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A Dynamic Perspective on Internet Capabilities and Export Marketing Performance

ABSTRACT

Academic and management literature alike suggest a positive performance impact of online marketing tools. However, the nature and sustainability of this effect remain largely unexplored. In this article, the authors identify an organization's Internet capabilities as a bundle of skills to transform material and immaterial resources into particular online applications. Based on cross-national data from 215 middle-sized industrial exporting firms, we find that companies can use Internet capabilities to spur functional export marketing capabilities. On top, Internet capabilities fullfill a second purpose, namely enhancing the export marketing knowledge base of an export venture. This dual-purpose effect illustrates the dynamic nature of Internet capabilities and eventually improves companies export marketing performance. Eventually, we account for a direct effect of Internet capabilities on performance, and find that this effect is fully mediated by export marketing capabilities and strategy.

INTRODUCTION

The Internet has affected export marketing considerably, in that it offers global market visibility, facilitates international market entry, and enables worldwide data collection at a relatively low cost. To enjoy these benefits, export firms invest in Internet applications for online information sharing, customer interactions, transaction handling, and relationship management. In general, industry reports and empirical studies alike confirm that a more intense usage of the Internet for marketing purposes spurs export performance (Bianchi & Mathews, 2016).

However, increasing evidence suggests that the performance impact of the Internet is neither unequivocally straightforward nor sustainable. Industry reports point to potential pitfalls of treating the Internet as a panacea for a wide range of problems (Daub & Wiesinger, 2015). The open character of the Internet and highly competitive nature of export environments enable competitors to copy Internet applications for export marketing purposes almost effortlessly, so initial competitive advantages fade quickly (Sinkovics et al., 2013). Moreover, the strengthening of enduring competitiveness becomes particularly relevant as increased globalization of trade transforms benefits related to the Internet into necessities (Mathews et al., 2012). Therefore, researchers and practitioners alike require in-depth insights into the impact of the Internet on export performance.

The role of the Internet in export marketing has appeared on research agendas for more than a decade (Quelch & Klein, 1996), with a dominant focus on the drivers of and barriers to Internet-based export marketing, Internet-based global distribution, or the integration of the Internet with export marketing strategies and tactics (Hamill, 1997; Varadarajan & Yadav, 2002). Yet research to date has failed to establish an unequivocal relationship between a firm's Internet applications and its export marketing performance (Katsikeas et al., 2016). Inconsistencies in empirical evidence may exist because previous studies focus on diverging aspects of the Internet,

ranging from perceptions of the productive development of Web sites for international use (Seilheimer, 2004) to the architecture of individual online applications (Miao & Ruby Roy, 2009). To assess the role of the Internet in export marketing, we posit that sustainable competitive advantage cannot be derived solely from Internet usage but largely depends on the firm's relevant capabilities; competencies, skills and routines that affect sustainable competitive advantage (Samiee, 1998). A recent global study highlighted the importance of Internet capabilities and concluded that insufficient Internet capabilities represent one of the most important barriers to successful performance across all electronic marketing domains (Daub & Wiesinger, 2015). Therefore, we focus on a firm's Internet capabilities and contribute to the emerging literature by examining three critical issues.

First, to conceptualize Internet capabilities, we rely on the resource-based view (RBV) of the firm, which provides evidence that export marketing capabilities have the potential to affect performance in two principal ways (Morgan et al., 2004). Accordingly, these capabilities are not only known for their functional role in which they help implement export-specific operations with the aim of directly achieving competitive advantages, but also for their dynamic role in which they have the potential to change a company's resource configurations and routines (Morgan et al., 2012). By playing such a dynamic role, capabilities rather indirectly yet fundamentally contribute to the output of the firm. According to the resource-based view (RBV) of the firm, dynamic capabilities produce additional value and sustainable sources of competitive advantage, because they acquire and/or integrate a firm's domain-specific resources (Teece et al., 1997).

