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# Constituents of Dynamic Marketing Capability: Strategic Fit and Heterogeneity in Export Performance

# Journal of Business Research

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# Dr. Mohammad Tayeenul Hoque

Assistant Professor and Chairman Department of Marketing and International Business School of Business and Economics, North South University, Bangladesh Email: <u>mohammad.hoque02@northsouth.edu</u>

# Dr Prithwiraj Nath

Professor of Marketing Newcastle Business School, Northumbria University, UK Email: prithwiraj.nath@northumbria.ac.uk

# **Dr Mohammad Faisal Ahammad**

Associate Professor of International Business Centre for International business (CIBUL) Leeds university Business School, University of Leeds, UK Email: <u>m.f.ahammad@leeds.ac.uk</u>

# **Dr Nikolaos Tzokas**

Professor of Marketing Prince Mohammad Bin Salman College for Business & Entrepreneurship, Saudi Arabia E-mail: ntzokas@mbsc.edu.sa

> Dr. Nick Yip Associate Professor of Marketing Norwich Business School, University of East Anglia E-mail: <u>N.Yip@uea.ac.uk</u>

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# The Constituents of Dynamic Marketing Capability: Strategic Fit and Heterogeneity in Export Performance

# Abstract

Using the Resource Based View and Dynamic Capability theoretical lenses, this paper provides such a strategic treatise in exploring how the underlying dimensions of DMC can be understood within a higher-order DMC strategy and the influence of the latter upon the export performance of firms from an emerging market. The empirical findings drawn from a sample of 315 exporters representing eight industries from Bangladesh show that the DMC is a second-order latent construct consisting of four marketing capabilities: proactive market orientation, brand management capability, new product development capability, and customer relationship management capability. Additionally, this study identified three clusters of firms and showed that, among them, enthusiastic embracers—which are characterized by high levels of activity across marketing capabilities, such as proactive market orientation and brand management capability—achieve better performance.

**Keywords:** Resource Based View; Dynamic capability; Dynamic marketing capability; Export; Firm performance; Emerging market, Strategic Configuration

## 1. Introduction

Continued globalization has stimulated international trade and motivated a growing number of organizations to engage in internationalizing through exporting activities (Buckley & Strange, 2015). The total value of exported goods and services was US\$26.22 trillion in 2019 (World Bank, 2021a). Exporting provides firms with an opportunity to access knowledge from abroad, which can serve as an effective means of organizational learning (Bratti & Felice, 2012). Governments in emerging markets actively encourage exporting and consider the related performance as one of the most important indicators of a firm's technological sophistication (Pham, Le Monkhouse et al. 2017). Despite the aforementioned advantages, exporters from emerging markets face significant challenges in designing effective knowledge management processes in their export markets (Martin and Javalgi 2019). High levels of uncertainty, risks, and inter-market institutional differences drive the complexities and challenges that characterize today's export environment (Murray, Gao, & Kotabe, 2011). In addition, emerging market exporters need to monitor the frequent changes in consumer demands and preferences, and comply on an ongoing basis with any new guidelines imposed on product design or manufacturing processes by the regulators in both their home and target nations (Lages, Silva and Styles, 2009). Under such circumstances, exporters from emerging markets need to constantly accumulate and upgrade the market knowledge that can help them cope with the changes and innovate their products and services to make them suited to deal with such unpredictable challenges.

The extant studies have established the role played by marketing as a turn-around mechanism suited to create and sustain a competitive advantage (Helfat & Winter, 2011; Kaleka & Morgan, 2017). In particular, the creative application of marketing resources and capabilities can support a firm's survival and growth strategy in both the internal and external business

environments (Kaleka & Morgan, 2017). Dynamic Marketing Capability (DMC) is often considered a key differentiator strategy for firms facing these uncertainties and the challenges they bring (Morgan, 2012). DMC is commonly defined as the process by which a firm can absorb new knowledge-based resources and transform them into knowledge management processes to generate products/services that are commercially viable in their target markets, and continuously reconfigure their marketing capabilities in order respond to market demands in an agile fashion (Bruni & Verona, 2009; Peteraf, 1993; Wang & Hsu, 2018). However, the achievement of this capability is particularly challenging for emerging market exporters for several reasons. For example, such firms often lack the necessary resources-e.g., infrastructure, technology, and brand equity—or even the market-based knowledge crucial to keep up to date with the changes in western consumer demands (Fang and Zou, 2009; Lu, Zhou, Bruton, & Li, 2010). This hinders such exporters' initiatives aimed at acquiring knowledge or using it to develop long-term strategies in their target export markets. In addition, exporters often primarily focus on chasing short-term opportunities—such as becoming sought-after outsourcing partners for their western clients rather than taking the steps necessary to integrate the knowledge-based marketing resources or capabilities that can enable them to adapt to the changes in the international business environment (Lages et al., 2009; Spyropoulou, Katsikeas, Skarmeas, & Morgan, 2018, 2017).

In relation to continuously changing market conditions, most studies show how DMC. as an organization's knowledge-based capability, supports value offerings for customers (Cacciolatti and Lee, 2016). In particular, a firm's knowledge is considered a strategic firm-level resource and a source of competitive advantage (Kogut and Zander, 1996; Pereira and Bamel, 2021). The proponents of the knowledge-based view (KBV) argue that knowledge is an intangible firm-level asset and a critical component of knowledge management systems and dynamic capability, wherein its assimilation and application can enable firms to develop the uniqueness of their offerings (Eisenhardt and Martin, 2000). Nevertheless, several research gaps exist in the RBV-KBV and DMC literatures, especially in the context of emerging market exports.

First, what is striking about the DMC literature is that most studies are solely focused on the theoretical foundation of DMC strategies, addressing what constitutes DMC in an isolated way. For instance, strategists have argued that DMC is composed by individual components of a firmsuch as brand management capability, which focuses on using marketing assets to grow and leverage brands (Morgan, 2012; Santos-Vijande, del Río-Lanza, Suárez-Álvarez, & Díaz-Martín, 2013); new product development processes, which involve the creation of new value offerings for target markets (Dacko, Liu, Sudharshan, & Furrer, 2008; Lages et al., 2009); customer relationship management activities, which ensure that relationships with customers are maintained in order to improve business propositions (Morgan, Kaleka, & Katsikeas, 2004); and proactive market orientation, which involves market exploration aimed at developing a better strategic fit for a firm, thus enabling an effective strategic implementation (Skarmeas, Lisboa, & Saridakis, 2016; Vorhies & Morgan, 2005). Although each of these individual capabilities are crucial for firms to maintain a competitive advantage, none of the extant studies investigated how efficiently a firm can integrate knowledge management capabilities in order to create a higher-order strategic capability by which it can control the proper alignment of its business strategy with its business operational environment to the end of tackling increasingly challenging business demands.

Second, emerging nation exporters must often assimilate and integrate their limited resources from various internal sources; e.g., to develop new products that cater to the evolving needs of western markets or their own unique capability to understand the dynamism in the market through intelligence gathering. Such internal assets and capabilities need to work in tandem to develop dynamic knowledge-based responses suited to make their own brands unique to foreign buyers and, at the same time, maintain close customer relationships that will enable them to preserve their statuses as ideal suppliers. In essence, firms need to focus on identifying and configuring the processes that can transform their internal capabilities into more customer-facing functions. This requires the close integration of their pool of knowledge-based resources and capabilities in order to endow their knowledge-based response with agility. From a theoretical perspective, this needs a more integrated approach of DMC with the KBV in order to understand the nuances of the challenges faced by emerging nation exporters. The literature has explored how these theoretical strands can work together in relation to the role played by knowledge-based resources in the international new ventures domain in the emerging market mobile technology context (e.g., Fletcher-Brown et al., 2020; Martin and Javalgi, 2019); however, scholars (Pereira and Bamel, 2021) seek greater empirical validation that can integrate the resource and knowledgebased views with a firm's strategic alignment for effective strategic implementation. Although several studies on the RBV-KBV or DMC offer a disparate constellation of empirical insights, they lack a cohesive framework focused on the exporters' strategic fit in designing DMC in ways that enable the effective implementation of knowledge management processes in an emerging nation context. This research represents an early attempt to address this gap.

Third, past research has often used configuration theory to explain how firms can integrate multidimensional organizational characteristics to achieve better performance (e.g., Malshe et al., 2017; Homburg, Jensen and Krohmer, 2008). For example, Vorhies and Morgan (2003) suggested that a firm can achieve superior performance by striking a correct balance between its strategic types and marketing characteristics. Homburg et al. (2008) used configuration theory to develop clusters of firms based on their marketing-sales interfaces. The nature of DMC strategy involves

multidimensional capability constructs, each of which might require different sets of resources; it was thus imperative to explore whether exporting firms present any similarities in their configurations and approaches to the development of DMC and how such configurations influence their performance. Hence, the second objective of this study was to explore the possible DMC configurations, proposing a taxonomy of exporting firms in regard to how they approach DMC and to how such configurations influence their performance.

Fourth, to the best of our knowledge, although marketing capabilities have been discussed in various contexts (Santos-Vijande et al., 2012), export marketing had hitherto not been subjected to an extensive examination. We argued that, given the increasing importance and complexity of global trade, gaining an insight into the export marketing enacted by firms from an emerging market such as Bangladesh would be critical. This would require going beyond any unidimensional approaches to marketing capability, to enable such firms to benefit from the synergies embedded in a strategic approach. For example, Morgan (2012) highlighted that, among the components of DMC, are architectural capability, which relates to the strategic marketing planning process that takes place within a firm, and specialized marketing capability, which pertains to the implementation activities of the planned strategy. Such a pluri-signified appreciation of a DMC strategy from emerging market exporting firms is necessary to paint a more complete picture of the field. In order to address the above-mentioned research gaps, this study was aimed at developing a higher-order appreciation of a DMC strategy suitable for firms in the context of exports, and to examine how DMC strategy configurations influence the performance of exporting firms from Bangladesh. Achieving this aim would verify the importance of DMC anatomy to design effective export strategies and, in turn, implement them to realize performance heterogeneity. Overall, to achieve its aims, this research addressed the following questions:

RQ1. To what extent can an exporter generate a higher-order DMC strategy through the RBV-KBV lens?

RQ2. To what extent can an exporter identify variations in the underlying dimensions of a DMC strategy in order to rectify its taxonomy?

RQ3. To what extent does an exporter's fine-grained configuration of a higher-order DMC strategy provide an effective export strategy implementation suited to positively affect firm performance?

