

# Designing a demand chain management framework under dynamic uncertainty

## An exploratory study of the Chinese fashion apparel industry

Ying Ye

*Department of Business IT and Logistics,  
RMIT University College of Business, Melbourne, Australia, and*

Kwok Hung Lau

*RMIT University College of Business, Melbourne, Australia*

### Abstract

**Purpose** – The purpose of this paper is to put forward a demand chain management (DCM) framework underpinned by the alignment theory and applies it to investigate the fashion apparel (FA) industry in China under the impacts of the latest economic transition.

**Design/methodology/approach** – An exploratory multiple case study methodology involving five Chinese FA firms, each with a different business model and ownership type, was employed. Semi-structured interviews, onsite observations and review of company documents were conducted to collect information for analysis.

**Findings** – Using a conceptual DCM framework as a guide for analysis, the study finds that companies with a higher level of alignment with the external market situation and among the three internal DCM dimensions, namely, market management, supply chain management (SCM), and organization management, appear to perform better under the rapidly changing economic conditions in China.

**Research limitations/implications** – This study contributes to knowledge by reviewing thoroughly the literature on SCM evolution and develops a DCM framework based on alignment theory that represents the state of the art in this area. By extending the administration-integration-production-development (A-I-P-D) logic set adopted in the alignment theory, this study has also equipped the proposed framework with an empirical tool to measure alignment.

**Practical implications** – By applying the framework to examine the Chinese apparel industry under the impacts of the latest economic transition, this study provides practitioners in the industry with a framework to help formulate strategies and a tool to measure alignment. The findings of the case study also offer insights to the industry to thrive in the rapidly changing businesses environment with dynamic uncertainties.

**Originality/value** – This study extends the application of the A-I-P-D logic set under the alignment theory to the SCM field. This endeavor successfully transforms the proposed DCM framework from a theoretical concept to a practical tool to help evaluate empirically the alignment and strategic fit of a firm and potential relationship with firm performance. As the Chinese FA market has increasingly evolved under the impact of the globalization, the findings of this study not only assist the local FA companies in coping with the dynamic uncertainties but also shed light on the future developments of the global FA industry. Besides, the alignment measurement tool embedded in the proposed DCM framework can help enhance the chances of business success during implementation.

**Keywords** China, Supply chain management, Fashion apparel industry, Demand chain management, Dynamic process alignment, Strategic fit of the alignment

**Paper type** Research paper



### Introduction

China's apparel market represents one of the largest growing retail markets in the world. Attributed to the booming e-commerce and digital technology, there is a proliferation of domestic consumptions from not only the big metropolis but also the large number of inland cities (Fung Business Intelligence Centre, 2014). The rising demand for clothing is also

fueled by the stable increase in household income. Improved living standard of people in the country has shifted the focus from basic apparel to more diverse fashion products (Lu and Dickson, 2015). According to the forecast made by Euromonitor, annual apparel sales in China will reach \$333,312 million by 2019, an increase of 25 percent from \$267,246 million in 2014 (Euromonitor International, 2014). However, confronted with growing dynamism, traditional fashion apparel (FA) companies have encountered a series of disruptive difficulties, such as rising labor cost, outdated product lines and large over-stocks, which finally led to supply chain (SC) breakdowns (Yuan and Xu, 2010; Chao and Lu, 2015). Despite the dramatic changes and the dynamic market uncertainties, research on how Chinese FA companies adapted to disruptive changes is limited.