Second, to assess the dynamic nature of Internet capabilities, we first focus on how they (re)configure the firm's export marketing resource base. Knowledge is a substantive and integral part of this resource base, because ultimately through knowledge, firms realize enduring

competitive advantage (Grant, 1996b). To attain these advantages, the firm must continually update and reconfigure its knowledge stocks. These stocks commonly consist of declarative (know-what) and experiential (know-how) knowledge (Eriksson et al., 1997; Morgan et al., 2003). We posit that Internet capabilities support both information and social exchanges, so that exporting firms can better accumulate, evaluate, and adapt their export-related knowledge stocks (Nguyen et al., 2015). As such, we develop a framework that reflects the critical role of Internet capabilities in the creation of declarative and experiential knowledge as a valuable resource base for export marketing. Extant research convincingly demonstrates that market knowledge fuels export marketing performance indirectly (Morgan, et al., 2003). Whether market knowledge fuels into its export marketing capabilities and strategies (Souchon & Diamantopoulos, 1996; Zou et al., 2003). Thus, the ultimate performance impact of Internet capabilities hinges on important intermediate export resources.

The increasing ubiquity of Internet-based export marketing, despite the scarce, inconsistent, and sometimes contradictory findings about its performance impacts, creates the need for more research that investigates the foundation of export marketing performance in an online-endowed marketing environment. Therefore, we focus on a firm's Internet capabilities and their effects on the firm's export marketing basis, as well as on export marketing performance. We test the theoretical and empirical validity of our propositions and detail the implications across samples of medium-sized industrial firms from Europe.

CONCEPTUAL FRAMEWORK

In this section, we refer to strategic marketing and information systems literature to define Internet capabilities and position them alongside export marketing capabilities as critical antecedents of export performance in an online-endowed export marketing environment.

Internet Capabilities

According to the RBV (Grant, 1991), a firm's resources consist of assets and capabilities that provide the substructure for sustainable competitive advantage (Barney, 1991; Peteraf, 1993). Assets are the resource endowments the firm has accumulated, whereas capabilities are the firm's complex bundles of skills, exercised through organizational processes that enable the firm to coordinate its activities (Amit & Schoemaker, 1993; Grant, 1991). Various domains attempt to conceptualize capabilities (e.g., Bhatt & Grover, 2005; Moorman & Slotegraaf, 1999), and insights into the functional activities of market-driven organizations (Day, 1994) inspire conceptual and empirical work on export marketing capabilities, especially with respect to informational, relational, and product development skills (Morgan, et al., 2012). Export marketing capabilities thus have been unequivocally established as pivotal antecedents of export marketing strategy, tactics, and performance (Morgan, et al., 2004; Zou, et al., 2003).

Export marketing takes place in an environment that is increasingly virtual, which creates a strategic imperative to manage the export firm's Internet presence. Online-related skills refer to an organization's Internet capabilities as they increase its ability to repeatedly generate Internet applications that create value (Song et al., 2008). If underdeveloped, Internet capabilities significantly hinder Internet marketing performance, which means that in addition to export marketing capabilities, Internet capabilities need to be developed as a complementary driver of marketing performance. Internet capabilities constitute both technical (e.g., integration of software tools) and nontechnical (e.g., graphical design of a Web site) skills and can transform

material (e.g., hardware) and immaterial (e.g., knowledge of programming languages) resources to make them useful for performance (Zhu & Kraemer, 2002).

In addition to their functional role as a platform for the creation of Internet applications, Internet capabilities may affect the (re)configuration of a firm's organizational routines (Chatterjee et al., 2002), other functional capabilities (Kaleka, 2011), and the knowledge base (Tanriverdi, 2005). A dynamic perspective of the RBV suggests that the (re)configuration and dynamic use of functional capabilities, especially knowledge stocks, represents the cornerstone of sustainable competitive advantage (Cepeda & Vera, 2007; Eisenhardt & Martin, 2000; Teece et al., 1997). As higher-order or dynamic capabilities, Internet capabilities would help firms achieve enduring competitive advantages in changing environments because they can deploy and (re)configure export marketing capabilities and knowledge stocks (Zander & Kogut, 1995).