This study makes the following research and practice contributions. First, past research has explored the role played by firm-level capabilities (such as organizational learning) in export performance and competitive advantage (e.g., Griffith and Dimitrova, 2014). However, highly uncertain business contexts, such as exporting from emerging nations. require firms to adopt more comprehensive approaches that involve integrating individual firm-level capabilities in order to create more overarching structures. Past research has relatively overlooked this integration approach, particularly in the context of emerging market exporting firms. This study fills this gap in the RBV and DC literatures.

Second, this research directly answers the call for research aimed at jointly extending the resource and knowledge-based views (Pereira and Bamel, 2021) in the high risk, dynamic, and challenging context faced by emerging country exporting firms in an oligopsonic market the dynamics of which are dictated by a handful of western buyers. In doing so, this study empirically demonstrates how DMC with the KBV can be integrated and contribute to the growing body of literature in this domain.

Third, this study adopted configuration theory to integrate multidimensional organizational characteristics in order to develop a higher order DMC structure for emerging market exporting firms and examine how their configurations can influence firm export performance. It also

proposes a taxonomy of emerging market firms based on their approaches to the adoption of DMC and to how this can influence policymaking in regard to developing such firms' export orientations.

Fourth, this paper contributes to the body of export marketing literature that uses the RBV-KBV and DC perspectives as its backdrop by proposing and empirically verifying the holistic construct of DMC strategies in the context of an emerging market—Bangladesh. Emerging market firms face higher complexity in terms of their institutional, political, and competitive frameworks, which drives their allocation, acquisition, and management of specific resources, knowledge, and capabilities in different ways as compared to firms from developed countries (Guillen, 2000; Popli, Ladkani, & Gaur, 2017). Such differences make it necessary to delineate and specify the contexts and contextual factors that pertain to emerging-market firms venturing into advanced economies. Accordingly, further research is needed to understand the taxonomy of DMC and export performance in the context of exporting firms from Bangladesh, which is among the fastest growing emerging markets (Haroon 2021).

## 1.1 Why Bangladesh is a Suitable Setting for DMC Configuration Strategy

We chose Bangladesh as the empirical setting to study the constituents of DMC and its strategic configuration towards export performance. This context was particularly suitable as an emerging market in the Asia-Pacific region (The Daily Star, 2021), with Bangladeshi organizations viewing exporting as a lucrative process suited to their rapid international growth, contributing US\$46 billion to the country's GDP (World Bank, 2021b). For this study, we selected eight export-oriented Bangladeshi industries (textile, handicraft & furniture, leather goods, IT, plastic goods, finished leather, ceramics, and light engineering), which, together, generated a significant export revenue of more than 34,659.32 million US\$ in the 2017/18 fiscal year (EPB, 2020). The multi-industry sample chosen for this study not only ensured the generalizability of the findings but also

enabled us to capture a great variability in how individual firms develop their DMC without neglecting the influence of the idiosyncrasies of their individual industries. The total value of exports from Bangladesh increased from US\$40.56 billion in 2018 to US\$46.36 billion in 2019 (World Bank, 2021b). This reflects both the export growth and dynamism in the market and its complexities.

However, several organisations are unable to achieve positional advantages in export markets as they appear to lack the ability to accumulate market-specific knowledge along with that to properly utilise marketing resources. This is particularly crucial for exporters from emerging markets like Bangladesh, who lack the efficiency needed to maintain an effective alignment of knowledge absorption practices and knowledge management systems, apart from being unable to deal with the cost of doing business abroad and having relatively little foreign market experience. In the emerging market context of Bangladesh, exporters can benefit from having a configuration of knowledge management marketing capabilities suited to respond swiftly to uncertain market conditions. Therefore, Bangladesh is a suitable context to examine the internal structure of a DMC strategy and its structural influence on the export performances of emerging market firms.

#### 2. Literature review

# 2.1 The Resource-Based View, the Knowledge-Based View, and Dynamic Capability: the Emergence of a Dynamic Marketing Capability

The resource-based view (RBV) is one of the theories most widely used in management studies (Nason & Wiklund, 2018). The RBV has been used in a number of research streams, such as knowledge transfer in mergers and acquisitions (e.g., Ahammad, Tarba, Liu, & Glaister, 2016), innovation, alliances, international business, and knowledge management. In addition, a number of theories and perspectives have evolved from the RBV, such as dynamic capabilities (Teece, Pisano, & Shuen, 1997), the relational view (Dyer & Singh, 1998), and the knowledge-based view (KBV) (Kogut & Zander, 1992). The KBV argues that a firm needs to access and integrate market specific specialized knowledge to sustain its resource heterogeneity and achieve a competitive advantage (Grant, 1996; Pereira and Bamel, 2021). The RBV and KBV have been applied to other research streams, such as social entrepreneurship and sustainability (e.g., Nair & Bhattacharyya, 2019), outsourcing and offshoring (e.g., Pereira, Munjal, & Ishizaka, 2019), emerging market context (e.g., Fletcher-Brown et al., 2020), big data management (e.g., Xu, Frankwick, & Ramirez, 2016), and open innovation (e.g., Santoro, Vrontis, Thrassou, Dezi, & Change, 2018). In the marketing literature, the RBV has been used to identify potential marketing resources and to deploy such resources in a way that supports the formulation of marketing strategies (Lages et al., 2009, Santos-Vijande et al., 2013). The RBV reveals that the formation and implementation of an organization's competitive strategy is influenced by its possession of a variety of marketing resources and capabilities. Extant studies argue that firms achieve performance differentials in competitive environments characterised by idiosyncratic bundles of knowledge-based resources by transforming them into knowledge management processes suited to make better value propositions in target export markets. The success of a firm's effective international strategy implementation and international operation is contingent on its adaptability in tackling uncertain market environments; a firm thus needs to achieve international marketing effectiveness by adapting to any changes in its absorbed resources and knowledge management systems.

This paper draws upon a dynamic capability view of international organisations to develop a new conceptualization of dynamic marketing capability. The dynamic-capability (DC) view stresses the importance of reconfiguring capabilities to the end of achieving a competitive advantage under conditions of high-level market uncertainty. The process underlying dynamic capability considers the higher-order capabilities that are involved in rebuilding and reconfiguring any ordinary capabilities in order to attain positional market advantages (Garri, Spicer, Pereira, Temouri, Malik & Tarba, 2020). Several previous studies have defined the term 'dynamic capability' and also shown its influence on performance. For instance, according to Teece et al. (1997), an organization's "*ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments*" reveals the roots of its dynamic capabilities, which are the true determinants of an organization's long-term competitive advantage. Other scholars (Eisenhardt and Martin, 2000) showed how DC follows a path-dependent repeated pattern that enables an organization to systematically amend its resources and capabilities to adjust to a changing market environment.

The RBV is concerned with achieving superior performance in the presence of market demands that do not fluctuate excessively (Morgan, Feng, & Whitler, 2018). The vibrant nature of international markets causes an organisation to reconfigure its capabilities and develop long-term international strategies. This encourages marketing researchers to examine the mutual influence of the RBV-KBV and DC on the long-term growth and survival of international organisations. In export market contexts, the application of resources and capabilities can be improved by emphasising the DC view (Li, He, & Sousa, 2017). However, the RBV and DC views are typically incapable of explaining how international organisations can accumulate and implement market-based knowledge to effectively enact their business strategies. This is crucial because a firm's efficiency in implementing its business strategy is influenced by its adaptability in reconfiguring its resources and processes to meet the needs of its target market environment. This has led to the emergence of a new school of thought—called 'dynamic marketing capability'—that describes the

importance of market-based knowledge for the clearer management of processes. This paper argues that the nature of the RB-KB and DC views are the key theoretical foundations for the development of a dynamic marketing capability strategy.

# 2.2 The Underlying Dimensions of Dynamic Marketing Capability: Knowledge Management Systems

Marketing and strategy scholars have used dynamic capability theory quite extensively to explore how firms can achieve superior performance (e.g., Barrales-Molina, Martínez-López, & Gázquez-Abad, 2013; Bruni and Verona, 2009; Morgan, 2012; Konwar et al., 2017). According to Wang & Hsu (2018), dynamic capability is defined as an organization's higher-order competency that involves reconfiguring its ordinary capabilities, such as adding innovativeness to improve firm's performance. Nonetheless, theorists have introduced a new school of thought called 'dynamic marketing capability' to more adequately explain the management of market-specific knowledge-based resources within a changing market environment (Kachouie, Mavondo, & Sands, 2018).

Marketing theorists distinguish between the functions of the general marketing capabilities and dynamic marketing capability concepts in several ways. When a market is stable, the basic feature of marketing capability (MC) is to enable a marketing mix approach suited to achieve a positional advantage (Glaum & Oesterle, 2007). In times of market environment unpredictability, it is challenging for an organization to seek and seize global opportunities simply through its knowledge of the typical marketing efforts that pertain to a classical marketing mix approach (Weerawardena, Mort, Liesch, & Knight, 2007). In relation to the criticism of MC, researchers have conceptualized DMC as the responsiveness of a business to changes in market conditions and its efficiency in integrating cross-functional business processes in ways that generate customer value (Baralles-Molina et al., 2014; Fang and Zou, 2009; Morgan, 2012). The nature of DMC is contingent not only on enabling an established marketing-mix approach; rather, it involves upgrading knowledge-management capabilities in order to implement marketing strategies.

The literature (Falasca, Zhang, Conchar, & Li, 2017; Sluyts, Matthyssens, Martens, & Streukens, 2011) identifies two critical characteristics that a business process needs to possess in order to be classified as a dynamic marketing capability: the ability to acquire and use knowledge and the ability to integrate cross-functional disciplines, leading to better resource utilization. Baralles-Molina et al. (2014) explained how firms use two different types of capabilities to acquire and use any market knowledge: a sensing capability, which is the ability to gather new market knowledge; and a learning capability, which is the ability to use such knowledge. They proposed such capabilities as two of the key underlying processes used by firms to meet current and future customer needs. Hence, the way in which a firm acquires market knowledge, understands any changes in customer demands, and exploits such changes to innovate its products is crucial to the achievement of a competitive advantage and is a critical component of DMC. Marketing experts (Merrilees, Rundle-Thiele, & Lye, 2011; Murray, Gao, & Kotabe, 2011) confirmed that higher-order MCs are the key knowledge management systems that exporters can adopt to realize greater business efficiency, particularly in B2B contexts.

