An Examination of Exploration and Exploitation Capabilities: Implications for Product Innovation and Market Performance

The authors employ the dynamic capabilities perspective to gain a greater understanding of the conversion of firm resources into exploitation and exploration capabilities and the influence of these firm capabilities on firm outcomes. Specifically, they theorize that marketing and technological resources provide a foundation for the establishment of exploitation and exploration capabilities, respectively, and that these dynamic capabilities influence the degree of product innovation and market performance. The theorized relationships, which the authors examine using a survey of 111 U.S. importers, indicate that marketing resources influence an importer’s development of exploitation capabilities, whereas technological resources influence the development of exploration capabilities. Furthermore, the authors find that exploitation capabilities provide a foundation for the development of exploration capabilities. They also find that whereas exploitation capabilities are negatively related to the degree of product innovation, exploration capabilities positively influence both the degree of product innovation and market performance. The authors provide implications for international marketing academics and practitioners.

Competitive advantage is predicated to a degree on a firm’s ability to develop dynamic capabilities (i.e., to employ resources that provide the organization with a sustainable competitive advantage through continual modification of resource usage) (Dyer and Nobeoka 2000; Eisenhardt and Martin 2000; Griffith and Harvey 2001; Song et al. 2005; Teece, Pisano, and Shuen 1997). The ability to develop dynamic capabilities resides in a firm’s ability to create flexible strategies to coordinate and redeploy resources (Eisenhardt and Martin 2000; Griffith and Harvey 2001; Song et al. 2005; Teece, Pisano, and Shuen 1997).

From a strategic standpoint, firm capabilities related to product innovation are central to continued corporate survival (see Henard and Szymanski 2001; Montoya-Weiss and Calantone 1994). Nowhere are capabilities associated with the management of product innovation more important than in the case of importers, because importers play a crucial role in connecting suppliers and buyers. For example, new product development activities in a value chain are significantly...
enhanced by supplier involvement, customer feedback, and retailer participation (Handfield et al. 1999; Koufteros, Vonderembse, and Jayaram 2005). Coordination with importers results in enhanced communication that increases knowledge flows across functional boundaries (Griffith, Myers, and Harvey 2006; Liang and Parkhe 1997). Because importers link producers and retailers, their role in successful product innovation has dramatically increased over time.

Traditionally, importers have been viewed as fulfilling a key matching and sorting function within the channel (Alderson 1957). However, as the competitive landscape has evolved, allowing for greater interactivity among suppliers and customers, and as innovation and actual production locations are uncoupled, the role of importers has changed (Andersen 2005; Kotabe 1993; Liang and Parkhe 1997). For example, Liang and Parkhe (1997, p. 520) note that in today’s environment, “often it is the importers who drive exports, by choosing exporters and export countries, rigidly specifying the product to be exporters, [and] handling all export marketing functions.” As such, importers are strategically proactive and are increasingly involved in new product development within the overall value chain. Specifically, their functional responsibility within the marketplace has evolved to one in which they have begun to undertake the task of introducing new products to market (Liang and Parkhe 1997). For example, G. Willi-Food International, one of the world’s largest kosher food importers, credits its recent increase in revenues to its newly adopted strategy of leveraging its customer knowledge gained through its retail partnerships to modify its product line by introducing innovative kosher products (PR Newswire US 2007). Working closely with retailers, G. Willi-Food International has capitalized on the growing demand for dairy products and has added several new products to its offerings, including Bloose, Fetina, and Light Lurpak butter. Similarly, Pompeian, the century-old importer of olive oil, has added a new product, OlivExtra, which combines the health benefits of two oils—premium extra virgin olive oil and canola oil—in one bottle (see http://www.blguide.com/pomp.htm). Company executives claim that the introduction of OlivExtra is in response to the growing demand of healthier living. In each case, these importers are augmenting their product offerings by introducing new products in an attempt to capitalize on changing consumer needs.

Given the importance of product innovation management to the importer, it is surprising that relatively limited research has examined the resources and capabilities that drive this issue. A review of the extant literature reveals several shortcomings that have diminished our theoretical and managerial understanding of this issue. First, although a significant
amount of research has been focused on both the issue of resource needs for product innovation and that of exploration and exploitation (e.g., Atuahene-Gima 2005; Özsomer and Gençtürk 2003), the current status of the literature has yet to examine empirically the conversion of specific resources into differing capabilities. As such, this study aims to overcome this limitation by theoretically and empirically modeling the relationship between two specific sets of firm resources (i.e., marketing and technological) and exploitation and exploration capabilities.

Second, although research over the past decade has shed light on factors that affect the performance of product innovation in the market (see Atuahene-Gima 2005; Henard and Szymanski 2001; Montoya-Weiss and Calantone 1994), most of this research has focused on manufacturers, thus providing limited understanding of the importance of product innovation in the context of importers. Liang and Parkhe (1997) argue that importers differ greatly from manufacturers in terms of market focus, margin, profitability, role in the channel, and so forth; therefore, the extension of manufacturing literature to importers is questionable. This study extends the literature by examining how exploitation and exploration capabilities influence the degree of product innovation and market performance of importers, thus providing a response to Liang and Parkhe’s call for greater research on importers in international business research.

The resource-based view of the firm envisions the organization as a unique bundle of accumulated tangible and intangible resource stocks (Barney 1991; Peteraf 1993). The organization can use these resources to exercise its strategic intent. Typically, resources are conceptualized as internal attributes, including tangible assets, specific internal capabilities, routines, and knowledge, that are managed by the organization (Barney 1991; Conner 1991; Constantin and Lusch 1994). However, the resource-based view of the firm suggests that a firm achieves a competitive advantage through the conversion of firm resources into capabilities (Day 1994; Teece, Pisano, and Shuen 1997). A distinction is normally made between resources and capabilities: “[R]esources are stocks of available factors that are owned or controlled by the organization, and capabilities are an organization’s capacity to deploy resources” (Amit and Schoemaker 1993, p. 35). Following Penrose (1959), we argue that the value of a resource is founded in its potential to yield competitive differentiation and/or customer value delivery. This view of capabilities has been further extended to incorporate the evolving nature of capabilities in a competitive environment under the dynamic capabilities perspective.
Dynamic capabilities refer to the development of organizational, functional, and technological skills employed to gain/sustain competitive advantage (Eisenhardt and Martin 2000; Griffith and Harvey 2001; Song et al. 2005; Teece, Pisano, and Shuen 1997). Under the dynamic capabilities perspective, competitiveness is characterized by timely response, rapid and flexible strategies, and management capability to coordinate and redeploy internal and relational resources effectively (Eisenhardt and Martin 2000; Teece, Pisano, and Shuen 1997). Dynamic capabilities occur when management successfully adjusts the strategic combination of resources to the unique characteristics of the marketplace (Eisenhardt and Martin 2000; Grant 1996; Pisano 1994). As such, dynamic capabilities can be envisioned as the continuous modification of resource bundles, or capabilities (Eisenhardt and Martin 2000; Teece, Pisano, and Shuen 1997).