Internet Capabilities and Export Marketing Capabilities

Dynamic capabilities provide value by (re)configuring functional capabilities to match changing market prerequisites (Eisenhardt & Martin, 2000). When firms are too slow to (re)configure their functional capabilities, they miss the connection with evolving business practice in dynamic export markets, and core rigidities arise (Leonard-Barton, 1992). Core rigidities reflect the flip side of functional capabilities. In export marketing, typical core rigidities include product specifications, market information, and relationship strategies that have served the firm well in the past but become inappropriate for current and new environmental requirements (Morgan, et al., 2004). To avoid core rigidities and gain optimal value from export marketing capabilities, exporting firms use the dynamic potential of Internet capabilities to feed their export marketing capabilities. This dynamic potential exists in the form of day-to-day routines, processes, and simple rules (Kaleka, 2011). In summary, a firm's ability to develop and

coordinate Internet-based activities should enhance its timely upgrades of informational, relational, and product development skills. Accordingly, we hypothesize:

H₁: Internet capabilities positively affect export marketing capabilities.

Internet Capabilities and Declarative and Experiential Knowledge

Recent research emphasizes the importance of knowledge management for exporting firms (e.g., Khalid & Bhatti, 2015), but the extent to which the Internet affects an exporting organization's knowledge stocks and eventually influences long-term export marketing performance has been presumed rather than explored (Morgan-Thomas & Bridgewater, 2004). To clarify this phenomenon, we discern two types of export marketing knowledge: declarative and experiential. Focusing on both is necessary, because they have separate relevance with regard to the internationalization of the firm (Eriksson et al., 1997) and international business performance.

Declarative knowledge denotes a firm's understanding of the export market through codified, factual information that is readily available from various sources (Cohen & Bacdayan, 1994). This type of knowledge can be acquired easily through standardized methods of collecting and transmitting information and transferred to or replicated by other organizations. By increasing Internet capabilities, exporting firms likely gain access to online sources that contain relevant declarative information about export marketing (Nguyen & Barrett, 2006). The current prevalence of online-based marketing activities in international companies means that more and more firms acquire more advanced online applications that facilitate information gathering, validation, and integration across multiple information sources (Beck et al., 2014).

The Internet facilitates interactions between the firm and its markets and thus generates more accurate, factual information about the export marketing environment. The interface used to exchange information also enables exporting companies to store and internalize information, such as by integrating cloud-based and big data tools (Choudhary & Vithayathil, 2013). Firms look for declarative information to reduce the uncertainty associated with the foreign export market (Bergh, 1998; Johanson & Vahlne, 1977), then enter search processes to combine and compare different bodies of information. Once they acquire, sort, and add enough information, they translate it into new explicit and actionable knowledge (Nonaka, 1994). Thus, with their Internet capabilities, companies obtain greater exposure to factual information from the Internet and then internalize this information, which increases their stock of declarative knowledge.

Accordingly, we hypothesize:

H_{2a}: Internet capabilities positively affect an exporting firm's stock of declarative knowledge.

Unlike the "know-what" character of declarative knowledge, experiential knowledge primarily pertains to "know-how", that is, a firm's potential to perceive concrete opportunities in the market and understand how these opportunities should be taken, as well as how they fit into current and future activities (Eriksson, et al., 1997). Generating experiential knowledge is costly, because it requires frequent and extensive interactions with the field (Lam, 2000). Although extant literature points to the need for regular physical interactions between exporters and market(s) (e.g., learning by doing) to create experiential knowledge (Cavusgil & Zou, 1994), recent findings in relationship marketing and information systems research indicate that virtual interaction has advanced to the stage that it offers a suitable context for creating experiential knowledge on a large scale (Leonardi, 2015). Specifically, the increased reach and richness of virtual interactions enable firms to acquire new customers without a physical presence. Electronic communities for product/service support, manufacturer–reseller programs for online training, and relationship-building via social networks represent just some examples of how extended, virtual interactions between exporters and stakeholders in physically distant markets is now a reality

(Malthouse et al., 2013). Firms retrieve information from this interactionally rich media environment to reduce their ambiguity and confusion about opportunities (Daft & Lengel, 1986). In summary, the present-day Internet offers increasing possibilities for customization and personalization (e.g., real-time communication, instant feedback mechanisms) (Singaraju et al., 2016). With these Internet capabilities, firms can combine information exchange with social exchange and thus accumulate, evaluate, and adapt their know-how. In turn, they minimize ambiguity and maximize their understanding of concrete opportunities. Accordingly, we hypothesize:

H_{2b}: Internet capabilities positively affect an exporting firm's stock of experiential knowledge.

