our conceptual framework, structural equation modeling (SEM) was used in this study. The results of structural model using AMOS 20 are reported in Table 3. The overall fits of the structural model are good, with the CFI, IFI, and TLI well above the recommended threshold of 0.90 (Hu & Bentler, 1999), the RMSEA less than 0.10 (Kline, 1998), and the SRMR less than 0.08 (Hu & Bentler, 1999). While firm age ($\beta = -0.070, n.s.$) does not affect retail efficiency, retail characteristic ($\beta = 0.115, p < 0.10$) has a positive impact on retail efficiency. As shown in Table 3, the results indicate that marketing activities has a significant positive impact on operations activities, which lends support for H3. Similarly, the structural model shows that operations activities is significantly and positively related to financial performance. Hence, H2 is fully supported. However, marketing activities has no significant direct effect on financial performance. As such, H1 is rejected.

Table 3 - Results of hypotheses 1–3 tests using SEM.

<table>
<thead>
<tr>
<th>Structural paths</th>
<th>Standardized coefficient</th>
<th>t-Value</th>
<th>Hypothesis test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing capability → operations</td>
<td>0.634***</td>
<td>11.155</td>
<td>H3: Supported</td>
</tr>
<tr>
<td>capability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations capability → financial</td>
<td>0.432***</td>
<td>5.211</td>
<td>H2: Supported</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing capability → financial</td>
<td>0.081</td>
<td>0.962</td>
<td>H1: Not supported</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To identify the particular extent to which operations activities mediates the effect of marketing activities on financial performance, we conducted the Sobel test (Sobel, 1982) to directly examine the significance of the mediation effects using the interactive tool provided by Preacher and Leonardelli (2003). As an additional test for mediation, Mackinnon, Lockwood, Hoffman, West, and Sheets (2002) suggested that the Sobel test is superior in terms of power and intuitive appeal. The Sobel test lends additional support for the mediated relationships hypothesized through a change in significance of the indirect effect. The result of the Sobel test provides support for the fully mediating effect of operations activities ($t = 4.725, p < 0.001$) on the relationship between marketing activities and financial performance.

DISCUSSIONS AND IMPLICATIONS

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Discussions
Our structural model strongly supports Hypotheses 2 and 3. Therefore, marketing activities has a significant impact on operations activities, and that operations activities is significantly and positively associated with financial performance. However, there is no significant direct relationship between marketing activities and retail efficiency. This finding suggests that operations activities is a mediator of the relationship between marketing activities and financial performance. Although the value of marketing and operations activities has been recognized (e.g. Nath et al., 2010; Song et al., 2005; Terjesena et al., 2011; Vorhies & Morgan, 2005), few empirical studies have looked into the actual link between the two functional activities and their impacts on financial performance. Our structural path analysis suggests that marketing activities helps retail firms enhance their operations activities, which in turn leads to improved financial performance. Retailers with better resource performance transformation ability have superior market knowledge and create better value for their customers. This corroborates with market orientation literature (Jaworski & Kohli, 1993; Narver & Slater, 1990). A retailer's marketing activities depends on its ability to understand customer needs and build long-term relationships. Using its unique and inimitable marketing activities, the retailer can devote its marketing resources more effectively to creating superior customer value. To survive in an increasingly dynamic and competitive marketplace, better marketing activities lead to competitive advantage for retailers and help them strengthen operations activities (such as providing higher quality products and services at lower prices). Our finding of the positive effect of operations activities on improved business performance (retail efficiency) is consistent with the predictions of the resource-based view (Amit & Schoemaker, 1993; Grant, 1991) and previous studies (e.g. Nath et al., 2010; Terjesena et al., 2011). The empirical findings support the conceptual arguments from some researchers (e.g. Roth & van der Velde, 1991; Wheelwright & Hayes, 1985) who emphasized that the functional integration of operations and marketing has a significant impact on business performance. Hence, retail firms should consider integrating their functional departments (such as operations and marketing functions) in order to obtain financial benefits from the development of functional activities. Our structural path analysis indicates that there is no significant direct path between marketing activities and financial performance, which provides stronger evidence of fully mediating effects of operations activities. The Sobel test results further confirm the significance of paths between marketing activities and operations activities and between operations activities and performance, thus casting operations activities as a mediator. This provides support for the argument that those firms that develop an effective operations activities are able to obtain superior financial performance compared to those who do not develop an effective operations activities (Terjesena et al., 2011; Vickery et al., 1993).