The continuous introduction of new product and service offerings is considered an important element of a firm’s continued success. Product innovations can enhance a firm’s overall performance by satisfying customer needs and wants more effectively than existing offerings (Davidson 1976; Szymanski, Bharadwaj, and Varadarajan 1993). Thus, a firm’s success can be expected to vary either positively or negatively with the degree of new product innovations (Szymanski, Bharadwaj, and Varadarajan 1993). From the generation of new ideas through the launch of a new product, exploration and exploitation capabilities are a central theme of product innovation (Atuahene-Gima 2005; Holmqvist 2004; Özsomer and Gençtürk 2003; Rothaermel and Deeds 2004).

March (1991, p. 85) defines exploration as “experimentation with new alternatives having returns that are uncertain, distant, and often negative” and exploitation as “the refinement and extension of existing competencies, technologies, and paradigms exhibiting returns that are positive, proximate, and predictable.” Levinthal and March (1993, p. 105) define exploration as “the pursuit of knowledge, of things that might come to be known,” and exploitation as “the use and development of things already known.” Building on these definitions, we define “exploration capabilities” as the importer’s ability to adopt new processes, products, and services that are unique from those used in the past and “exploitation capabilities” as the importer’s ability to improve continuously its existing resources and processes. These conceptualizations emphasize the dynamic and distinctive aspects of exploration and exploitation.

First, both exploration and exploitation capabilities are considered dynamic capabilities, given that the role of dynamic capabilities is the transformation of existing resources into new functional competencies that better match the environ-
ment (Eisenhardt and Martin 2000). Previous research has suggested that an importer’s dynamic capabilities depend on simultaneously exploiting current technologies and resources to secure efficiency and creating variation through exploratory innovation (March 1991; Teece, Pisano, and Shuen 1997). Although exploitation capabilities arise from small changes in current technology and exhibit little deviation from the current market experiences of the importer to satisfy the needs of existing customers, the transformation of an importer’s existing resources into new abilities is still taking place. In the case of exploration capabilities, the fundamental changes in the importer’s current technology and market practices are more pronounced than those of exploitation capabilities. These changing actions typically address the needs of emerging customers and offer substantial new benefits to customers (Chandy and Tellis 1998). In each case, the importer’s current resources and processes are transformed into new competencies dynamically.

Second, our definitions incorporate the fundamental difference between exploration and exploitation capabilities—that is, the fundamental mandates from which product innovation emerges. Exploration capabilities emerge from the importer’s drive to discover something new, whereas exploitation capabilities derive from the importer’s drive to build on an existing set of resources, assets, or capabilities currently under the importer’s control (March 1991; Rothaermel and Deeds 2004). Although exploitation and exploration capabilities evolve from differing mandates, the literature suggests that firms must engage in the establishment and development of both capabilities for long-term success (Garcia, Calantone, and Levine 2003; Lee, Lee, and Lee 2003; March 1991).

Furthermore, exploration and exploitation capabilities are closely linked (Rothaermel and Deeds 2004). For example, it has been argued that an excessive focus on exploitation eventually leads to technological exhaustion in the market in which firms compete for developing new products (Lee and Ryu 2002). March (1991, p. 73) indicates that “since long-run intelligence depends on sustaining a reasonable level of exploration, these tendencies to increase exploitation and reduce exploration make adaptive processes potentially self-destructive.” These findings suggest that importers that exploit existing processes without exploring new processes will eventually become ineffective. As such, it can be argued that exploitation provides an importer a foundation of continuing operation on which riskier exploration can occur. This is consistent with the work of Garcia, Calantone, and Levine (2003), who argue that significant cash flows from exploitation activities provide financial assets that underpin exploration activities, whereas exploration activities provide
the technological assets and capabilities for the renewal of exploitation capabilities. Thus, it is important that both exploration and exploitation capabilities are viewed jointly. Furthermore, under the dynamic capabilities perspective, the capabilities themselves are not important for the firm but rather the outcomes for which they provide. As such, we argue that the importer’s degree of product innovation and its market performance result not only from extant capabilities but also from the continual renewal of such capabilities.

Figure 1 presents a model of product innovation management. The model extends previous work on product innovation capabilities under a dynamic capabilities perspective. Specifically, the model theorizes that two types of importer resources—marketing and technological—are converted into exploration and exploitation capabilities, influencing an importer’s degree of product innovation and market performance.

**Influence of Resources on Exploration Capability and Exploitation Capability.** Marketing strategy research emphasizes the need for firms to exploit existing resources while developing new ones (March 1991; Özsomer and Gençtürk 2003; Rothaermel and Deeds 2004). An importer’s ability to gain competitive advantage over its competitors lies in its ability to convert its current resources into specific capabilities (Teece, Pisano, and Shuen 1997). From a strategic standpoint, two key importer resources related to exploitation and exploitation capabilities are marketing and technological resources (Holmqvist 2004; Rothaermel and Deeds 2004). Marketing resources encompass the skills of the importer that are related to the marketing operations of the importer, such as marketing/sales, marketing research, and personnel development resources. Technological resources consist of sourcing, technological product aspects, and legal resources (e.g., knowledge of protecting innovations through legal means). The development of these resources within an importer provides the foundation for resource conversion into specific new product management capabilities (i.e., exploitation and exploration capabilities).