Knowledge and Export Marketing Performance

The relationship between organizational knowledge and performance has been extensively discussed and corroborated in the strategy, organization, international business and marketing literature. We build on this rich theoretical and empirical basis and on its exponent in export marketing literature more in particular to shortly discuss how declarative and experiential knowledge and export marketing capabilities relate to export marketing performance. As such, we develop four baseline hypotheses through which we relate Internet capabilities to export marketing performance.

Following the knowledge-based view, declarative and experiential knowledge provide two fundamental sources of a firm's functional capabilities (e.g., Grant 1996a). These knowledge–capabilities relationships receive ample empirical support in export marketing literature (e.g., Morgan et al., 2003). Furthermore, strategic management and export marketing literature reveal that the capabilities–strategy link represents an important path to (export)

performance (Barney, 1991). An export marketing strategy pertains to a firm's deliberate exploitation of internal resources and adequate response to the external forces and opportunities of an export product–market combination (Varadarajan & Yadav, 2002). In general, research supports the proposition that companies with a clearer, more intense strategic course outperform competitors (Morgan, et al., 2012). Finally, empirical studies confirm the positive effects of strategy on financial (e.g., Pelham & Wilson, 1996) and nonfinancial (e.g., Jaworski & Kohli, 1993) performance. Strategy–performance effects have also been substantiated in the export marketing literature (e.g., Hunt & Morgan, 1996). Extant research defines export marketing performance as the degree to which an export venture achieves its most important financial and nonfinancial marketing goals (Diamantopoulos & Kakkos, 2007). Hence, we propose four baseline hypotheses:

- H_{3a}: The stock of declarative knowledge positively affects export marketing capabilities.
- H_{3b}: The stock of experiential knowledge positively affects export marketing capabilities.
- H₄: Export marketing capabilities mediate the effect of Internet capabilities on export marketing performance .
- H₅: Export marketing strategy mediates the effect of export marketing capabilities on export marketing performance.

We use these baseline hypotheses to integrate Internet capabilities into the established thread that theoretically links market knowledge, export marketing capabilities, and strategy to export marketing performance. If we can empirically confirm this integration, these structural relationships present a promising perspective on the dynamic nature of Internet capabilities.

Direct Link Internet Capabilities – Export Marketing Performance

In addition to considering the dynamic nature of Internet capabilities and their associated indirect effect on export marketing performance, information systems research focuses on the more functional impact of IT on firm performance (Zhu & Kraemer 2002). More in particular, it is argued that IT-related capabilities foster a firm's sales volume and therefore lead to higher satisfaction with short-term performance improvements (Trainor et al., 2011). We take into account a direct relationship, while taking into account the "virtuality trap".

A firm's Intenret activity may fall short of or outpace its strategic course. Empirical studies illustrate the high risks and costs associated with improperly aligned Internet applications (Power & Singh, 2007; Sinkovics, et al., 2013). Firms may overestimate the role of the Internet, overinvest in Internet capabilities, and get caught in the "virtuality trap" (Yamin & Sinkovics, 2006), which prompts them to underutilize or even ignore nonvirtual sources of information. Beyond an optimal point, extra investments in Internet capabilities grow increasingly misaligned with the strategic course of the exporting firm,

 $H_{5a,b}$: Internet capabilities have a direct, positive effect on export marketing performance. This effect, however, is fully mediated by the export marketing knowledge base, capabilities, and strategy.

The conceptual framework in Figure 1 summarizes our constructs and hypotheses.

[Figure 1: Conceptual Framework About here]

We thus take a dual perspective toward the relationship between Internet capabilities and export marketing performance. Dynamic in nature, Internet capabilities affect both export marketing capabilities and the relevant knowledge base of the exporting firm. While we control for a direct effect of Internet capabilities on performance, we show that this effect is fully mediated by export marketing capabilities and strategy.

EMPIRICAL STUDY

We focus on firms exporting manufactured goods and, in line with previous studies in export marketing, ask respondents to provide information about one specific export venture (product market combination) (Cavusgil & Zou, 1994; Morgan, et al., 2004). This unit of analysis is appropriate, because a firm maintains a portfolio of foreign business relationships, each of which might have a different effect on export performance. Taking a venture-level approach has two particular advantages. First, this unit of analysis provides nonaggregated measures of export performance variables (Cavusgil & Zou 1994). Second, it is easier for export managers to report on measures at the export venture level, because ventures play a central role in their day-to-day business (Cavusgil & Zou 1994).