The fashion market is characterized as an industry of short lifecycle, high volatility, low predictability and frequent impulse purchases (Lyons *et al.*, 2012). With the movement of globalization, managing an apparel SC to source from labor-intensive countries and coordinating a long pipeline in short lead time in order to catch up with the rapidly changing trends have become increasingly critical for industrial players (Cao *et al.*, 2008; De Brito *et al.*, 2008). Although many proposed supply chain management (SCM) solutions have considered meeting market demand with proper supply fulfilment method, most of them prescribe a one-size-fits-all solution with either a lean or an agile SC to cope with the dynamism (Bruce *et al.*, 2004; Comm and Mathaisel, 2005; Lam and Postle, 2006; Masson *et al.*, 2007; Barnes and Greenwood, 2006). With a view that market orientation is ancillary to SC operation, the need to fulfill various demands with an integrated SC process is still largely neglected in previous studies (Lee, 2002; Christopher *et al.*, 2006). In recent research, some scholars have suggested using a taxonomy approach to specify SC strategies taking into account demand differences. For instance, Brun and Castelli (2008) developed the “segmentation tree” process incorporating three demand elements – product, channel and brand characteristics – into supply strategies. Similarly, Yi *et al.* (2011) identified four types of supply strategies, namely, laggard, conservative, agile and aggressive, that could be assigned to product categories for higher SC flexibility. While new jargons and initiatives are being developed constantly, theoretical basis for how these strategies are derived and linked with each element in the SC process is still insufficient. To fill the research gap, this study puts forward an overarching demand chain management (DCM) framework underpinned by the strategic fit concept of the alignment theory and proposes a set of measurements that can integrate the theory with the specific SCM processes.

To begin with, this study reviews the paradigm shift of SCM and DCM, and underlines some of the key strategic frameworks that led to the paradigm shift. As a descendant of SCM, DCM advocates that in order to thrive in a highly dynamic business environment, a firm’s strategic objectives must align externally with the marketplace and internally among its SC processes so as to attain a strategic fit (Van Landeghem and Vanmaele, 2002; Walters, 2006; Hilletoft *et al.*, 2009). Based on this notion, a dynamic DCM framework and its theoretical foundation is proposed. Key DCM scopes, elements, components and SC strategies are identified and incorporated. To illustrate the application of the theoretical framework, the Chinese apparel industry, which is fast-developing and subject to dynamic market uncertainties as a result of rapid economy growth in the country, is taken as a case study.

China has been experiencing a series of economic transitions in the last few decades generating significant impacts on the domestic market (Mo, 2010; Lu and Dickson, 2015). This study attempts to explore the changes that the FA companies made in response to the impacts and examine if the strategic fit approach of DCM alignment can be applied in this case to analyze how dynamic market uncertainties were dealt with by the firms. To achieve this, five Chinese FA companies, each represents one of the major corporate ownerships and SC structures in the current market, were selected for investigation and interviewed.

Within-case analysis and cross-case comparison were conducted to analyze the information collected. Empirical data were matched against the corresponding logic codes derived from the alignment theory used to underpin the proposed framework. Findings of the cross-case comparison suggest that the levels of internal and external alignment of five companies are related to their performance during the economic transition. Apart from contributing to knowledge, the outcome of the study provides industry practitioners in the transitional Chinese retail market with insights on how to thrive in the turbulent economic changes.

The paper is structured as follows. Upon a comprehensive literature review on the topic, a theoretical framework is put forward. The methodology of the study will then be discussed followed by the findings of the within-case analysis and cross-case comparison. Implications of the findings will then be deliberated followed by a conclusion with discussion on limitations of the study and directions for future research.

### **Literature review**

#### *From SCM to DCM*

The term SCM has been coined to describe both changes within the SC as well as the evolution of SC processes, strategies, and management tools. SCM first appeared in 1980s as a concept encompassing all activities associated with the flow and transformation of goods from raw materials through to the end user (Oliver and Webber, 1982). The intense global competition in 1980s forced many organizations to offer low cost, high quality and realizable products with greater SC efficiency (McFarlane, 1984; Chandra and Kumar, 2000). Manufacturers utilized just-in-time and other management initiatives to improve manufacturing efficiency and cycle time (Srinivasan *et al.*, 1994; Thomas and Griffin, 1996; Tan, 2001). Lean production, adopted in the Toyota Production System (Ohno, 1988), was one of the significant advancements in the early 1990s promoting the use of barcodes, electronic data interchange and shipment record for cost cutting (e.g. cost of inventory and overheads) and accuracy improvement. This had transformed the traditional ways of manufacturing into managing all activities evolved from suppliers to customers for smooth product flow and lead-time reduction (Henderson and Venkatraman, 1993; Broadbent and Weill, 1993). During this period, the objective of SCM focused mainly on minimizing inventory and enhancing SC efficiency (Davenport, 1993; Hewitt, 1994).