Benner and Tushman (2003) argue that resources are the foundation of both exploitative and exploratory activities. To achieve correspondence with the changing business environment, there needs to be a focus on a firm’s capability to renew all or part of its managerial competences and to create radically new competences (Teece, Pisano, and Shuen 1997). Exploration and exploitation activities are the fundamental task for an importer that exists in a competitive marketplace, and they require a constant surveillance of the capability to accomplish change quickly (Özsomer and Gençtürk 2003). Research implies that the divergent aspects of new product
Comparison of the technological and marketing resource effects on each capability.

Figure 1.
Conceptual Model
management can be decomposed into two related dimensions: marketing and technology (Holmqvist 2004; Rothaermel and Deeds 2004).

Exploitation is associated with mechanistic structures, tightly coupled systems, path dependence, routinization, control and bureaucracy, and stable markets and technologies (Ancona et al. 2001; Brown and Eisenhardt 1998; Lewin, Long, and Carroll 1999). Exploitation capabilities focus on the “development” aspect of the research-and-development process and are entered into with the goal of joining existing competencies across firm boundaries to generate synergies, which are then shared across partners (Garcia, Calantone, and Levine 2003; Koza and Lewin 1998). Thus, because exploitation capabilities derive from an importer’s ability to leverage its existing knowledge related to its suppliers and markets to capitalize on market opportunities, we argue that they are driven primarily by marketing resources. By developing effective market research, an importer can expose current capability deficiencies within the firm, be aware of emerging market opportunities, and eventually gain market knowledge competence (Li and Calantone 1998). Barnett, Greve, and Park (1994) argue that an awareness of changing market conditions provides opportunities for the firm to refine existing resources. With a deeper understanding of current market conditions and customers, importers can cultivate their existing processes and resources. In brief, it is difficult for an importer to make use of its existing capabilities without knowledge of market conditions (i.e., marketing resources).

Alternatively, exploration is associated with organic structures, loosely coupled systems, pathbreaking improvisation, autonomy and chaos, and emerging markets and technologies. It is motivated by the desire to discover something new, and as such, importers employing an exploration capability focus on the “research” aspect of the research-and-development process (Garcia, Calantone, and Levine 2003; Koza and Lewin 1998). Thus, exploration capabilities are founded on an importer’s ability to diverge from its know-how and to capitalize on previously unexplored opportunities. Although marketing resources (e.g., market knowledge) help in the refinement of importers’ existing capabilities to respond to changing environments, importers need both substantial technological abilities and a well-developed production system (i.e., technological resources) to develop truly new innovations. Because exploration focuses on emerging markets and requires discovery of something truly new, the technological resources must be presented in importers’ overall capabilities. Therefore, we argue that exploration capabilities are primarily driven by technological resources.
However, although each capability is primarily driven by one resource, technological resources may also be related to exploitation capabilities, and marketing resources may be related to exploration capabilities. For example, existing markets (those that are familiar to the importer) are often exploited with new products that rely on new technologies that incrementally improve existing products. Similarly, when new technologies are understood, a major challenge for converting technologies into successful innovations is the leveraging of market research to identify which markets are appropriate for new products that incorporate the new technologies. Thus, marketing resources can be important in developing and capitalizing on exploration capabilities. For example, to compete more effectively, Beaulieu, an importer of traditional handmade rugs, pulled away from the furniture market in favor of home textiles (Wyman 2002). This strategic change in positioning was the result of intense marketing research efforts that indicated that consumer trends in the rug business had shifted from the more traditional motivations toward the elegance of contemporary styling. By closely observing consumer preferences/trends and new manufacturing technologies, Beaulieu substantially changed its import offering to capitalize on new consumer opportunities.

Although marketing resources may be related to exploration capabilities and technological resources may be related to exploitation capabilities in some cases, we believe and theorize that an importer’s marketing resources are more paramount to successful exploitation capabilities than its capabilities founded on technological resources and that an importer’s technological resources are more paramount to successful exploration capabilities than its capabilities founded on marketing resources. Formally,

\[ H_1: \text{Marketing resources are more strongly positively related to an importer's exploitation capabilities than technological resources.} \]

\[ H_2: \text{Technological resources are more strongly positively related to an importer's exploration capabilities than marketing resources.} \]

\textit{Relationship Between Exploitation and Exploration Capabilities.} March (1991) argues that for a firm to prosper continually, a balance must be struck between exploratory and exploitative activities. He argues (p. 71) that firms that “engage in exploration to the exclusion of exploitation are likely to find that they suffer the costs of experimentation without gaining many of its benefits.” This work further suggests an interrelationship between exploitation and exploration capabilities for importers. Specifically, exploitation
forms the foundation on which exploration can exist. For importers to continue to invest in product innovation exploration (a costly endeavor), they must also develop and maintain new exploitation capabilities because exploitation capabilities allow the importer to provide value to its existing customer base, thus providing a low-risk stream of capital inflow (Garcia, Calantone, and Levine 2003). As such, we argue that the greater the importer’s exploitation capability, the greater is the importer’s exploration capability. Formally,

\[ H_3: \text{Exploitation capability is positively related to new product management exploration capability.} \]

**Exploration Capability on Degree of Product Innovation and Market Performance.** The development of exploration capabilities within an importer influences the importer’s degree of product innovation and market performance; the degree of product innovation refers to the extent of an importer’s new product offerings, ranging from line extensions to new-to-the-world products (Galbraith 1973), and market performance refers to the importer’s assessment of overall performance gains (Jaworski and Kohli 1993). Exploration capability encompasses search, variation, risk taking, experimentation, and innovation (Holmqvist 2004; March 1991; Powell, Koput, and Smith-Doerr 1996; Rothaermel and Deeds 2004). In competitive markets, it is difficult for an importer to build a sustainable competitive advantage. However, product innovation is theorized as a manner of building and maintaining sustainable advantages (Garcia, Calantone, and Levine 2003). Through an importer’s development of exploration capabilities, the importer can increase its degree of product introductions, introducing new products and services into the market, overcoming prior importer limitations, and enhancing both value delivery to current customers and the extension of products and services to new customers.