We consider export ventures of industrial small- and medium-sized enterprises (SMEs), which encompass the vast majority of European enterprises (OECD, 2016). We have opted for this particular context for mainly two reasons. First, SMEs account for approximately 30% of turnover from exports to industrialized countries all over the world (OECD, 2016). Their characteristic resource constraints mandate that SMEs use exports as an important path for firm growth (Lu & Beamish, 2001). Second, compared to companies in other regions, European companies have lost momentum since 2008 in terms of their digital evolutions (Chakravorti, 2015).

Survey Design

As our unit of analysis is the product market combination within the exporting firm, to the best of our knowledge no objective data exists to test our conceptual model. Moreover, the majority of the concepts in our model have been defined and operationalized as latent, multidimensional constructs. Therefore, we adopt a survey-based research design.

Sampling

Our data collection procedure mirrors that of several previous export studies (Morgan et al. 2003). In the Netherlands, we draw a stratified random sample of 1,853 Dutch firms from the Dun & Bradstreet database, based on standard industrialization classification (SIC) codes. Thus, we obtain a cross-section of industries including food and beverages (two-digit SIC code 20); tobacco, textiles, and clothing (SIC codes 21–23), machinery and transport equipment (SIC codes 35 and 37). Thus, our sampling frame features exporting firms from multiple industries in the manufacturing sector, which helps us increase the variance and generalizability of our findings.

All eligible firms had at least three years of export experience and a corporate Web site. The former criterion ensures that export is a structural activity of the firm or business unit, and the latter verifies that the companies have the potential to develop Internet capabilities. We contacted all firms by telephone to check their qualifications, identify an appropriate key informant (usually export or marketing manager), and ask him or her to participate. Eventually, we identified 913 Dutch companies that met the aforementioned requirements and were willing to complete our online survey. Immediately after gaining their approval, we sent an e-mail message with a hyperlink to the online questionnaire. At the beginning of this questionnaire, we asked respondents to identify a specific export venture that had existed for at least three years, as well as the export country, and answer all remaining questions with respect to this venture. After one

reminder, our data collection efforts in the Netherlands yielded 215 responses, though 19 had excessive missing data (i.e., missing responses on three or more items for any single scale), which leaves a data set of 196 cases, for a response rate of 21.5%.

To control for potentially confounding demographic factors, we investigated the sample on the key demographic characteristics of the export ventures. Most firms export to other countries within the European Union (73.5%), including Germany (26.7%), the United Kingdom (8.9%), France (5.9%), and Belgium (5.0%), as well as to the United States (6.9%). A slight majority (53.9%) report annual sales volumes of $\in 5-\in 30$ million, and most possess considerable business experience (77.0%).

Measures

By combining fieldwork with insights from international marketing and information systems literature, we verify the relevance and adequacy of each construct. Furthermore, to ensure that the original meaning of the constructs does not change, we apply double backtranslation, such that the original English version of the questionnaire was translated to Dutch by three academics in international marketing (two Dutch native speakers). We draw the measurement scales from articles published in established journals in information systems, (international) marketing, and strategy. Respondents could complete the Dutch, or English versions of the questionnaire. The items in our scales, references, and reliability estimates appear in Appendix A, and we discuss them next.

Declarative and Experiential Knowledge. We measure declarative and experiential knowledge with three-item scales adapted from Morgan and colleagues (2003).

Internet capabilities. We assess Internet capabilities by adapting a measure based on Zhu and Kraemer (2002), whose items tap the degree to which the export venture provides information (4 items), transaction (5 items), interaction (5 items), and supplier connection (4 items) capabilities.

Export marketing capabilities. We adapt Morgan et al.'s (2004) measure to operationalize the export marketing capabilities scale with an instrument that focuses on informational capabilities (5 items), relationship-building capabilities (3 items), and product development capabilities (3 items). These items reflect the most important types of capabilities, widely used as indicators of export marketing capabilities (Calantone et al., 1996; Souchon & Diamantopoulos, 1996).

Export marketing strategy. We assess the extent to which export ventures embrace an export marketing strategy by adapting a nine-item measure from Morgan et al. (2004). This measure reflects three underlying dimensions—cost leadership, market differentiation, and service differentiation—operationalized with three items each.