On the other hand, a firm's success depends on its ability to integrate resources from crossfunctional disciplines in order to achieve efficiency in its market delivery process (Eisenhardt & Martin, 2000). Fang and Zou (2009) argued that firms can deliver better customer value by taking a cross-functional approach, thereby achieving higher performance through resource combination, integration, and deployment. Therefore, a cross-functional approach leads to better resource utilization, which is a critical component of a DMC strategy. Table 1 presents a summarized review of the literature in this area.

TABLE 1 HERE

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After reviewing the extant work (Table 1), we then implied that a DMC strategy involves the combination of certain underlying components, and there thus is the need to better understand the anatomy of a higher-order DMC strategy. Critically, we argued for the importance of exploring how the individual DMC constructs identified in literature can be combined to form a higher-order construct, thus not only complementing each other, but jointly having a stronger impact on performance. Therefore, the first objective of this study was to identify the underlying dimensions of the higher-order structure of a DMC strategy suited for firms in the context of B2B exports. Based on the literature, we postulated the following proposition related to this study's prime aim:

**P1**. Those export marketing managers who emphasize the modification of knowledge management systems show a greater tendency to seize mid-level knowledge management marketing activities as more vibrant components of a DMC strategy than their counterparts who possess and practice generic marketing capabilities in isolation.

# 2.3 The Higher-Order Structure of a DMC Strategy

While previous studies (Table 1) propose a mixture of higher-order (i.e., DC or DMC) and mid-level (i.e., strategic and cross-functional MCs: market sensing, brand management capability, customer relationship management, or new product development) marketing capabilities in DC

domains (Morgan et al., 2018), we argued for the existence of a complementary influence of such cross-functional marketing capabilities. As soon as a firm focusses on the interaction between midlevel MCs, it realizes the complementary influence of its MC portfolio, which can generate value offerings greater than those offered by individual mid-level MCs (Morgan, Vorhies, & Mason, 2009). This view is supported by various studies (Baralles-Molina et al., 2014; Fang and Zou, 2009; Morgan, 2012) that repeatedly emphasize and theoretically argue that the individual marketing capabilities that constitute a DMC strategy often interact with each other to create a higher-order, overarching construct. The use of such a higher-order construct with other marketing ones is not uncommon in the literature. For example, Fang and Zou (2009) argued that a DMC is the outcome of a combination of several business processes, such as new product development and customer relationship management, which give firms the capability to remain competitive and improve their performance. Similarly, Santos et al. (2012, 2013) postulated that brand management capability and organizational learning are composed of multiple underlying dimensions (i.e., low and middle-order sub-constructs) and that, together, they can create a higher-order latent structure that further positively affects firm performance. Based on the above criteria, marketing theorists (Barrales-Molina et al., 2013; Fang & Zou, 2009; Morgan, 2012) have broadly used five types of mid-level capabilities in the DC premise (Table 1). These are: market orientation capability, customer relationship management capability, brand management capability, new product development capability, and networking capability.

Whereas several of the underlying constructs that constitute a DMC strategy have been discussed in the literature (e.g., Baralles-Molina et al., 2014; Fang and Zou, 2009), the identification of such constructs in the exporting context is rather limited. As explained earlier, the ability to acquire knowledge-based resources and to integrate them in a business process by taking

a cross-functional approach are the foundations of a DMC strategy. Based on the theoretical work of Morgan (2012) and Barrales-Molina et al. (2013), this research extends the conceptual study of DMC by developing a multi-dimensional DMC scale that comprises four dimensions (mid-level MCs): 1) proactive market orientation (PMO) as the construct related to the knowledge and learning aspects of DMC; 2) new product development capability (NPDC), 3) brand management capability (BMC); and 4) customer relationship management capability (CRMC). An exporter needs to develop these four mid-level MCs in order to explore and exploit any market demands. The broad implementation of such mid-level MCs indicates an organization's ability to generate a well-articulated DMC strategy suited to the penetration of target markets, rather than the mere treatment of such MCs in isolation. Figure 1 shows the conceptual, higher-order structure of our proposed DMC framework. Specifically, based on the application of various underlying components of DMC strategy, this study evaluated a disparate typology of DMC strategies. Thus, the following proposition was examined.

**P2**. Those export marketing managers who seize mid-level marketing capabilities to form a fine-grained DMC strategy as a more viable structure of organizational strategy implementation can surpass those key rivals emphasize knowledge management marketing activities in isolation.

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# FIGURE 1 HERE

#### **2.3.1 Proactive Market Orientation (PMO)**

The market orientation literature suggests that a firm's customer orientation, competitor orientation, and cross-functional coordination (Narver & Slater, 1990)—combined with its intelligence generation, dissemination, and responsiveness (Jaworski & Kohli, 1993)—are what gives it an edge over its competition. Narver, Slater and Maclachlan (2004) extended this concept to include two additional dimensions: (a) responsive market orientation (RMO), which is the ability of a firm to satisfy its customers' current and expressed needs associated with market exploitation, and (b) proactive market orientation (PMO), which explains a firm's ability to satisfy its customers' future and unexpressed/latent needs associated with market exploration. However, we argued that the role played by PMO is more crucial in dynamic and uncertain situations (like in exports) as firms have to constantly manage today's business demands while adapting to tomorrow's business environment (Herhausen, 2016).

Although the literature often suggests that RMO and PMO contradict each other and that firms lose out while striving to strike a balance between them (Atuahene-Gima et al., 2005), some studies explain how the two constructs complement each other and jointly have a positive effect on performance (Herhausen, 2016). The motivation for this has introduced PMO as a core midlevel strategic marketing capability of the DMC anatomy, rather than simply using individual market orientation (MO) constructs. In essence, a firm's export efficiency can be attained by the possession of the PMO capability when it is complementary with other transformational knowledge management ones. However, past studies have failed to notice the effectiveness of PMO in terms of explaining the role played by DMC constructs in overseas operations. As export markets are characterized by high degrees of uncertainty (Fang and Zou, 2009), firms have to act proactively on the latent needs of their customers in order to maintain and grow such markets (Efrat, Hughes, Nemkovac, Souchon, & Changcoe, 2018). We posited that a proactive learning strategy reinforces an exporter's DMC development processes. We thus found it logical to propose that the interaction of PMO with other cross-functional marketing capabilities can promote the development of a multi-dimensional DMC construct in an export market environment.

# **2.3.2** The New Product Development Capability (NPDC)

The new product development capability (NPDC) is defined as a continuous process whereby new ideas are triggered through the exploitation and exploration of knowledge, and are then implemented to offer innovative products/services suited to satisfy customer demands. As a constituent of dynamic capabilities, (Dacko et al., 2008; Jin, Hewitt-Dundas, & Thompson, 2004) the NPDC is often seen as one of the key constructs of DMC because of its cross-functional nature, which involves the integration of a range of organizational activities (Baralles-Molina et al., 2014). In general, the NPDC operates in cross-functional business processes that accumulate valuable information—either internally or externally—and then integrate such information in such a way as to provide solutions in the market (Fang and Zou, 2009). These processes include the conversion of any accumulated information by reconfiguring, leveraging, and integrating resources and capabilities throughout the organization in order to introduce commercially viable products within distinct levels of the market environment (Teece, 2012). Previous studies indicated that the NPDC is a crucial component that exporters use to sustain the repeated offering of products in their export markets (Lages et al., 2009; C.-H. Wang, Chen, & Chen, 2012). As a mid-level marketing capability, the NPDC promotes the modification of an organization's innovativeness in order to satisfy demands in export markets (Merrilees et al., 2011). Additionally, the NPDC encourages an organization to be proactive by exploring innovation, instead of merely exploiting the strength of its existing products. Lages et al. (2009) stated that such new product development capability is

critically a success factor for exporters competing in highly challenging sectors. Thus, we argued that the NPDC should be considered as one of the cross-functional components of a DMC strategy that is relevant and crucial to the export context.

# **2.3.3** The Brand Management Capability (BMC)

The brand management capability has been considered important for emerging market firms (Liu, Öberg, Tarba & Xing, 2018). Morgan (2012) defined the BMC as the outcome of the systems and processes used to develop, grow, and leverage a firm's brand assets. It is a comprehensive capability that includes inputs from the functional areas within the marketing discipline (such as marketing mix and market research) that can enhance the value of organizations and create strategic competitiveness in the market (Huang & Tsai, 2013). The BMC enables an organization to reconfigure, combine, and deploy its knowledge management capabilities to improve the value of its reputational assets. The core attributes of the BMC—which include brand orientation, internal branding, and brand management strategy—are often considered non-imitable and are therefore classified as mid-level marketing capabilities (Santos-Vijande et al., 2013). Firms are then said to invest in their BMC in order to develop strong corporate brands that enable them to secure competitive positions in the market.

In the export sector, the BMC has a significant influence because a strong brand leads to an organization's ability to launch and reap benefits from its new and innovative products within an adverse market space (Beverland, Napoli, & Farrelly, 2010). For instance, in the consumer electronics sector, Apple's strong brand-building capability enables it to deploy new products and services (Apple watch, various iPhone series) in the market to balance continuous growth and survival in international markets. This suggests that the BMC can create a platform for an exporter's growth and survival within export markets by building a strong and continuous corporate

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brand that is recognized by both importers and potential customers in export markets. Therefore, we proposed that the BMC, as a marketing capability, is essential for an exporting firm to compete strategically.

## 2.3.4 The Customer Relationship Management Capability (CRMC)

The term CRMC—as a cross-functional MC—refers to the ability of a firm to identify, initiate and maintain a relationship with profitable customers. This capability can be seen as a set of complex organizational processes that enables the acquisition of knowledge from existing and potential customers, and subsequently circulates such knowledge into cross-functional business units so that the organization can leverage any market value propositions (Boulding, Staelin, Ehret, & Johnston, 2005; Srivastava, Shervani, & Fahey, 1999), which largely improves a firms' performance (Morgan, 2012). In this CRMC phase, an organization does not rely only on gathering new ideas about products; rather, it involves its customers in a series of experiments aimed at comprehending the market's specific needs. Scholars (e.g., Merrilees et al., 2011) explained that the CRMC is a type of mid-level market knowledge management process that operates within cross-functional business units in order to maintain a connection between customer relationship management and customer satisfaction.