Furthermore, it can be argued that exploration capabilities directly influence the importer’s market performance. In a rapidly changing environment, an importer should develop new technologies and change its resource structure to adapt to new environmental opportunities (Karim and Mitchell 2000) because existing organizational practices and routines may reduce an importer’s flexibility to adapt to new changes (Levitt and March 1988). Although exploration activities are inherently risky, they significantly increase performance levels of the firms (Lewin, Long, and Carroll 1999). In particular, when competitive forces are in place, importers tend to continually introduce technologically superior products to maintain at least their current market performance because competitive pressure often does not allow struggling importers to focus primarily on improvements of existing products. This is consistent with research by Garcia, Calan-
tone, and Levine (2003), who argue that firms can gain organizational capabilities by acquiring new knowledge through exploration capability, which fosters new product development and enhances the firm’s performance. As such, we argue that as an importer develops exploration capabilities, it engages in a series of innovative and creative activities that directly influence its market performance. Building on these arguments, we posit the following:

**H4:** Exploration capability is positively related to an importer’s degree of new product innovations.

**H5:** Exploration capability is positively related to an importer’s market performance.

**Effect of Exploitation Capability on Product Innovation and Market Performance.** The development of an importer’s exploitation capabilities influences the importer’s degree of product innovation and market performance. Exploitation gives importers a chance to leverage their existing resources, thus ensuring their immediate survival (Lee, Lee, and Lee 2003; Sitkin, Sutcliffe, and Schroeder 1994) through the commercialization of knowledge, which in turn opens up avenues for product innovation (Rothaermel and Deeds 2004). Exploitation activities are essential for importers because they provide a relatively low-risk way to extend the importer’s operations (March 1991). However, an importer’s increased development and employment of exploitation capabilities minimizes its degree of product innovation because exploitation capabilities drive the importer toward maintaining minimal extensions from its existing product and service portfolios.

Furthermore, it can be argued that exploitation capabilities enable an importer to enhance its performance (Garcia, Calantone, and Levine 2003; Lee, Lee, and Lee 2003; Rothaermel and Deeds 2004). Exploitation capabilities leverage an importer’s existing products and services and therefore enable it to deepen its value delivery within an existing clientele. Although returns from successful exploitation activities are less profitable on average than those of successful exploration activities, it is assumed that importers prefer undertaking exploitation projects to less certain and distant outcomes of exploration projects. Because 20%–80% of all new product research projects are unsuccessful (Cooper 1993) and because exploration activities are traditionally risky (Lewin, Long, and Carroll 1999), many new product development programs focus on exploitation over exploration activities (Garcia, Calantone, and Levine 2003) because the probability of success is higher for exploitation activities than for exploration activities. Formally,
H₆: Exploitation capability is negatively related to an importer's degree of new product innovations.

H₇: Exploitation capability is positively related to an importer's market performance.

**Degree of Product Innovation on Market Performance.** Research findings suggest that there is a positive, direct relationship between product innovation and market performance (e.g., Bayus, Erickson, and Jacobson 2003; Damanpour and Evan 1984; Khan and Manopichetwattana 1989; Zahra, De Belardino, and Boxx 1988). Scholars have linked above-average profits to firms' ability to innovate (e.g., Li and Atuahene-Gima 2001). A continuous stream of product innovations enables firms to stay ahead of the competition (Bayus, Erickson, and Jacobson 2003; Roberts 1999). Importer market performance benefits from new product introductions through increased demand stimulation, increased profit margin, and lower customer acquisition and retention costs (Bayus, Erickson, and Jacobson 2003). In addition, product innovation is becoming increasingly important not only for importer growth but also as a means of survival in the face of intensifying competition and environmental uncertainty (Gronhaug and Kaufmann 1988). The increase in the degree of product innovation also signals greater innovativeness, which has been found to increase an importer's competitive advantage, resulting in higher performance (Hurley and Hult 1998). Thus, to evaluate the impact of product innovation on importer market performance, we hypothesized the following:

H₈: The degree of product innovation is positively related to market performance.

---

**RESEARCH METHODS**

**Research Design**

We tested the hypotheses with a data set developed from a field survey of U.S. importers. Respondents reported on the operations of their firm and their relationships with its primary Japanese business partner. We selected a single country (i.e., Japan) for two reasons: (1) Japan is of strategic importance to the United States, and (2) a single country of supply minimizes cultural variation in the international relationships examined, thus reducing potential confounds in the study. We used a systematic random selection method to identify a national sample of 500 U.S. importers from the *Directory of United States Importers.*

**Pretest**

We conducted interviews with business professionals in the United States to explore the validity of the proposed constructs and construct relationships. Next, U.S. international market researchers and business professionals examined the survey instrument and cover letter. Iterative pretesting with these groups indicated minor modifications to minimize
translation concerns. We then conducted a pilot study in the United States to examine the measures in a subsample of the population. One hundred importers were randomly drawn from a national sample of 500 U.S. importers from the Directory of United States Importers. The surveys were mailed to these randomly selected importers. Of the 100 importers, we received 22 responses, resulting in a 22% response rate. The results from the pilot study suggested that the survey was appropriate for further administration.

Individuals identified in the source directories were contacted by mail and asked to have the individual responsible for the daily administration of their relationship with their primary Japanese business partner complete the survey. A follow-up survey packet was sent at a four-week interval. To enhance the response rate, respondents were offered a copy of the results for completing the survey.

Of the 500 surveys mailed, 111 surveys were returned completed. Thirty-six surveys were returned as undeliverable, and 4 indicated that they were no longer conducting business. Overall, the study yielded a 24.78% effective response rate and a 24.13% usable response rate. The average size of the firms, measured in number of employees, was 58. The average years in international operations were 23.3. In addition, 44% were in the consumer nondurable industry, 23.4% were in the consumer durable industry, 10.8% were in the capital goods industry, and 21.6% were in the producer industry. On average, respondents were 50.8 years of age and had 24.5 years of experience in their chosen profession. Finally, 96% were male, and 80% were the owner or chief executive officer of the firm.