Export marketing performance. We measure short-term export marketing performance satisfaction with Lages and Lages's (2004) 10-item STEP scale, which reflects the following dimensions: extent to which the export venture achieved satisfaction with short-term performance improvement (4 items), immediate export intensity improvement (2 items), and expected short-term performance improvement (4 items). Finally, to assess long-term export marketing performance, we borrow Zou et al.'s (1998) EXPERF scale, which captures financial and strategic export performance, as well as overall satisfaction with the export venture, with three items each. We use this overall, timeless scale, which is appropriate for gathering long-term performance assessments from respondents. According to Diamantopoulos and Kakkos (2007), if the scale does not refer to a timeframe for export marketing, respondents tend to think about the long term. We provide more details about the measures in Appendix A.

ANALYSIS

Measure Validation

Except for declarative and experiential knowledge, we operationalize the remaining constructs in our model using multidimensional measures. To test the hypotheses, we use a first-order partial aggregation model (Bagozzi & Heatherton, 1994), in which the underlying dimensions are parceled and load on the higher-order construct. For instance, for export marketing capabilities, the informational, relationship-building, and product development capabilities items aggregate into three item parcels that constitute the indicators for that construct. Item parceling is appropriate for nonnormally distributed and coarsely categorized data (Bandalos, 2002); it allows for less complex models and reduces the number of parameters to be estimated (Bagozzi & Heatherton, 1994).

However, item parceling should be considered only when the parceled items exhibit unidimensionality (Bandalos 2002). Unidimensionality can be defined in the context of structural equation modeling as having measurement models with manifest variables which only load on one hypothesized construct (Anderson & Gerbing, 1988; Kumar & Dillon, 1987). To assess unidimensionality, we conduct confirmatory factor analyses of all possible pairwise combinations of the measures at the disaggregate level. Specifically, we test each possible combination of the 18 dimensions (including declarative and experiential knowledge) using a nested model approach, which yields 153 pairwise analyses. For each two-factor model, we compare two nested models: one in which the interfactor correlation is constrained to unity, and another in which the factor correlation remains unconstrained (Anderson & Gerbing 1988). The constrained model is equivalent to a one-factor model and should yield inferior model fit compared with the unconstrained model if the two measures are truly unidimensional (Rindskopf & Rose, 1988). Moreover, this approach also allows us to assess within-method convergent and discriminant validity (Anderson & Gerbing, 1988).

To assess violations of the assumption of multivariate normality, we conduct Mardia's (1985) omnibus test of multivariate normality using PRELIS. Based on this test, we reject the null hypothesis, which implies our data are not normally distributed. Therefore, we use the Satorra-Bentler scaled (SB) χ^2 (Satorra & Bentler, 2001) and corresponding robust standard errors to adjust for the deviations from multivariate normality, as suggested by (Curran et al., 1996). All measures exhibit sufficient reliability, with coefficient alphas ranging from .80 to .92. Finally, we partially aggregated the items at the first-order level for all constructs except declarative and experiential knowledge.

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FIGURE 1 Conceptual Framework