The CRMC can then be seen to play a role on several levels. First, it assists with identifying any market-oriented learning for export-based industrial products under very challenging and dynamic changing market conditions. Second, a better understanding of customer needs achieved through the CRMC supports the exporter by offering possible solutions to be used in cross-functional business units across various stakeholders (Morgan et al., 2004). Furthermore, Fang and Zou (2009) identified the CRMC as one of the core constructs of a DMC strategy in the context of the establishment of international joint ventures, and suggested that it involves cross-functional

processes suited to balance the relationship with not only customers, but also other channel partners. Next, relationship capabilities, based on information sharing within the organization, often play a role in every strategic decision made by a firm, which is key to building and maintaining the long-term relationships needed to sustain its exports (Lages et al., 2009). And, finally, by developing better customer relationship management capabilities, an exporting organization can improve its customers retention rates, which, in turn, generates a higher level of export profitability. In that respect, we argued that, by combining the CRMC and other market knowledge management capabilities, export firms are better equipped to unravel their customers' needs and to furnish solutions suited to tackle any adverse conditions found in their export markets.

# 2.4 The Strategic Fit of DMC as a Driver of Performance in Export Markets

Exporting is a common way to enter international markets that enables firms to utilize any excess capacity, improve their production efficiency, and compete effectively in an increasingly globalized marketplace (Sousa & Bradley, 2008). The literature has suggested that the export sector involves complex interactions between the various stakeholders engaged in export activities and that this impacts a firm's performance (Liu and Vrontis, 2017). For instance, research has shown growing interest in evaluating the dominant antecedents of a firm's exporting performance, such as its management, strategy, structure, and, to a large extent, its capabilities—and particularly its marketing ones (Chen & Hsu, 2010). Substantial studies show how individual marketing capabilities such as organizational learning, brand management, new product development, and relationship management have a positive influence on firm performance in the context of international joint ventures and exports (Lages et al., 2009; Santos-Vijande et al., 2013; Spyropoulou et al., 2017). Nevertheless, limited research has been conducted on how—when combined as the sub-dimensions of an exporter's higher-order DMC strategy—these individual

marketing capabilities might influence its effective strategy implementation, which, in turn, would lead to a competitive advantage.

We proposed that the export performance effects of strategic formality in a DMC structure may vary according to an exporter's strategic alignment with the environment. Exporting firms may systematically combine a wide variety of knowledge management capabilities to constitute a higher-order DMC strategy (e.g., Spyropoulou et al., 2017; Lages et al., 2009) for examining performance, as they operate in very different market environments. Marketing strategy research has very often overlooked any sources of performance heterogeneity derived from differences in strategic group membership or structure in general. In particular, there is a need for a better understanding of the process whereby an exporter's knowledge management activities adapt to its export market environments. Accordingly, it is crucial to draw attention to Miles and Snow's (1978) organizational typology (i.e., analysers, prospectors, defenders, and reactors) so as to corroborate the association of a strategic organizational typology with the strategic-fit of a higherorder DMC strategy. Ultimately, we determined to investigate the following proposition:

P3. Those export marketing managers who most efficiently combine mid-level marketing capabilities tend to view the strategic fit of a DMC configuration as being more suited to improve export performance than those of their counterparts that inappropriately implement a knowledge management strategy within an export market context.

## 3. Method

#### 3.1 Empirical Context

Based upon the extant literature, the research design of this study involved using survey data to develop a taxonomy for a higher-order DMC strategy for export-oriented firms operating

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in the manufacturing & engineering/electrical sector of an emerging country, Bangladesh. As the firm-level strategies aimed at supporting export strategies adopted in developed countries differ significantly from their emerging economy counterparts (Chen, Sousa, & He, 2016), export-oriented firms from a fast growing developing country like Bangladesh require a better understanding of the adoption of knowledge management practices and other determinants in order to achieve better export performance. In this study, key respondents were selected from eight industry sectors (e.g., textile, handicraft & furniture, leather goods, engineering & electrical products, plastic goods, finished leather, ceramics, and light engineering) in Bangladesh. These sectors were chosen because their cumulative exports had shown significant growth in 2017/2018 fiscal year (EPB, 2020). For instance, in recent years, Bangladesh has been growing its expertise in the engineering and technological sectors, and that is evidenced by the increase in export earnings (US\$41.93 million) from the electrical and IT products/services sector during the 2020-2021 fiscal half-year (The Daily Star, 2021).

Although researchers in the IB literature have widely focussed on manufacturing sectors, strategies for engineering/electrical-related product exports had hitherto received little attention in export performance research (Chen et al., 2016). However, despite the differences in the nature of commercial technological products and manufactured goods, we adopted both to generalize industry influence on export performance. While we selected a multi-industry sample for this study, we did not include all types of exporters involved in manufacturing products and services, excluding joint-venture firms and solely focussing on the same business units within larger firms. Additionally, to avoid the liability of newness, we excluded firms that had been operating for no more than five years from the sampling frame (Mehrabi, Coviello, & Ranaweera, 2019). We did so because young firms enact operational strategies that are distinct from those of more established

ones, and we aimed at comprehending the knowledge management strategies that are implemented within the same business units of export-oriented firms. Using the same business units in our sample was crucial in view of the fact that firms have various product lines for their export markets, and often follow a specific operational strategy for each. Collectively, the multi-industry variation found in the environmental conditions of the sample ensured the generalizability of the findings.

# 3.2 Scale Development

This research followed a rigorous development process to generate and validate the scale of the hierarchical reflective DMC construct in order to assess its intensity within export organizations. In particular and whenever possible, to model the hierarchical reflective structure of the DMC scale, this study adopted measurement items for mid-level marketing capabilities from previous studies. The sampling and scale development for this study was done in three stages based on recommendations drawn from the literature (Churchill Jr, 1979; Parasuraman, Zeithaml, & Malhotra, 2005). Of note, the three-stage scale development processes (Table 2 highlights the item formation process) were: a) a semi-structured interview stage (scale development), b) a pilottesting stage (to refine the scale), and c) a final survey stage (to apply all the relevant manifest variables).

In the first stage, we conducted face-to-face interviews with seven managers who had been handling export ventures in our eight target industries for between five and thirty years. The designation of the sample included three CEOs, three international marketing heads, and one export compliance manager. Although the designations of the respondents in the semi-structured interviews were different, they all dealt with compliance issues at the time of exporting; their experience in marketing strategies was thus substantial. The interviews, which we conducted between January and March 2015, had durations that ranged between 40 and 120 minutes. The interviewees' considerable export management experience enabled them to share their opinions on questions about: (1) the resources and capabilities needed for exporting; (2) the process of managing compliance factors strictly to satisfy international customers; (3) how exporters learn, plan, and respond to changes in market and consumer requirements; (4) how new product development is institutionalized (based on foreign client demands or done proactively within the organization); (5) how brand development investments are made; (6) how customer relationships are handled; and (7) the overall exporting experience.

The fieldwork interviews (Table 3) focussed on specific areas of the exporters' possession of market knowledge management mechanisms and of a marketing mix in the B2B context. The researchers emphasized how an exporter implements an effective export marketing strategy. Table 3 presents a summary of the interviewees' analysis of the marketing priorities of exporters when they face external turbulence. In general, most respondents said that they had lost contracts due to a lack of investment in infrastructure, insufficient marketing knowledge, and a lack of new product development skills. The findings of the interviews specified some of the best methods related to knowledge accumulation practices and the knowledge management strategies exporters adopt to tackle such challenging issues.

Second, based on the interview feedback and on established measures drawn from the literature, we developed a draft questionnaire. Following the usual recommendations (Menor & Roth, 2007; Santos-Vijande, del Río-Lanza et al. 2013), three academics familiar with the marketing strategy and international marketing literatures assessed the face validity of the questionnaire and, through an iterative refinement process, supported the screening of an initial list of 27 items. These academics provided a valuable contribution to the discussion on the potential

of export marketing strategies wherein relevant past research was taken as the basis for item modifications.

After rechecking the 27 initial items, we removed five as confusing and/or duplicates and assigned 22 to the pilot study. Export associations play an important role in improving the success rates of their members in export markets; thus, we selected export professionals based on their suggestions, piloting the questionnaire face-to-face with 15 of them from our eight target sample industries. We chose them due to their knowledge of the strategic actions taken by export organizations within developing nations, which provided additional face validity to the questionnaire items from the practitioners' viewpoints. Some modifications were made in terms of the questionnaire's length, wording, and overlapping of a few items. The process helped to prevent research bias at a priori level. Between April and June 2015, we held 18 meetings with these academic and professional experts, and they shared comments by using English language format. After refining several items for the five input and one output variable (Table 5), the pilot study led to the establishment of the final measurement scale with 22 items. The first-order input variables were measured by level of agreement on a seven-point Likert scale (ranging from 1= strongly disagree to 7= strongly agree), while an output construct—namely, 'export performance'—was measured by four items on a seven-point Likert scale based on different levels of satisfaction (ranging from 1= very dissatisfied to 7= strongly satisfied). We performed the requisite confirmatory factor analyses to test the measurement validity of the developed scale (see Table 5 for the measurement items, their literature sources, and validity tests).

Finally, between July and September 2015, we administered a large-scale survey to finalize the scale and the confirmation of the hierarchical reflective DMC construct. The final questionnaire included all the relevant items in English. In addition to the focal input and output

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constructs, the study also considered four control variables: firm size, firm age, market uncertainty, and competitive intensity. Firm size (measured by number of employees) and age often dictate resource adoption and deployment capacities (Li & Atuahene-Gima, 2001). In particular, older and larger organizations tend to have more resources and capabilities to initiate changes in their marketing strategy (Majumdar, 1997), Competitive intensity measures the degree of competition in the industry, explains the dynamism in the industry, and also influences firm capability development and willingness to engage in a capability formation process (Narver et al., 2004; Morgan et al., 2012).