We completed nonresponse bias testing by comparing early with late respondents across the variables (Armstrong and Overton 1977). Specifically, we tested the first and last quartiles of the sample for significant differences across means for each of the theoretical constructs. The results of the t-tests indicated no significant differences ($p < .05$) between early and late respondents for either group.

Measure items and internal reliability statistics for the measures appear in Appendix A. Mean values, standard deviations, and correlations appear in Appendix B.

We conceptualized an importer’s resources as its ability to perform basic marketing and technological functional activities. We conceptualized marketing resources as the importer’s skills related to marketing operations, such as resources related to marketing/sales, marketing research, and personnel development, and we captured them with a three-item, seven-point weighted scale; we derived the items from
the work of Snow and Hrebiniak (1980). We conceptualized technological resources as those related to sourcing, technological product aspects, and protecting innovations through legal means, and we captured them with a three-item, seven-point weighted scale; again, we derived the items from the work of Snow and Hrebiniak.

We conceptualized a firm’s new product management capabilities as its exploitation and exploration capabilities (March 1991). An importer’s exploitation capabilities reflect the importer’s commitment to the dynamic improvement of its activities (Collis 1994). We operationalized an importer’s exploitation capability with a two-item, seven-point Likert scale ($\alpha = .76$) that we derived from the work of Douglas and Judge (2001). We conceptualized exploration capabilities as the strategic insights that enable importers to recognize the intrinsic value of other resources or to develop novel strategies before competitors (Collis 1994). We operationalized an importer’s exploration capabilities with a two-item, seven-point Likert scale ($\alpha = .70$) that we derived from the work of Menon and colleagues (1999).

We conceptualized the degree of product innovation as the extent of a firm’s new product offerings, ranging from line extensions to new-to-the-world products (Galbraith 1973). We asked respondents three specific questions: (1) “Approximately how many products/services did your firm introduce that were not really new to your firm but were new to the market you serve?” (2) “Approximately how many products/services did your firm introduce that were new to your firm but were not really new to the market you serve?” and (3) “Approximately how many products/services did your firm introduce that were both new to your firm and new to the market you serve?” We then operationalized the degree of product innovation with a composite score ranging between 1 and 3, derived from three scale items that captured the number of products/services the respondent firms introduced over the past three years. For the degree of new product innovation, we coded firms that indicated that they introduced over the prior three years only products/services that were not new to the firm but were new to the market it served as 1. We coded firms that indicated that they introduced only products/services that were new to the firm over the past three years as 2. We coded firms that indicated that they introduced both types of products over the past three years as 3.

We conceptualized market performance as the importer’s assessment of overall performance gains (Jaworski and Kohli 1993). Following Jaworski and Kohli (1993), we measured performance with a two-item, seven-point scale that assessed whether (1) the firm’s overall performance during the past
year was greater than expected and (2) the firm outperformed its major competitors in the past year ($\alpha = .87$).

We carried out a two-stage data analysis approach to assess the measurement models of the factors and to test the structural model (Anderson and Gerbing 1988). The two-stage approach provides a greater ability to identify model mis-specification and provides an opportunity to minimize the potential for interpretational confounding. First, we performed a confirmatory factor analysis to test the convergent validity and discriminant validity of the model. Second, we conducted a structural equation analysis on the covariance matrix obtained from the first-stage analysis to test the structural model and the related research hypotheses.

To evaluate the fit of the measurement model in Figure 1, we followed the procedure that Bagozzi and Yi (1988) recommend. We used the maximum likelihood procedure of the EQS 6.2 program to fit the measurement model (Bentler 1989). The EQS output indicated minimization process problems. The results of the measurement model indicated high levels of convergent and discriminant validity for the model. As Appendix A shows, the item loadings were all significantly greater than zero, and they were all positive and high in magnitude. These findings indicate that the model converged well.

Next, we examined model fit statistics. Because the chi-square statistic has been shown to be extremely sensitive to sample size and normality, we used fit indexes to assess the overall fit of the model to the data (Bentler 1989; Bollen 1989). Therefore, we examined other fit indexes to evaluate the model, following the procedure that Bagozzi and Yi (1988) recommend. Table 1 summarizes the goodness-of-fit indexes for the measurement model.

Finally, to assess discriminant validity, we used the procedure that Fornell and Larcker (1981) recommend. We found

---

**Table 1. Goodness-of-Fit Indexes Summary for Confirmatory Factor Analysis**

<table>
<thead>
<tr>
<th>Index</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>18.650</td>
</tr>
<tr>
<td>d.f.</td>
<td>15</td>
</tr>
<tr>
<td>Normed fit index</td>
<td>.948</td>
</tr>
<tr>
<td>Nonnormed fit index</td>
<td>.973</td>
</tr>
<tr>
<td>Comparative fit index</td>
<td>.989</td>
</tr>
<tr>
<td>Bollen's incremental fit index</td>
<td>.984</td>
</tr>
<tr>
<td>Goodness-of-fit index</td>
<td>.965</td>
</tr>
<tr>
<td>Root mean residual</td>
<td>.033</td>
</tr>
<tr>
<td>Root mean square error of approximation</td>
<td>.047</td>
</tr>
</tbody>
</table>
that the average variance extracted by the measure of each factor was larger than the squared correlation of that factor’s measure with all measures of other factors in the model, thus demonstrating discriminant validity. Furthermore, we tested discriminant validity by performing chi-square difference tests one at a time between a model in which the factor correlation is fixed at 1.0 and the original (unrestricted) model. Because every restricted model exhibited a significantly poorer fit than the unrestricted model, we concluded that there was a sufficient degree of discriminant validity between the factors. On the basis of these finding, we concluded that all factors in the measurement model possessed discriminant validity.

We examined the structural relationships of the model using EQS 6.2 software. There were no irregularities or special problems, and the sample converged well. More than half of the paths were significantly greater than zero. As Figure 2 shows, the chi-square is 24.323 with 19 degrees of freedom, which is significant at the .05 level. Because Bollen (1989) suggests that chi-square should not be used alone to evaluate model fit, we examined other fit indexes. We found that the Bentler–Bonett normed fit index was .933, the nonnormed fit index was .969, the comparative fit index was .984, Bollen’s incremental fit index was .984, and the RMSEA was .50. Furthermore, we observed that the standardized residuals were small, and all parameter estimates were in the expected direction. Thus, on the basis of the high fit indexes and the theoretically consistent parameter estimates, we concluded that the structural model fit the data well.