A Dynamic Perspective on Internet Capabilities and Export Marketing Performance

APPENDIX A

Constructs, Measurement Items, and Reliabilities

Construct and Measurement Items	Reliabilities
Declarative Knowledge (adapted from Morgan et al. (2003)) ("Much worse" and "Much better" compared with competitors are scale anchors)	.81
MK_1: Our customer knowledge in this export market is	
MK_2: Our knowledge of competitors in this export market is	
MK_3: Our knowledge of business information in this export market is	
Experiential knowledge (adapted from Morgan et al. (2003)) ("Much worse" and "Much better" compared with competitors are scale anchors)	.74
EK_1: Our company's experience with operating this export venture is	
EK_2: The international orientation of our company's culture is	
EK_3: Our company's international experience is	
Export Marketing Capabilities (adapted from Morgan et al. (2004)) ("Much worse" and "Much better" compared with competitors are scale anchors) Our capability of	
A Informational	87
INFO 1: identifying prospective customers is	.07
INFO 2: capturing important market information is	
INFO 3: acquiring export market-related information is	
INFO 4: making contacts with potential partners is	
INFO 5: monitoring competitive products is	
B. Relationship Building	.85
REL_1: understanding overseas customer requirements is	
REL_2: establishing and maintaining close supplier relationships is	
REL_3: establishing and maintaining close overseas distributor relationships is	
C. Product Development	.84
PROD_1: developing new products is	
PROD_2: adapting the product to designated or revised specifications is	
PROD_3: adopting new methods and ideas in the manufacturing process is	
Export Marketing Strategy (adapted from Morgan et al. (2004))	
("No emphasis at all " and "Great emphasis" compared to competitors are scale anchors)	71
A. Cost Leadership	•/1
CL_1. Improving production/operating efficiency	
CL_2: Adopting innovative manufacturing methods and/or technologies	
B. Market Differentiation	.81
MD 1: Improving/maintaining advertising and promotion activities	
MD 2: Building brand identification	
MD 3: Adopting new/innovative marketing techniques	
C. Service Differentiation	.76
SD_1: Achieving/maintaining prompt response to customer orders	
SD_2: Improving/maintaining quick product delivery	
SD_3: Offering extensive customer service	

APPENDIX A (Continued) Constructs, Measurement Items, and Reliabilities

Construct and Measurement Items	Reliabilities
Internet Capabilities (adapted from Zhu & Kraemer (2002)) ("Strongly disagree" to "strongly agree", compared to competitors are scale anchors) A. Information (Our capability of) IN_1: offering product information online IN_2: offering product-based online search capabilities for assisting customers in finding specific	.66
 products quickly IN_3: providing potential customers with online 3rd party reviews or customer ratings of our products IN_4: providing information on product updates online B. Transaction (Our capability of) TR_1: enabling our customers to place their orders online TR_2: enabling customers to view the status of their orders online TR_3: offering a simplified procedure for registered users to complete online transactions fast 	.93
 TR_4: facilitating product returns online TR_5: offering sufficient information online about the security of transactions and customers' sensitive data C. Interaction (Our capability of) INT_1: allowing customers to configure product features online so that products can be built-to-order on the basis of their preferences INT_2: allowing users to register online to gain access to personalized accounts or private messages 	.93
 INT_3: offering dynamic real-time product recommendations for our customers online INT_4: enabling online visitors to customize the content viewed online INT_5: offering real-time technical support online D. Supplier Connection (Our capability of) SCON_1: allowing for online procurement of raw material, supplies and parts by our importing partners SCON_2: offering dynamic real-time product recommendations online SCON_3: facilitating shipment and logistics management online SCON_4: facilitating and in a inventory and information underge 	.93

APPENDIX A (Continued) Constructs, Measurement Items, and Reliabilities

Construct and Measurement Items	Reliabilities
Short-Term Export Marketing Performance (adapted from Lages & Lages (2004)) A. Satisfaction with Short-Term Performance Improvement ("Much less satisfied in 2003" to "Much more satisfied in 2003 than 2002", compared to competitors are scale anchors)	.95
SSTPI_1: Export sales volume	
SSTPI_2: Export profitability	
SSTPL 4: Overall export performance	
B Short-Term Export Intensity Improvement	90
("Large decrease from 2002 to 2003" and "Large increase from 2002 to 2003" are scale anchors")	••••
STEII_1: Percentage of this export venture to total sales volume	
STEII_2: Percentage of this export venture to total profitability	
C. Expected Short-Term Performance Improvement	.94
("Much less satisfied in 2003" to "Much more satisfied in 2003 than 2002" are scale anchors)	
ESTPI_1: Export sales volume	
ESTPI_2: Export profitability	
ESTPI_3: Achievement of the objectives	
ESTPI_4: Satisfaction	
Long-term Export Marketing Performance (adapted from Zou et al. (1998))	
("Strongly disagree" to "Strongly agree", compared to competitors are scale anchors)	
A Financial Export Performance	84
FFP 1: has been very profitable	-0.
FEP 2: has generated a high sales volume	
FEP 3: has achieved rapid growth	
B. Strategic Export Performance	.89
SEP 1: has improved our global competitiveness	
SEP 2: has strengthened our strategic positioning	
SEP 3: has significantly increased our global market share	
C. Satisfaction with Export Venture	.92
SEV_1: turned out to be very satisfactory	
SEV_2: has been very successful	
SEV_3: has fully met our expectations	