Our findings suggest that retailers operating in an increasingly competitive marketplace should place greater emphasis on the development of operations activities because it is operations activities that directly affects retail efficiency. Superior operations activities are reflected in efficient and reliable delivery processes, cost reductions and control, increased volume and mix flexibility, and exceptional conformance quality (Boyer & Lewis, 2002; Swink & Hegarty, 1998; White, 1996), and lead to competitive advantage and the corresponding financial rewards. However, marketing activities should not be ignored because it strengthens operations activities and has an important effect on retail efficiency, but the influence is articulated through and modified by operations activities.

Theoretical implications
This study fills a gap in the existing literature since there is limited work that integrates functional activities (operations and marketing) to examine their roles in improving firm performance. Our study contributes to the literature on marketing and operations in several ways. Drawing upon the resource-based view theory, we develop a framework to investigate the relationship between operations activities and marketing activities and their impacts on financial performance. As noted earlier, the empirical findings of this study support the conceptual arguments from some scholars (e.g. Grant, 2002) who suggested that specialized activities are integrated into broader functional activities such as operations and marketing activities. Although the impact of marketing and/or operations activities on a firm's
financial performance has been studied (e.g. Nath et al., 2010; Song et al., 2005; Terjesena et al., 2011), our study is unique that it explores the link between marketing activities and operations activities and reveals the mediating role of operations activities on the marketing activities–financial performance relationship. Hence this study empirically examines the relationships among the three constructs holistically.

Managerial implications
The managerial implications of this study are twofold. First, according to the resource-based view, it is important for firms to invest in and exploit their functional activities (such as marketing and operations) in order to achieve competitive advantages and superior firm performance. Thus, retail managers are encouraged to improve their marketing and operations activities, such as deploying resources to improve their marketing communication strategies and providing innovative new products and services. Second, it is important for managers to understand the relationship between operations and marketing activities. Our results suggest that there is no significant direct relationship between marketing activities and financial performance, indicating a full mediating role of operations activities. We believe that this can give retail managers a new way to understand the relationships between functional activities and their impacts on operational efficiency. Successful integration of functional activities is the key to success. Firms should emphasize on the development and maintenance of operations activities in order to gain superior financial performance. Careful deployment of resources on operations improvement such as capacity planning and control, just-in-time (JIT) inventory systems and total quality improvement (TQM) is essential to build operations activities. However, as an antecedent of operations activities, marketing activities should not be ignored. Firms should also deploy their resources on marketing activities such as advertisement, trade promotion and customer relationship management to build marketing activities.

CONCLUSION
Drawing upon the resource-based view, we have developed a framework that examines the relationships among marketing activities, operations activities, and financial performance. Our structural model has suggested that marketing activities has a significant positive effect on operations activities, and that operations activities is significantly and positively related to financial performance. More specifically, operations activities fully mediates the relationship between marketing activities and financial performance. The findings of this study also provide practical insights for practicing managers to consider when developing functional activities in order to achieve superior financial performance. More specifically, this study provides managerial guidelines for managers to decide how to devote their efforts and resources to developing different functional activities (such as marketing activities and operations activities), and which functional activities directly influences financial performance. This study has some limitations. According to the resource–activities–performance framework suggested by the resource-based view, we tested the hypotheses using archival data. However, such secondary data do not provide insights into the actual transformation process on how different firms have assimilated these constructs into their business process. Survey-based research or research that combines survey data and archival data may generate in-depth understanding of the process. Thus, future research may collect primary data using questionnaires and also confirm the results obtained in this study. In addition, functional activities in this study were characterized by two principal activities of marketing and operations. However, according to the resource-based view, each organization has a distinctive set of resources and activities (Day, 1990; Song et al., 2007). Future study may identify more relevant functional activities (such as IT activities, market linking activities, supply chain activities, or financial activities) and examine their important roles in improving firm performance. Finally, some literature (e.g. Dutta et al., 1999) suggests that interactions among functional activities are critical drivers of competitive advantage. Future research may extend our research model by examining the potential interactions among different functional activities (such as marketing, operations, and financial activities). Such interaction effects may be tested using a multiple regression analysis or a lead-lag analysis.
REFERENCES


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