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#### 3.3 Measuring the Dependent Variable:

For the export performance construct, export marketing researchers have used multidimensional measurement items such as financial performance (Leonidou, Katsikeas, & Samiee, 2002) and strategic performance (Keh, Nguyen, & Ng, 2007). To date, the export marketing literature has mainly focussed on the respondents' subjective views of export performance, whereas researchers have often overlooked an objective view of it. Earlier studies have recommended the application of a subjective measure for export performance (Lu et al., 2010; Woodcock, Beamish, & Makino, 1994) when: a) an organization's financial measures are not publicly available, b) cross border accounting practices create challenges to resolve difference in financial performance, and c) there are differences in the financial reporting and/or exchange rates between the home and host countries. In order to discuss the application of a subjective measurement of export performance, Morgan et al. (2004) adopted three financial measures (i.e., export volume, export market share, and profitability). Likewise, Zou, Fang, & Zhao (2003) applied subjective financial information measures to export performance: the exporter's sales revenue, return on investment, profitability ratio, and profit margin level. Similar to previous export marketing studies (Murray et al., 2011), we used subjective measures of export performance. In addition, past studies (Dess & Robinson Jr, 1984; Geringer & Hebert, 1991; Lu et al., 2010) recommended a satisfactory correlation between subjective and objective measures of organizational performance. Most firms included in this research were not publicly traded on a stock exchange, and thus did not have to disclose their financials. Hence, this research measured their performance by adopting subjective measures. To capture the sample exporting organizations' subjective views of performance, this study designed an export performance construct consisting of four items: growth performance, market share performance, return on investment performance, and customer satisfaction performance. The participants, who handled export functions, were asked how satisfied they were with: growth, market share, return on investment through export sales, and increase in customer satisfaction in the export market on a seven-point Likert scale (ranging from 1= very dissatisfied to 7= very satisfied, based on Lu et al., 2010).

# 3.4 Data Collection

We developed the sample frame in two stages. Due to the lack of established databases of exporters in Bangladesh, we approached the eight different industry exporters' associations of interest and organized several presentations for their senior officials to explain how this study might benefit the members of their respective associations so that they could be motivated to participate in the survey. A shortlist of 700 exporting firms was generated from the membership databases of these associations. We made repeated phone calls to each firm to: (1) verify that they were established exporters (with at least five years of experience); (2) identify within each firm a key informant with knowledge of export strategies; (3) explain the purpose of the study and how this might benefit the firm; and (4) explore each firm's willingness to participate in the study. Most of the firms (135) that did not show any interest in participating in the survey did so due to internal company policies, 50 firms were no longer exporting, and 70 had been in the export business for less than five years, for a total of 300 ineligible firms out of the 700 potential participants.

Between July and September 2015, we mailed the questionnaire with return stamped envelopes to management-level staff members of each of the remaining 400 sample firms. The questionnaire began with a short explanation of the importance of export marketing strategies and a request for the respondents to share their insights into the use of marketing instruments within their respective firms over the previous five years. Then, the respondents were asked to evaluate their respective degrees of awareness on relation to the adoption of marketing capabilities encompassing four mid-level ones; namely, (1) proactive market orientation processes (adapted from Atuahene-Gima et al., 2005; four items), cross-functional marketing capability; (2) the new product development capability (adapted from Merrilees et al., 2011; four items); (3) the customer relationship management capability (adapted from Orr et al., 2011; four items); (4) the brand management capability (adapted from Santos-Vijande et al., 2013; three items); the outcome 'export performance' variable (adapted from Lu et al., 2010), and the 'market uncertainty' exogeneous variable (adapted from Bodlaj et al., 2012; three items). Most of the items had been refined from the existing literature on the basis of the received during the pilot test.

Furthermore, the respondents were asked to share whether they had had earlier experience with managing export market operations within the previous five years. Finally, the respondents were asked to provide their standard demographic information—i.e., gender, educational qualification, job designation, and number of years' experience in managing export market operations. The respondents' attention in filling out the questionnaire was verified by means of two reverse coded questions.

The respondents were also contacted through telephone calls twice to follow up on returning the completed questionnaire, and, in some cases, were supported whenever they were in doubt about sharing their opinions within the survey questions. After repeated phone reminders, a total of 346 copies of the questionnaire were returned, 31 of which were excluded due to being only partially completed. Thus, the survey yielded a total of 315 valid copies of the questionnaire, representing a return rate of 45%. Table 4 shows the sample's composition. Most of the respondents were over 36 years of age, with job titles like CEO (38%) and export managers (62%), and wherein 72% had exporting experience between 5 and 10 years. Following Morgan et al. (2012), we also conducted an informant validity check. The researchers approached 20 of the sample firms that had provided valid responses to identify and collect data from a second informant. The average correlation on export marketing activities between the first and second informant ranged between 0.6 and 0.8, showing the internal consistency of the data.

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#### 3.5 Non-Response Bias Test

We tested non-response bias in two stages. In the first stage, the sample was split into two groups: early and late responders. A sample of 158 responses were selected to do this. In the second stage, a t-test of the two independent samples was performed on the four DMC constructs and export performance. The findings showed no significant difference between early and late responders, signifying that non-response bias was not a systemic issue with the data.

# 3.6 Common Method Bias Test

Collecting data from a single informant always has the potential for common method bias. In essence, we applied different response scales as an a priori CMV test for the independent and dependent measures such as "export performance items are measure by very dissatisfied = 1 and very satisfied = 7". As an a posteriori method, we first followed a correlation matrix procedure (Tehseen, Ramayah, & Sajilan, 2017). Table 7 reports the correlations among all the first-order latent constructs used in the model, which show that latent construct correlation not exceeding 0.9 (r > 0.9)By observing the correlation matrix, we could claim that multicollinearity and CMV was not an issue with the data. Secondly, we used marker variable procedure as another post hoc method of investigating the influence of CMV. Marketing scholars have often used the marker variables approach in previous work (Jaramillo, Mulki, & Boles, 2011). In the second stage, 'market uncertainty', a three items latent construct, was selected as a marker variable (Hulland, Baumgartner, & Smith, 2018) that was linked to all first-order exogenous and endogenous latent

constructs. The comparison between the unconstrained and the fully constrained models showed no significant difference in the  $\chi^2$  value (i.e.,  $\Delta\chi^2 = 60.76$ , p > 0.05) and a very strong fit for the unconstrained model (CFI = 0.962, NFI = 0.918). Thus, the findings empirically supported that CMV did not inflate the linkage between the marker variable and the latent constructs used in the model.

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## 3.7 Data Analysis Procedure

We performed the analysis in three stages. In the first, we established the higher-order measurement structure for the DMC using multi-stage confirmatory factor analysis (CFA) models, in which we used SPSS AMOS (version 23) to test the fitness of the measurement models. The reliability and convergent and discriminant validity of the constructs were checked by means of confirmatory factor analysis. In the second stage, as part of the taxonomy procedures, we explored variations within a high-order DMC configuration structure using cluster analysis. In the third stage, using analysis of covariance (ANCOVA), we explored how such DMC configurations lead

to differences in firm performance. To unfold the classifications of the underlying dimensions of a DMC strategy and investigate the differences in export performance between the clusters of higher-order DMC strategy thus empirically identified, we used the SPSS statistical package (version 23). This tool supported us in performing a cluster analysis (i.e., hierarchical, K-Means method) and in operationalizing the analysis of covariance (ANCOVA) test.

#### 3.8 Taxonomic Procedure

We subsequently ran a taxonomy procedure through a cluster analysis approach aimed at organizing the phenomena into a set of groups of homogeneous members separated from each other (Rohm & Swaminathan, 2004). On the basis of a set of preselected constructs/variables, a cluster analysis classifies cases that are composed of constructs into different groups (Aroean and Michaelidou, 2014). As it does not require an a priori assumption, cluster analysis is a method widely used in different domains for classifying samples and reducing the complexity of differences within populations (Kımıloğlu, Nasir & Nasir, 2010).

To identify how our sample firms could be classified as per their response to a higher-order DMC construct and develop a taxonomy, we took a multistep clustering approach (i.e., three decision-making stages) consistent with previous taxonomy work (Cannon & Perreault Jr, 1999; Homburg, Jensen, & Krohmer, 2008). First, to determine the number of clusters, we obtained a hierarchical cluster solution by using an average linkage method, which is less susceptible to the effects of outliers (Hair, Anderson, Tatham, & Black, 1998). This was supplemented with Ward's algorithm after removing 10% of the observations as outliers using the multivariate Mahalanobis distance  $D^2/df > 4$  (sig > 0.001) (Cannon & Perreault Jr, 1999; Punj & Stewart, 1983). Past studies

suggest this to be required to compare results by using two ways of clustering (e.g., Homburg et al., 2008). Both clustering techniques yielded a three-cluster solution. To test the robustness of such solution, we followed the procedure used by Homburg et al. (2008) to re-run the clustering algorithm with four independent random subsets with 50% of the data. Next, we computed the percentage increase in the agglomeration coefficient, where large changes indicated the point at which dissimilar clusters are forcefully combined (Hair et al., 1998). All the methods showed strong support for the three-cluster solution.

The second stage involved assessing observations to clusters. We followed the multi-stage procedure suggested by Homburg et al. (2008), which involves Ward's method to determine the initial seed point, followed by a K-Means clustering approach (i.e., a non-hierarchical method). Such fine tuning, which involved assigning observations into clusters where the initial seed was obtained from hierarchical methods, followed by K-Means clustering, was observed to be a powerful combination (Hair et al., 1998). The evidence from the K-Means cluster analysis suggested that the three-cluster solution was the most meaningful and interpretable.

The last stage involved the evaluation of the stability of the cluster assignment. By using a random split sample procedure, we divided the sample into two halves and ran a hybrid clustering (involving a hierarchical process followed by a non-hierarchical one). Such split sample technique is widely used in the literature to test the stability of cluster solutions (e.g., Homburg et al., 2008, 2012). Consistent with McIntyre and Blashfield's (1980) work on cross validation processes, we examined the reliability of the three-cluster solution. First, we identified a cluster centroid by assessing one half of the data set using a hybrid process. Next, we assigned each object from the second half of the data set to the nearest centroid computed from the first half of the data set.

Finally, kappa statistics were used to compare between the two solutions. The results strongly supported the three-cluster solution, and these clusters were adopted for further analysis.

### 4. Results

#### 4.1 Higher-Order Measurement Structure for DMC

This study conceptualizes a DMC as a four-dimensional, second-order reflective latent construct that is comprised of four first-order ones (PMO, CRMC, NPDC, and BMC) (as shown in Figure 1).