Because we gathered the data used in this study using key-informant questionnaires, the relationships among the constructs may be artifacts of a bias that leads a respondent to answer all questionnaire items in a similar manner (e.g., on the right side of the item scale). Therefore, before testing the hypotheses, we used a confirmatory factor analysis approach to Harman’s one-factor test (Podsakoff et al. 2003) to assess whether common method variance created a problem in the testing. More specifically, if a single latent factor accounted for all manifest variables, we could conclude that common method variance caused a serious threat to the analysis (Podsakoff and Organ 1986). Common method variance does not cause a serious threat if a fit for the one-factor model is worse than the measurement model (MacKenzie, Podsakoff, and Paine 1999; Podsakoff and Organ 1986). The one factor model yielded a chi-square of 128.456 with 27 degrees of freedom (compared with \( \chi^2 = 18.650 \), d.f. = 15, for the measurement model). The fit is considerably worse for the unidimensional model than for the measurement model, suggesting that common method bias is not a serious threat in the study.
Exploration and Exploitation Capabilities

Figure 2. Analysis of Results

*Statistically significant at $\alpha = .01$. 
In addition, we investigated the effects of common method bias using the procedure that Netemeyer and colleagues (1997) describe. To assess the effects of common method variance, we reestimated the original model in Figure 1 by adding a same-source factor to the indicators of each construct (see Appendix B in Netemeyer et al. 1997). We compared an unconstrained model, in which the same-source factor loadings are estimated freely, with a constrained model, in which the loadings are constrained to zero. The results show the presence of minor method bias when we used a chi-square difference test for each of the two groups ($\chi^2_{\text{diff}} = 24.234, \text{d.f.}_{\text{diff}} = 9, p < .01$). However, regarding the specific relationships, the hypothesized paths remained consistent with our findings, even with the presence of this bias.

We used the estimates of the path coefficients to test the hypothesized relationships (see Table 2). $H_1$ posited that marketing resources would be more strongly positively related to exploitation capabilities of an importer than technological resources. $H_2$ posited that technological resources would be more strongly positively related to exploration capabilities of an importer than marketing resources. The path coefficients in Figure 2 indicate that exploitation capability was influenced positively and significantly by marketing resources ($\beta = .661, t = 5.886, p < .01$), whereas the effect of technological resources on exploitation capability was negative but not significant ($\beta = -.034, t = -.354, p > .10$). Conversely, exploration capability was influenced positively and significantly by technological resources ($\beta = .217, t = 2.152, p < .01$), whereas the effect of marketing resources on exploration capability was negative but not significant ($\beta = -.073, t = -.525, p > .10$). We compared the standardized beta coefficients across the hypothesized relationships using the Lagrange-multiplier test in EQS, applying appropriate constraints and testing for significance. Each test showed significant differences at the $p < .05$ level, in support of $H_1$ and $H_2$.

### Table 2. Structural Model Results

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimate</th>
<th>SE</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological resources $\rightarrow$ exploitation capability</td>
<td>-.034</td>
<td>.091</td>
<td>-.354</td>
</tr>
<tr>
<td>Technological resources $\rightarrow$ exploration capability</td>
<td>.217</td>
<td>.091</td>
<td>2.152*</td>
</tr>
<tr>
<td>Marketing resources $\rightarrow$ exploitation capability</td>
<td>.661</td>
<td>.108</td>
<td>5.886*</td>
</tr>
<tr>
<td>Marketing resources $\rightarrow$ exploration capability</td>
<td>-.073</td>
<td>.125</td>
<td>.525</td>
</tr>
<tr>
<td>Exploitation capability $\rightarrow$ exploration capability</td>
<td>.668</td>
<td>.169</td>
<td>3.711*</td>
</tr>
<tr>
<td>Exploration capability $\rightarrow$ product innovation</td>
<td>.740</td>
<td>.258</td>
<td>3.452*</td>
</tr>
<tr>
<td>Exploration capability $\rightarrow$ market performance</td>
<td>.452</td>
<td>.352</td>
<td>1.967*</td>
</tr>
<tr>
<td>Exploitation capability $\rightarrow$ product innovation</td>
<td>-.574</td>
<td>.220</td>
<td>-2.946*</td>
</tr>
<tr>
<td>Exploitation capability $\rightarrow$ market performance</td>
<td>.223</td>
<td>.282</td>
<td>1.132</td>
</tr>
<tr>
<td>Product innovation $\rightarrow$ market performance</td>
<td>.021</td>
<td>.160</td>
<td>.164</td>
</tr>
</tbody>
</table>

*Statistically significant at $\alpha = .01$. 
H₃ posited that exploitation capability would be positively related to exploration capability. The results indicate that exploitation capability positively and significantly influenced exploration capability ($\beta = .668$, $t = 3.711$, $p < .01$), in support of H₃.

H₄ posited that exploration capability would be positively related to an importer’s degree of new product innovations. The results indicate that exploration capability positively and significantly influenced the degree of product innovation ($\beta = .740$, $t = 3.452$, $p < .01$), in support of H₄.

H₅ posited that exploration capability would be positively related to an importer’s market performance. The results indicate that exploration capability positively and significantly influenced market performance ($\beta = .452$, $t = 1.957$, $p < .05$), in support of H₅.

H₆ posited that exploitation capability would be negatively related to an importer’s degree of new product innovations. The results indicate that exploitation capability negatively and significantly influenced the importer’s degree of new product innovations ($\beta = -.574$, $t = -2.946$, $p < .01$), in support of H₆. Note that exploitation capability negatively influenced the degree of product innovation (H₆), but it positively influenced exploration capability (H₃), which in turn positively influenced the degree of product innovation (H₄). This result suggests that exploitation capability has a negative, direct effect on the degree of product innovation. This result is also consistent with prior findings, which suggest that a firm that is too oriented toward exploitation is likely to suffer because of a lack of novel ideas. In addition, exploitation capability had a positive, indirect (through exploration capability) effect on the degree of product innovation. This is also consistent with prior research findings (e.g., Garcia, Calantone, and Levine 2003), which contend that significant cash flows from exploitation activities provide financial bases for exploration activities. We report direct, indirect, and total effects in Table 3.