Starting from the late 1990s and throughout the 2000s, globalization was in full swing. Outsourcing of manufacturing and distribution had driven companies to focus on “core competencies” (Childerhouse *et al.*, 2002; Frohlich and Westbrook, 2002). Instead of vertical integration, companies outsourced less-competitive functions to various service providers, such as Original Equipment Manufacturers (OEMs), to develop close SC partnerships (Williams *et al.*, 2002; Al-Mudimigh *et al.*, 2004). This change had generated significant effects on SC infrastructure – from the foundation layers of establishing and managing electronic communication between trading partners, to more complex requirements, such as the configuration of processes and work flows that are essential to the management of the network itself (Robertson *et al.*, 2002; Stratton and Warburton, 2003). Under this context, SCM was defined as the integration of key business processes linking the end users with the original suppliers that provides products, service, and information for customers and other stakeholders (Lambert *et al.*, 1998; Tan *et al.*, 1998). Emphasizing on the importance of customer, agile SC strategy was proposed using market knowledge and virtual corporation to exploit profitable opportunities in a volatile marketplace as a trade-off solution opposed to lean strategy (Naylor *et al.*, 1999; Mason-Jones *et al.*, 2000). Companies strived to assemble networks of specific partners and tailor combined supply processes for different demand categories to realize SC agility (Flint, 2004; Walters and Rainbird, 2004). The supply processes might differ between various types of organizations but mostly included procurement, manufacturing, logistics capacity consideration (inventory and delivery),

---

SC information technology and SC relationship (Lambert *et al.*, 1998; Christopher, 2000; Hines, 2004). During this period, the objective of the SCM focused mostly on fulfilling customer demand and enhancing SC effectiveness (Walters, 2006; Jüttner *et al.*, 2006).

Growing with globalization and technology innovation in late 2000s, there was an increasing concern for market mediation. SCM was then redefined with a new perspective that management of all SC activities should be driven or created outwardly by the market rather than the suppliers (Rainbird, 2004; Jüttner *et al.*, 2007; Hilletoft *et al.*, 2009). Previous “one-size-fits-all” SC strategy, i.e., lean and agile designs that structured SCs inwardly for fulfilling few demand categories, had become insufficient to cope with the new demand variations (Christopher and Towill, 2001; Huang *et al.*, 2002). As a result, studies in 2010s were centered on designing SCs based on demand differentiations. Many authors distinguished this concept from SCM and named it as DCM (Walters and Rainbird, 2004; Jüttner *et al.*, 2006; Canever *et al.*, 2008; Hilletoft, 2009). They focused on identifying specific demand processes and activities involved in each organization and other SC members for integration. Again, the demand processes might differ between various types of organizations, but mostly included product mix and development, market emphasis, customer segmentation, channel of distribution, promotion and price regime (Esper *et al.*, 2010; Jüttner *et al.*, 2007; Gattorna, 2015). The objective was centered on analyzing and creating customer demand rather than fulfilling it in the most cost-efficient manner.

Compared with SCM, DCM aims for an overarching process coordination enhancing both supply and demand process elements. Demand processes occur at the customer or market interface and aim at responding to customer demand through value creation while supply processes comprise the tasks necessary for fulfilling the demand (Canever *et al.*, 2008; Esper *et al.*, 2010; Hilletoft *et al.*, 2009). Considering the various market differentiations, dynamic strategies can be formulated to serve the different market segments with different SC priorities by structuring the process elements in different manners (Jüttner *et al.*, 2006; Sukati *et al.*, 2012). Extending from the previously proposed lean and agile SC strategies, DCM proposes two additional strategies, namely hybrid and highly flexible, accommodating multiple demand segmentations (Mason-Jones *et al.*, 2000; Childerhouse *et al.*, 2002; Christopher, 2000; Christopher and Towill, 2001; Holmström *et al.*, 2001). These four represent the main types of DCM strategies to handle external demand variations (Treville *et al.*, 2004; Vonderembse *et al.*, 2006; Gunasekaran *et al.*, 2008; Gattorna, 2015). The objective of DCM primarily focuses on managing demand variations responsively to achieve strategic fit of alignment and enhance business competitiveness (Defee and Fugate, 2010; Flynn *et al.*, 2010; Wu *et al.*, 2014). Table I summarizes the definitions of the four DCM strategies and the operational differences addressed by DCM process elements.