To verify the higher-order structure, we conducted first- and second-order CFAs following Santos-Vijande et al. (2012). The two stage measurement models were found to have satisfactory fit indices, with the first-order (CFI = 0.951, AGFI = 0.874,  $\chi 2/df = 2.115$ , RMSEA = 0.053) and second-order CFAs (CFI = 0.933, AGFI = 0.875,  $\chi^2/df = 1.885$ , RMSEA = 0.053) models confirmed the higher-order (multi-dimensional) reflective structure of the DMC. The use of CFA made it clear that the underlying constructs of the DMC converge into a single higher-order latent factor. Additionally, Santos-Vijande et al. (2012) suggested that it is imperative to find higher degrees of Consistent Akaike's Information Criteria (CAIC) to show the merit of higher-order reflective latent constructs in first stage compared to second stage measurement models. This study elicited a lower value of CAIC (635.469) in the second stage CFA model compared to that (764.047) of its first stage counterpart. This study confirmed that the second stage CFA model achieved satisfactory fit indices and, overall, the measurement models were found to support construct validity. Based on the CFA results, this study shows that the DMC is a reflective secondorder measure. We also compiled a correlation matrix to comprehend whether or not multicollinearity was influencing the results of the second stage CFA. Table 7 shows that all the latent constructs in the second-order CFA model were found to be below the cut-off point (r < 0.9) of multicollinearity (Gujarati, 2009). This enabled us to conclude that multicollinearity was not an issue for the second stage CFA model, and that higher-order latent constructs can be used to examine the measurement structure for the DMC. Hence, the results show that the DMC is a higher-order reflective construct composed of four latent sub-constructs: CRMC, NPDC, BMC and PMO.

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We also used the CFA results (Anderson & Gerbing, 1988) to test the measurement structure of the proposed DMC scale (see Tables 5 and 6). The results show the reliability of the scale (the values of Cronbach's alpha were all found to exceed 0.7, ranging between 0.778 and 0.902, and those for composite reliability were all found to exceed 0.7, ranging between 0.779 and 0.902), convergent validity (the standardized loadings of all items on their respective constructs were found to exceed the minimum threshold with t-values > 2.0), and discriminant validity (the AVE values of all constructs were found to exceed 0.5, and the squared correlation between any two constructs were found to be lower than the AVEs extracted by the constructs, with minimum AVE = 0.541). This indicated that the model developed based on the theoretical bases was reasonably specified and suitable to use in further analysis. Strong evidence of the higher-order structure of a DMC strategy was found by corroborating the fit of the measurement structure for a higher-order organizational strategy, and satisfying the benchmark score for validity (i.e., discriminant,

convergent) and reliability (i.e., Cronbach's alpha). Accordingly, we found support our proposition 1.

### 4.2 Cluster Descriptors: Identifying the Varieties in the DMC Configuration Structure

We identified three varieties (or clusters) of firms based on their approach to adopting a higher-order DMC strategy. The section below presents a description of the three different clusters. The analysis of the clusters revealed that each was distinct in terms of the level of engagement of its knowledge management mid-level marketing capabilities in emerging markets. Table 8 shows the profile of each cluster. Based on their respective scores, we used the terms 'enthusiastic embracers', 'cautious adopters', and 'despaired laggards' to name the clusters.

Cluster 1 (enthusiastic embracers): this cluster (57.8%) demonstrated the highest initiative in all underlying dimensions of the higher-order DMC construct (except for CRMC, where it was found to be medium). Such firms were found to be extremely adept at managing the mid-level marketing capabilities that could help them to reconfigure their knowledge management practices by proactively planning their market operations, constructing brands, developing new products for their customers, and maintaining a relationship with them. However, such firms were found to possess medium levels of knowledge management competency in maintaining a relationship with their customers. Most of these firms were found to belong to contemporary export sectors such as engineering/electrical products, light engineering products, plastic goods, ceramics and textile, which require firms to possess the agility to effectively meet the unexpressed needs of their customers. They were found to have achieved the highest level of export performance among the three clusters. This group represented the 'analysers' organizational strategy (Miles, Snow, Meyer, & Coleman Jr, 1978), which maintains a stable set of customers and products through dynamic export marketing initiatives and take a careful approach to exploring the market in order to swiftly respond during times of business environment turbulence.

Cluster 2 (cautious adopters): this cluster (26%) showed medium-high levels of engagement with BMC, NPDC, and CRMC, but the lowest level of PMO activities. This reflects the fact that such firms continuously exploited opportunities in the market and, at the same time, maintained their current product/market portfolios, while possessing low market planning abilities as they grow by merely being responsive to their markets' express needs. Compared to the other clusters, their performance achievement was found to be medium. Leather goods and handicraft exporters were found to dominate this cluster, as the traditional focus of this industry's firms is to respond to changes in knowledge management marketing competencies in order to satisfy new trends in the markets. This group exhibited the 'prospectors' type of firm-level strategy (Miles, et al., 1978) by continuously striving to locate and exploit new market opportunities.

Cluster 3 (despaired laggards): this group (16.2%) demonstrated low-medium levels of engagement in all aspects of managing a higher-level DMC strategy, and, at the same time, were found to have achieved the lowest levels of export performance. It was clear that this cluster did not show any initiative in regard to learning and understanding the changes in the market, neither did it focus on various mid-level marketing capabilities to respond to rapid changes. Rather, the firms in this cluster were found to exhibit greater efficiency in stable business environments. Miles, et al. (1978) referred them as 'reactors' that possess very little entrepreneurial skill along with light expertise in knowledge management marketing tactics. Overall, the findings pertaining to the clusters provided important insights that confirmed our proposition 2.

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### 4.3 Differences in Performance Based on Higher-Order DMC Configurations

This part of the findings section presents how the clusters were found to differ in terms of their achievement of business performance. We performed 'Analysis of Covariance' (ANCOVA) to explore inter-cluster performance differences. Thus, we operationalized four independent ANCOVAs with the four manifest items of export performance as the criterion variables. The ANCOVA tests were controlled by three contextual factors (i.e., firm size, firm age, and industry sector competitive intensity), whereas the resulting cluster (DMC configuration) was selected as the independent variable. The results, presented in Table 9, show a statistically significant difference (p < 0.05) in higher-order DMC configurations towards export performance. This was confirmed by the ANCOVA tests. In particular, the testing of the between-subject effects indicated that the resulting clusters had a significant effect on four items of export performance. The ANCOVA tests also revealed no difference (P > 0.05) in firm age, firm size, and industry sector competitive intensity across the four measurement items of export performance.

We also evaluated export performance differences between each pair of clusters by using the Bonferroni procedure, which presents lower limitations with regard to any differences in size between clusters. The results (Table 8) indicated that Cluster 1 (enthusiastic embracers) outperformed the other two, whereas Cluster 3 (despaired laggards) achieved the worst performance scores. Compared to the cautious adopters and despaired laggards, the enthusiastic embracers were found to demonstrate higher levels of involvement in proactive orientation strategies, innovativeness, and brand management systems, thus achieving better export performance. Conversely, the cautious adopters were found to exhibit higher levels of customer relationship management strategies than the other two clusters in regard to meeting their customers' needs and providing solution packages in their export markets. In reality, by participating in international fairs, the cautious adopters were reflecting their global presence on their customers' doorsteps, and this was due to their better customer relationship management strategies. With regard to future business strategies, the enthusiastic embracers were found to demonstrate stronger intentions to act proactively within their export markets, and the respondents within this cluster were found to have recorded better export performances due to their involvement in reconfiguring their knowledge management marketing capabilities. This is not surprising, given that previous research (Krasnikov & Jayachandran, 2008) shows that firms possessing higher-order marketing capabilities are likely to exhibit superior performance. The ANCOVA further confirmed the significance of our proposition 3.

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### 5. Discussion and Conclusions

This study conceptualized a higher-order DMC strategy as a multi-dimensional construct. Our analysis confirmed the DMC as a second-order reflective latent construct. More specifically, one that comprises four first-order constructs (PMO, BMC, NPDC, and CRMC) that are defined as mid-level/cross-functional marketing capabilities.

In order to establish normative conclusions for our approach to a higher-order DMC strategy, we evaluated the association of the DMC with performance through a configurational approach that resulted in classifying our firms into three clusters. Our analysis showed that higher performance was mainly associated with exporters practicing high levels of DMC strategy.

#### 5.1 Research Contribution

This paper contributes to the RBV-KBV and DMC research in three ways. First, past research had theorized (e.g., Morgan, 2012) and empirically verified (e.g., Bruni and Verona, 2009) individual elements of DMC. However, a gap in the literature remained in regard to how the underlying components of a DMC strategy might interact to support effective strategy implementation, particularly in the context of exporting firms from emerging economies. By using a two stage CFA model, this study demonstrated the multi-dimensional reflective nature of the DMC construct. In doing so, it enriches and extends the literature on the higher-order theoretical propositions of a DMC strategy (e.g., Morgan et al., 2018; Baralles-Molina et al., 2014; Bruni and Verona, 2009; Fang and Zou, 2009; Morgan, 2012). In the same vein, although past research had also explored the role of various marketing capabilities such as planning and implementation, international marketing capability (Li, Liu, and Bustinza, 2018), or relationship building in the export context, it had done so in isolation (e.g., Lages et al., 2009; Spyropoulou et al., 2017). However, such capabilities are often cross-functional and require resource inputs from across the organization to achieve effective strategic implementation. This required a much more integrated approach. The findings of this study validate the proposition that the systematic integration of four individual mid-level marketing capabilities supports the formation of a higher-order DMC strategy whereby the effective strategic implementation of an exporter can be achieved in order to face the demands of the export market.

Second, past research had shown the positive influence of the marketing capability on firm performance (e.g., Krasnikov and Jayachandran, 2008). However, such research was limited in regard to whether firms can achieve better performance by concentrating on specific elements of their DMC and their interplay. This is significant because the DMC is a higher-order multidimensional construct that requires a cross-functional approach—rather than a disjointed one—to improve the resource-capability configurations in individual marketing areas of a firm. We tackled this issue by taking a configurational approach. Using cross-industry data, we identified three firm clusters and showed that the enthusiastic embracers—which are characterized by high levels of activity across marketing capabilities such as PMO, NPDC, and BMC—are more effective in implementing strategy and achieving better performance than the other clusters. Our three-cluster solution is consistent with the extant strategic grouping literature (Miles et al., 1978; Slater, Olson, & Hult, 2006). This provides additional justification to our conceptualization and construct identification of a DMC strategy in the exporting context.

Some empirical evidence (Murray et al., 2011, Tan and Sousa, 2015) suggests that success in export performance may stem from the exporters' ability to effectively align knowledge-based resources and capabilities, rather than from a focus on individual marketing mix capabilities. This raises the question of how export-oriented firms from emerging markets align their organizational strategic typology with their DMC strategy configurations. As the underlying dimensions of a higher-level DMC strategy involve the processes of knowledge absorption and knowledge implementation (Hoque, Ahammad et al., 2020), we drew attention to the knowledge-based view to the end of evaluating which archetypical configurations of a DMC strategy, as a knowledge management system, can generate better value offerings in the export markets of emerging economy firms. Finally, our findings are in line with Fletcher et al. (2013), who argued that the effective implementation of an internationalization knowledge management system is contingent on a firm's higher-order organizational capability structuration. The findings of this study contribute to the RBV-KBV by answering that the 'enthusiastic embracers' structuration of a higher-order DMC strategy enables exporters to mitigate the difficulties found in transferring their knowledge-based resources across their cross-functional business units in order to improve export success.