H₇ posited that exploitation capability would be positively related to an importer’s market performance. The results indicate that exploitation capability did not significantly influence market performance ($\beta = .223$, $t = 1.132$, $p > .10$). Thus, H₇ was not supported.

H₈ posited that the degree of product innovation would be positively related to market performance. The results indicate that the degree of product innovation did not significantly influence the importer’s market performance ($\beta = .021$, $t = .164$, $p > .10$). Thus, H₈ was not supported.
Table 3. Direct, Indirect, and Total Effects on Market Performance

<table>
<thead>
<tr>
<th>Construct</th>
<th>Direct Effects on Market Performance</th>
<th>Indirect Effects on Market Performance</th>
<th>Total Effects on Market Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard Coefficient</td>
<td>t-Value</td>
<td>Standard Coefficient</td>
</tr>
<tr>
<td>Technological resources</td>
<td>.115</td>
<td>1.201</td>
<td>.115</td>
</tr>
<tr>
<td>Marketing resources</td>
<td>.428</td>
<td>3.411*</td>
<td>.428</td>
</tr>
<tr>
<td>Exploitation capabilities</td>
<td>.319</td>
<td>1.132</td>
<td>.430</td>
</tr>
<tr>
<td>Exploration capabilities</td>
<td>.689</td>
<td>1.957</td>
<td>.023</td>
</tr>
<tr>
<td>Degree of product innovation</td>
<td>.026</td>
<td>.164</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant at $\alpha = .05$. 
In this study, our underlying theme was to gain a greater understanding of importer resource conversion into dynamic exploitation and exploration capabilities and the resultant influence on the degree of product innovation and market performance. The results demonstrate the importance of marketing and technological resources in the development of importer exploitation and exploration capabilities and their influence on both the degree of product innovation and importer performance. As such, the results provide substantive theoretical and practitioner insights for international marketing academics and practitioners.

The findings of this study indicate that marketing and technological resources have unique influences on an importer’s exploitation and exploration capabilities. Specifically, the findings indicate that the development of exploitation capabilities is primarily derived from a marketing resource base, whereas exploration capabilities are derived primarily from a technological resource base. Not only do the results confirm our theorized relationships of technological and marketing resource bases of exploration and exploitation capabilities, but the findings also indicate the unique relationship between each resource and capability (each capability is influenced by only one resource base). As such, these findings not only demonstrate that specific resources, such as marketing or technological bases, provide an importer with unique capabilities but also extend our theoretical understanding of this issue because the extant literature only implies that there may be specific resource foundations to capabilities.

The findings also provide insights into the unique relationship between exploitation and exploration capabilities. March (1991) indicates that exploitation and exploration capabilities are central to a firm’s advancement and that these capabilities are inextricably linked. The dynamic capabilities perspective argues for the constant state of modification and renewal of capabilities. In this study, the results demonstrate that the continuous modification of exploitation capabilities provides a foundation to exploration capabilities. These findings suggest not only that an importer’s long-term viability is based on its ability to extend its core product/service offering through exploitation but also that the continuous development of its existing product/service offering drives the importer to expand into new areas, thus extending the importer’s overall market position. These findings provide new insights into the interrelationship between exploitation and exploration capabilities.

Furthermore, the findings indicate unique outcomes for each capability. Specifically, we examined two outcomes: the degree of product innovation and market performance. The
results indicate that as an importer develops its exploitation capability, its overall degree of product innovations is narrowed. However, as we indicated previously, the importer’s development of exploitation capabilities influences its exploration capabilities. This is important because the development of exploration capabilities drives the degree of product innovation. This is most important in the context of the outcome of market performance, which we found to be driven solely by the importer’s exploration capabilities. These findings highlight the intricate relationships between exploration and exploitation capabilities and specific firm outcomes.

However, of special interest within the findings was the lack of significant influence of the degree of a product innovation on firm performance. Although the literature suggests that a greater degree of product innovation within a firm can increase market performance, the results of this study failed to support this contention. The lack of evidence for this relationship can be best understood within the intricate relationship between exploitation and exploration capabilities. As the inverse effects of the two capabilities on an importer’s degree of product innovation demonstrate, the development of exploitation capabilities drives an importer to narrow its product innovation, whereas the development of exploration capabilities works to broaden the importer’s product innovation. Although exploration capabilities ultimately drive market performance, the positive effects of exploration capabilities are offset when examining the degree of product innovations. However, this is not to suggest that the development of exploitation capabilities is negative to the importer; these capabilities serve a foundational role in the development of exploration capabilities (which ultimately drive market performance).

Managerially, these findings suggest that importers need to establish resource bases in both marketing and technology to drive the development of both exploitation and exploration capabilities as an avenue to extend the firm’s market performance. Importers play a pivotal role between worldwide suppliers and local markets. In this role, importers are challenged to match worldwide product availability to local product demand. The ability to maintain a competitive position in the marketplace is not solely a function of the importer’s resource base; it is also the ability to develop specific capabilities that act as a leveraging mechanism to stimulate market performance. Because the importer’s ability to develop a dynamic exploitation capability is founded on marketing resources, importers may believe that these resources are the sole driver of market performance. However, our findings demonstrate not only that the importer’s exploitation capabilities drive the development of explo-
ration capabilities but also that this capability is founded on the importer's technological resources. This suggests to managers the importance of developing both resource bases, which would necessitate a review of current levels of resources and initiate appropriate investment strategies to maximize outcomes.

Finally, the findings suggest that managers should recognize that exploitation serves a foundational role within the importer's overall product innovation management. Specifically, although exploitation can influence market performance, its influence is indirect, through the exploration capability of the importer. Thus, managers must carefully monitor and manage the development of both types of capabilities.

Although this study provides several new insights into capabilities that drive the degree of product innovation and market performance, as with prior studies, it is subject to the limitations of the method employed. Although this study explored the resource foundations of exploitation and exploration capabilities, its findings are limited to the resources and capabilities examined. For example, it can be argued that a broader range of resources should be incorporated into the study of capability development. Hunt (2000) specifically identifies seven different resource bases when explicating resource advantage theory. As such, research that more fully captures the degree of firm resources might provide new insights to expand the current understanding of exploitation and exploration capabilities.

Another limitation lies in the unique context of the study (i.e., U.S. importers working with Japanese suppliers). As with most research, generalization beyond the sample frame is highly cautioned. The findings are limited to the institutional context of the United States (and specifically to U.S. importers working with Japanese suppliers). It could be argued that different relationships between resources and capabilities could exist in alternative institutional contexts. For example, in a transitional economy in which intellectual property laws are less stringently enforced, exploration capabilities may derive from alternative resource bases. Furthermore, it could be argued that institutional elements, such as national culture, may drive an importer's ability or desire to develop and maintain dynamic capabilities. Moreover, it could be argued that certain institutional environments reward different types of product innovations, thus leading to differences in market performance. As such, we believe that the extension of the basic model developed in this study to a multicountry context would substantially enhance the understanding of the issues addressed herein at a broader level.
Another fundamental limitation of this study derives from its cross-sectional design. Although the results of this study indicate that resources influence capabilities, which in turn influence the degree of product innovation and market performance, causality cannot be established. Thus, these relationships should be examined longitudinally. Exploring this issue longitudinally would also provide additional insights into the underlying model proposed. For example, building on the resource life-cycle literature (e.g., Helfat and Peteraf 2003), it could be argued that during different periods (e.g., competitive market conditions), resources would have unique effects on new product management capabilities. For example, during initial market penetration, an importer’s exploitation capabilities might take on a more important role in the importer’s market performance than in later stages, when the importer has an established market position on which to undertake the greater risk associated with exploration capabilities. As such, research in this area could overcome the limitations of existing models of exploitation and exploration capabilities.

Overall, the results of this study provide a strong theoretical and empirical foundation for understanding the influence of marketing and technological resources on importer exploitation and exploration capabilities under the dynamic capabilities perspective. However, the field is only beginning to develop an understanding of dynamic capabilities and their influence on the degree of product innovation and market performance. Thus, continued theoretical and empirical research is needed in this area, most notably in relation to the understudied international business context of importers.

---

### Appendix A.
Measurement Items, Standard Loadings, t-Values, and Reliabilities

<table>
<thead>
<tr>
<th>Item</th>
<th>Standard Loading</th>
<th>t-Value</th>
<th>Internal Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technological Resources (Seven-Point Likert Scale)</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Our firm has substantial abilities in product development/research.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our firm has a strong legal affairs department.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our firm has a well-developed production system.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Marketing Resources (Seven-Point Likert Scale)</strong>&lt;sup&gt;b&lt;/sup&gt;</th>
<th>N.A.</th>
<th>N.A.</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our firm is extremely good at marketing/selling.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our firm has developed a very effective market research program.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Standard Loading</td>
<td>t-Value</td>
<td>Internal Reliability</td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>---------</td>
<td>---------------------</td>
</tr>
<tr>
<td><strong>Our firm has substantial skills in terms of personnel development.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Exploitation Capability (Seven-Point Likert Scale)</strong></td>
<td>.76*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees of our firm try to continuously improve the firm’s processes, products and services.</td>
<td>.745</td>
<td>8.529</td>
<td></td>
</tr>
<tr>
<td>Employees of our firm believe that improvement of the firm’s processes, products and services is their responsibility.</td>
<td>.821</td>
<td>9.602</td>
<td></td>
</tr>
<tr>
<td><strong>Exploration Capability (Seven-Point Likert Scale)</strong></td>
<td>.70*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our firm chooses new approaches to processes, products and services that are different from those used in the past.</td>
<td>.681</td>
<td>7.161</td>
<td></td>
</tr>
<tr>
<td>Our firm has included some new aspects to its processes, products and services compared to prior strategies.</td>
<td>.796</td>
<td>8.384</td>
<td></td>
</tr>
<tr>
<td><strong>Product Innovation (as Reported by Informant)</strong></td>
<td>.922</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Approximately how many products/services were introduced by your firm that were not really new to your firm, but were new to the market you serve?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximately how many products/services were introduced by your firm that were new to your firm, but were not really new to the market you serve?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximately how many products/services were introduced by your firm that were both new to your firm and new to the market you serve?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Market Performance (Seven-Point Likert Scale)</strong></td>
<td>.87*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our overall performance last year was greater than expected.</td>
<td>.793</td>
<td>8.829</td>
<td></td>
</tr>
<tr>
<td>Overall, we outperformed our major competitors last year.</td>
<td>.962</td>
<td>11.039</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the .01 level.
*aFormative measure; items are weighted (averaged).
Notes: N.A. = not applicable.
<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Technological resources</td>
<td>3.8859</td>
<td>1.46439</td>
<td></td>
<td></td>
<td>.366</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Marketing resources</td>
<td>4.2673</td>
<td>1.15016</td>
<td></td>
<td></td>
<td></td>
<td>.217</td>
<td>.575</td>
</tr>
<tr>
<td>3. Exploitation capability</td>
<td>4.9685</td>
<td>1.15852</td>
<td>.233</td>
<td></td>
<td>.344</td>
<td></td>
<td>.508</td>
</tr>
<tr>
<td>4. Exploration capability</td>
<td>4.9865</td>
<td>1.20125</td>
<td></td>
<td></td>
<td></td>
<td>.213</td>
<td>-.003</td>
</tr>
<tr>
<td>5. Degree of product innovation</td>
<td>2.2252</td>
<td>1.08447</td>
<td>.226</td>
<td>.386</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Mean values, standard deviations, and correlations are based on average factor scores.
Exploration and Exploitation Capabilities


PR Newswire US (2007), “G. Willi-Food Reports 15% Increase in Revenues and 44% Increase in Operating Income for Fiscal 2006,” (March 19), (accessed August 15, 2007), [available at...