Collectively, the findings of this study provide an enhanced understanding of how emerging market exporting firms should maintain an effective alignment of their mid-level marketing capabilities in order to adjust their higher-order DMC strategy to deal with any adverse environmental changes. While Buccieri, Javalgi, and Cavusgil (2020) showed the importance of dynamic marketing capabilities in enhancing international new venture performance, we explored three different patterns of DMC strategy (i.e., enthusiastic embracers, cautious adopters, and despaired laggards) that support firm in identifying their firm-level strategic types as 'analyser', 'prospector', or 'reactor'. These findings are consistent with Efrat, Hughes, et al. (2018) by confirming that the proclivities of enthusiastic embracers (Cluster 1: analyser strategic type) enable them to adopt a proactive market orientation and refine the innovativeness of their products, brand management systems, and customer relationship management processes in order to remain competitive in their export markets. Specifically, the exporter DMC typology that exhibits export performance varies based on the different patterns of adaptive behaviours adopted by firms in managing their mid-level marketing capabilities within emerging markets. In doing so, this study directly answers the call for research aimed at jointly extending the RBV and KBV perspectives (Pereira & Bamel, 2021) and being applicable to the high risk, dynamic, and challenging contexts faced by exporting firms from emerging countries.

## 5.2 Practice and Policy Implications

The study offers two insights to the export marketing managers and policy makers responsible for the development of the export infrastructure in the context of emerging nations.

First, this research shows that an exporting firm can improve its performance by paying close attention to developing a good sense of the current market, planning for any future market changes (PMO), and executing any strategies with a much improved cross-functional DMC (BMC, NPDC, and CRMC). The higher-order DMC structure developed in this study offers an important diagnostic tool whereby managers can benchmark their own approach against those of the best performers (enthusiastic embracers) in the industry.

Secondly, our findings further emphasise how exporting firms can manage their business environment by prioritizing resource investment decisions that focus on a unified approach to strategy formulation (PMO) and, most importantly, on its implementation elements (BMC, NPDC, and CRMC). Interestingly, our analysis directs us to recommend that, rather than seeking to be simply the best in sensing current and future market trends, the managers of exporting firms should take good stock of the DMCs that are related to their marketing implementation effort and seek to improve them. Indeed, in the context of an exporting firm, the pursuit of a position of leadership in relation to sensing current and future market trends may be not only impossible but also damaging for the whole firm because it will deplete the resources required to develop a really attractive profile for its international business partners (importers). Based on our research, the best performance can be achieved by those companies that acknowledge the importance of sensing current and latent customer needs while, at the same time, managing to combine this with an implementation approach that includes the establishment of a reliable and trusted brand, constantly adopting new technology to meet buyer standards in new products, and taking a proactive approach to identifying and developing customer relationships in foreign markets.

From a policy-makers' perspective, seeking to assist those firms that face challenges similar to those experienced by exporters from Bangladesh would certainly entail the creation of

an infrastructure that supports existing good performers (i.e., enthusiastic embracers) but also motivates others (e.g., cautious adopters) to capitalize on the recommendations of this study. More specifically, given their limited resources, policy-makers could adopt the clustering approach of our study to identify different groups of exporters, thus directing their approach towards a focused and highly customized intervention for each group. For example, enabling and relief mechanisms could be applied with the aim of enhancing the identification of international market trends in new products for each relevant industry. Among other aspects, this would require government investment, for example, in national exporting institutions (thus *enabling* the collection and dissemination of export information to the country's exporters) and/or in the provision of financial support aimed at enabling firms to attend international resources). By the same token, exporting firms could be incentivized to improve the very critical DMC related to their strategic functional expertise in PMO, NPDC, BMC, and CRMC. Government-supported training and financial resources could thus be assigned to enhance such DMCs.

#### 5.3 Limitations and Future Research

The study has few limitations that could be addressed by future research in this area. First, it focussed on the conceptualization and empirical verification of DMC constructs, but did not consider the corresponding resources needed to build such capabilities. Future research could incorporate marketing resources (e.g., knowledge, financial or reputational ones) in the resource-capability transformation framework. Second, this study did not consider the fit between DMC development/ implementation and the strategic objectives of a firm (e.g., cost minimization vs. profit maximization) or other organizational characteristics (such as top management commitment). Future studies could consider exploring such factors in their DMC formulations.

Third, we collected subjective performance data from single informants, thus creating the potential for common method bias. Although we performed various tests to check that this was not systemic in the data, future research could draw data from multiple informants into the research framework for additional verification and to incorporate objective performance data from companies' accounts and export records. Finally, this study was conducted within the contextual industrial/market parameters of Bangladesh as an emerging exporting nation. As noted earlier, despite the unique contributions of this approach, replicating this research in other emerging exporting nations would be advised in order to better establish a more thoroughly informed and contextually robust theory of DMC in exporting.

#### 5.4 Conclusion

To summarize, this study answers three important research questions in the context of exporting firms from Bangladesh: "To what extent can an exporter generate a higher-order DMC strategy through the RBV-KBV lens?", "To what extent can an exporter identify variations in the underlying dimensions of a DMC strategy in order to rectify its taxonomy?", and "To what extent does an exporter's fine-grained configuration of a higher-order DMC strategy provide an effective export strategy implementation suited to positively affect firm performance?"

To do so, it explored a sample of exporters' knowledge management marketing capabilities—namely, PMO, CRMC, BMC, and NPDC—as clustering variables suited to develop a taxonomy of DMC strategies, and provided exploratory evidence of the adequacy of the fine-grained configuration of these strategic MCs for global market penetration. Specifically, such constructs involve knowledge gathering and cross-functional strategic marketing expertise. Three interpretable clusters were generated from the sample—enthusiastic embracers, cautious adopters,

and despaired laggards—based on their DMC strategies, wherein firms with proactive DMC approach were found to exhibit a significantly better performance than others. In doing so, this study answered the call to extend the RBV-KBV research in a new context in which exporters from emerging markets need to integrate their limited knowledge-based resources and transform them into unique knowledge-management systems. Though these, exporters will be able to interact with their unstable export market environments, and subsequently adopt a well-balanced DMC strategy suited to meet the needs of the dynamic and volatile western buyers. Finally, by establishing a clear link with international performance, this study has provided clear evidence in favour of embedding this new theorization of DMC strategy into the strategic fabric of a firm.

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Authors	Research question and design	Conceptualization	DMC components considered	Research Findings
Falasca et al., 2017	Th effects of DMC components on innovation performance: quantitative research	A marketing dynamic capability acts as mediator between customer knowledge management and product innovation performance	Customer knowledge management, DMC <sup>a</sup>	A customer knowledge management capability and the use of a marketing dynamic capability have significant influence on the attainment of product innovation performance.
Fang & Zou, 2009	The effects of DMC components on organizational performance: quantitative research design	Resource magnitude, complementarity and organizational culture influence DMC for international joint ventures	Product development management, supply chain management, and customer relationship management	DMC is a higher-order multidimensional construct
Bruni & Verona, 2009	The effects of DMC components on organizational performance: qualitative research design	Market knowledge can be an important source of capability reconfiguration in the product development process, and it facilitates reconfiguration of resources.	New product development; market knowledge and marketing resources	Market knowledge accumulation is an important resource for the modification of a firm's MCs in ways suited to generate commercially valuable products and services.
Kaleka, 2011	The impact of marketing capabilities on performance: quantitative research design	The conceptual model illustrates that the service advantage of a firm is contingent on tacit knowledge and financial resources through the indirect influences of higher-level MCs (customer relationship	informational, customer relationship, and product development <sup>a</sup> ; Experiential Resources/	An exporter's possession of a knowledge accumulation capability contributes directly to its innovativeness and customer relationship management capability, in which the results reveal the importance of adopting both tacit knowledge along with financial resources to realize better export venture

# Table 1: Research streams of RBV, dynamic capability view & dynamic marketing capability view used in marketing literature

		management capability and product development capability), in which a knowledge accumulation capability acts as a determinant of higher-level MCs.	Tacit Knowledge, Financial Resources <sup>b</sup>	performance. However, little is known about how an exporter can enhance its knowledge accumulation capability, and what is still unclear is the influence of ambidextrous learning processes within the relationship between learning and capability deployment.
Morgan, Vorhies, & Mason, 2009	The impact of marketing capabilities on performance: quantitative research design	The proposed model depicts the direct influence of responsive market orientation and specialized marketing capabilities on firm performance as well as the complementarity influence of market orientation and specialized MCs on firm performance.	Specialized marketing capabilities and responsive market orientation	The findings support the notion that a complementary linkage between the market orientation and marketing capabilities is essential to explain better firm-level performance. Nonetheless, this study requires more clarity in regard to the changes in proactive and responsive market orientation capabilities.
Lages, Silva, & Styles, 2009	Quantitative	An export firm's performance is contingent on its learning, relationship, and quality capabilities through their indirect influence of product strategy, such as product innovativeness and quality.	Organizational learning, relationship, and quality capabilities	This study showed effects of a product strategy (i.e., innovativeness and quality) on export performance (in terms of relationship performance).
Morgan et al., 2018; Morgan, 2012	Dynamic marketing capability evolution: theoretical paper	This study introduced a large number of marketing related resources and capabilities, and showed the complementary effect of such resources and capabilities on performance.	Specialized marketing capability, cross- functional marketing capability, dynamic marketing capability, architectural	An MC has three levels, namely, high- (DMC or DC), mid- (strategic and cross-functional), and low-order ones (specialized/tactical marketing skills). DMC as a process of market learning, resource reconfiguration together with capability refinement that acts in a firm cross functional business unit.

			marketing capability	
Barrales- Molina et al., 2013	Dynamic marketing capability evolution: theoretical paper	The underlying processes of DMC are the sensing, learning, and integrating capabilities. This study postulates that a firm's knowledge absorption capacity and knowledge management processes are specific components of DMC that the enablers of DMC should possess such as new product development capability and proactive MO.		Researchers proposed a conceptualization of underlying processes, enabler, specific components and marketing enablers of DMC. This study showed NPDC and PMO are two crucial components of DMC.

# Table 2: Steps of scale development

Stage 1: Defining the construct and confirming the face validity of the conceptual model	<ul> <li>Seven face-to-face semi structured interviews aimed at comprehending constructs and DMC dimensions.</li> <li>This process confirmed that DMC is a four-dimensional hierarchical reflective construct</li> <li>This process supports the definitions of the DMC's underlying dimensions that are related to the literature review.</li> </ul>
Stage 2: Forming the items and purifying them through experts' comments	<ul> <li>In this process, 35 items were generated along with 17 demographic questions</li> <li>Fifteen export marketing experts (i.e., practitioners and scholars) were involved in assessing the items' face and content validity</li> <li>Initial assessment of item reliability, factor loading, and item refinement.</li> <li>Twenty-seven items represented; 8 constructs were retained for the final stage questionnaire</li> </ul>
Stage 3: Confirming the scale for constructs	<ul> <li>In this stage, survey to 315 export organizations' manager-level executives from a shortlist of 700 export organizations.</li> <li>Twenty-seven items were retained to estimate reliability, perform confirmatory factor analysis, and evaluate validity.</li> </ul>

# Table 3: Selective statements from semi-structured interviews

	Dermanderstellersteller
Underlying	Respondents' quotes
dimensions	
of DMC	
Market	"in our case, as an export-oriented handicraft manufacturer, we put emphasis
orientation	on proactive and responsive market orientation, but the degree of resources
	investment differs in both cases" – International marketing manager (company A)
New product	"in our case, we repeatedly seek new ideas and hence employees from different
development	business units bring commercially innovative ideas for supporting new product
capability	development" – CEO (company B)
Customer	"we are trying to attend the international fairs to communicate with overseas
relationship	potential customers. By attending international fairs, we accumulate valuable
management	information about manufacturing process, production flexibility and cost
capability	minimization issue in apparel sector." – Compliance manager (company C)
Brand	"as a furniture exporter, we are talking about brand reputation and brand
management	image's importance within functional business units. This supports every
capability	employee to be aware about our corporate brand and they can represent explicitly
	our brand in international trade fairs" – Merchandiser (company D)

 Table 4: Sample composition

Respondents' information	Responses	Percentage	Respondents' information	Pe	rcent
Job Title			Export experience		
CEO	119	38	5-10 years' experience		72
Marketing manager	28	9	11-15 years' experience		15
International marketing manager	63	20	16-20 years' experience		8
Merchandiser	69	22	21-30 years' experience		4
Compliance manager	36	11	30+ years' experience		1
Total	315	100.0			1
Industry type			Sales from exports		
Engineering/Electrical	24	7.6	Above 90%	181	72%
Handicraft and furniture	59	18.7	75-90 %	20	14.9%
Plastic goods	19	6.0	60-75%	14	8.3%
Leather goods	47	14.9	30-60%	33	3.8%
Finished leather	18	5.7			
Textile	134	42.5			
Ceramics	10	3.2			
Light engineering	4	1.3			
Total	315	100			

Construct Sources	Constructs	Standardized	t-		Reliability	
		parameters	values	Cronbach's alpha	CR	AVE
	Proactive Market Orientation					
Atuahene-Gima et al. (2005)	PMO1: We continuously try to discover additional needs of our potential customers of which they really value but never disclose to us	0.867 <sup>a</sup>		0.902	0.902	0.697
Atuahene-Gima et al. (2005)	PMO2: We inspect users existing products complication to offer better solution to satisfy needs	0.85	18.991			
Atuahene-Gima et al. (2005)	PMO 3: We support customers to improve their expectation in the market through our suggestions.	0.822	18.022			
Atuahene-Gima et al. (2005)	PMO 4: We work closely with lead users who try to recognize customer needs earlier than key competitors' action of understanding customers' needs	0.800	17.275			
	Customer Relationship Management Capability					
Orr et al. (2011)	CRMC 1: We repeatedly focus on meeting long term needs to retain customers in the export markets.	0.847 <sup>a</sup>		0.841	0.841	0.571
Orr et al. (2011)	CRMC 2: We routinely establish a "dialogue" by attending in international fairs to meet with target customers	0.803	15.533			
Orr et al. (2011)	CRMC 3: (-) We hardly invest on developing IT infrastructure to enhance quality of relationship with attractive customers.	0.686	11.818			

# Table 5: DMC measurement model, items and their sources

					T	
Orr et al. (2011)	CRMC 4: We apply innovative marketing and promotion methods to maintain loyalty among potential buyers compared to the rivals	0.673	14.583			
	Brand Management Capability					
Santos-Vijande et al. (2013)	BMC 1: Our brand decisions are a very important element in the firm's business strategy	0.751 <sup>a</sup>		0.778	0.779	0.541
Santos-Vijande et al. (2013)	BMC 2: We have a well-coordinated, multidisciplinary team to manage its brand	0.706	10.863			
Santos-Vijande et al. (2013)	BMC 3: (-) We hardly invest in managing and promoting the reputation/image of our firm compared to key rivals	0.748	11.284			
	New Product Development Capability					
Merrilees et al. (2011)	NPDC 1: We rapidly respond to solve customer's problems by presenting new solution package	0.820 <sup>a</sup>		0.843	0.847	0.582
Merrilees et al. (2011)	NPDC 2: We frequently upgrade capacity utilization process to reduce order lead time of product development	0.807	15.533			
Merrilees et al. (2011)	NPDC 3: We focus on improving plant efficiency to reduce production cost of product development	0.646	11.818			
Merrilees et al. (2011)	NPDC 4: We are better at adopting new technology to commercialize new ideas to satisfy buyers' standards	0.766	14.583			
	Performance in the export market					
Lu et al. (2010)	EP 1: How satisfied you are with the growth level in the export markets (Growth profitability) <sup>a</sup>	0.876 <sup>a</sup>		0.841	0.841	0.573

Lu et al. (2010)	EP 2: How satisfied you are with the market share position in the export markets (market share profitability)	0.800	16.170			
Lu et al. (2010)	EP 3: How satisfied you are with the return on investment level through export sales (return on investment performance)	0.639	12.069			
Lu et al. (2010)	EP 4: How satisfied you are with the increase in customers satisfaction level in the export markets (customer satisfaction performance)	0.691	13.358			
	Market Uncertainty					
Bodlaj et al. (2012)	MKT 1: In our kind of business customer requirements vary significantly across different customer segments.	0.654 <sup>a</sup>		.799	0.807	0.585
Bodlaj et al. (2012)	MKT2: In our kind of business, customers' product preferences change slightly over time.	0.843	10.602			
Bodlaj et al. (2012)	MKT 3: It is very difficult to predict demand for our products.	0.786	10.705			

*Key:* PMO = Proactive market orientation, NPDC = New product development capability, BMC = Brand management capability, CRMC = customer relationship management capability, MKT = Market Uncertainty

a= In order to set the construct initial factor loading constraint to 1.

# Table 6: Multilevel DMC structure

Factor	Dimensions	Standardized parameter	t-value	Reliability and convergent validity check
Second-order factor: DMC	PMO NPDC CRMC BMC	0.638 0.712 0.683 <sup>a</sup> 0.85	10.358 9.867  13.482	Cronbach's alpha = $0.887$ ; CR = $0.814$ AVE = $0.526$

*Key: PMO= Proactive market orientation, NPDC=New product development capability, BMC= Brand management capability, CRMC= customer relationship management capability, DMC= Dynamic marketing capability,* \**a*= In order to set the construct initial factor loading constraint to 1.

Table 7: Correlation matrix for	measuring discriminant validity
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	CRMC	EXPERF	BMC	PORO	NPDC
CRMC	0.756				
EXPERF	0.618	0.757			
BMC	0.547	0.562	0.735		
PMO	0.324	0.320	0.382	0.835	
NPDC	0.484	0.575	0.561	0.701	0.763
Second-ord	er factor se	uared corr	elations		
	EXPER	F			DMC
EXPERF	0.759				
DMC	0.721				0.725

Note: The square root of AVE for each column construct is reported in bold along the diagonal. Other relationships are the correlations between two constructs.

*NPDC- New product development capability, CRMC- customer relationship management capability, PMO- Proactive market orientation, EXPERF- Export performance, DMC- dynamic marketing capability* 

# Table 8: DMC clusters explanation

	Enthusiastic Embracers	Despaired Laggards	Cautious Adopters
Percentage of observations	57.8%	16.2%	26%
Engineering/Electrical	50%	16.7%	33.3%
Handicraft & Furniture	44.1%	18.6%	37.3%
Plastic goods	63.2%	15.8%	21.1%
Leather goods	53.2%	17.0%	38.9%
Finished Leather	33.3%	27.8%	29.8%
Textile	65.7%	14.2%	20.1%
Ceramics	90%	10.0%	0%
Light Engineering	100%	0%	0%
DMC Constructs			
РМО	High (5.997)	Medium (3.617)	Low (3.548)
BMC	High (5.638)	Low (2.637)	Medium (4.204)
NPDC	High (5.333)	Low (3.516)	Medium (4.943)
CRMC	Medium (6.653)	Low (3.784)	High (6.693)
Export performance	High (4.881)	Low (3.220)	Medium (4.771)
	N=182	N=51	N= 82

*Key: PMO*= *proactive market orientation, NPDC*=*New product development capability, BMC*= *Brand management capability, CRMC*= *customer relationship management capability.* 

Export performance	Predictors	F	Partial eta	Significance
manifest variables		statistics	squared	level
Growth profitability $R^2 = 0.210$	Firm age	0.181	0.011	0.671
	Firm size	0.227	0.001	0.634
	CMI	8.453	0.027	0.054
	DMC configuration	34.280	0.182	0.000
Market Share profitability $R^2 = 0.162$	Firm age	6.088	0.019	0.344
	Firm size	0.905	0.003	0.342
	CMI	7.542	0.024	0.068
	DMC configuration	21.351	0.121	0.000
Return on investment $R^2 = 0.110$	Firm age	4.999	0.016	0.260
	Firm size	0.873	0.003	0.351
	CMI	2.340	0.008	0.127
	DMC configuration	15.337	0.090	0.000
Customer satisfaction performance $R^2 = 0.130$	Firm age	1.132	0.004	0.288
	Firm size	0.167	0.001	0.683
	CMI	2.106	0.007	0.148
	DMC configuration	19.940	0.114	0.000

 Table 9: ANCOVA of export performance differences among the three groups

*Key: CMI= competitive intensity, DMC= dynamic marketing capability* 