Literature review also reveals that many studies discuss the dynamic retail market and economic transition in China (see for example Sin *et al.*, 2000; Kwan *et al.*, 2003; Chen and Shih, 2004; Hong, 2006; Liu, 2007; Yi and Jaffe, 2007; Kshetri, 2009; Zhu *et al.*, 2010; Hua and Guo, 2012). However, the majority of them approach the topic from a marketing research perspective focusing on the coping of market dynamism (Sin *et al.*, 2000; Tai, 2007; Qiu, 2008; d’Astous and Li, 2009; Kshetri, 2009; Chang and Luan, 2010; Chan, 2011; Yu and Ramanathan, 2012; Tong and Li, 2013). Only few have investigated the supply side of dynamism or the integrative aspect of considering both marketing and supply in the FA industry (Yi *et al.*, 2011; Ye and Lau, 2014; Ye *et al.*, 2013). The lack of studies in this regard suggests that industry practitioners might not have the experience yet in developing innovative management methods required to strive in an increasingly volatile environment. As such, DCM, which emphasizes a strategic fit of the supply and demand processes, might be an appropriate approach to explore how the Chinese FA companies have responded to the dynamic market changes, and investigate if failure or success of the companies is related to their capabilities in managing operations on both sides.

**Table I.**  
Definition of four  
DCM strategies and  
attributes described  
by DCM elements

Category	Lean (ship-to-stock/ make-to-forecast)	Hybrid (pack-to-order)	Agile (make-to-order)	Fully flexible (buy-to-order)	References
Definition	Supply chain focus on elimination of waste or non-value-added steps in the supply chain. It is supported by the reduction of setup times to allow for the economic production; thereby achieving cost reduction, flexibility and internal responsiveness External condition-Low uncertainty, low competitive intensity, low risk	Interfaces with market to understand customer requirements, maintaining future adaptability. Tries to achieve mass customization by postponing product differentiation until assembly process and adding innovative components to the existing products External condition-High uncertainty, low competitive intensity, low risk Integration (I)	Supply chain focus on respond to rapidly changing, continually fragmenting global markets by being dynamic and context-specific, aggressively changing, and growth oriented. They are driven by customer designed products and services External condition-Low uncertainty, high competitive intensity, high risk	A network of firms that is capable of creating wealth to its stakeholders in a competitive environment by reacting quickly and cost effectively to changing market requirements External condition-High uncertainty, high competitive intensity, high risk	Fisher (1997), Spear and Bowen (1999), Browne and Zhang (1999), Naylor <i>et al.</i> (1999), Christopher (2000), Huang <i>et al.</i> (2002)
Demand-side element	Administration (A)	Integration (I)	Production (P)	Development (D)	
Product mix	Commodity products, stable product line and minimal variants. This type of customer just wants the same product-service experience repeated on a consistent basis and they will shop around to get it. The lowest possible cost to drive the lowest price offer to customers is essential Lowest price, but reliable	Big emphasis on product quality; joint product development. Innovative to improve relationships. Consumers might not in the habit of exploring new products and might just want the same product-service experience repeated overly Building brand retention with existing customers	Larger range, choice is important and differentiated products on growing markets. Customers in a "demanding" mindset tend to like choice and convenience. Choice means a great variety in product range, but emphasis on meeting the quality is strong nonetheless Quick response to changing customer requirements	Customized products for innovation, growth through product development and market development. Extensive R&D; aims to be the first to market	Mason-Jones <i>et al.</i> (2000), Christopher and Towill (2001), Walters (2006), Gattorna (2015)
Marketing emphasis	Lowest price, but reliable	Building brand retention with existing customers	Quick response to changing customer requirements	Creative problem-solving.	Mason-Jones <i>et al.</i> (2000), Childerhouse <i>et al.</i> (2002)
Consumer segmentation	Little knowledge or involvement in delivery. Desired for efficiency or consistency before product-service quality	Little knowledge, very involved in delivery. Customers in this segment tend to buy proven quality	This type of customer is seeking differentiated products and service, will pay a premium if necessary. The	Very knowledgeable and involved delivery	Mason-Jones <i>et al.</i> (2000), Jüttner <i>et al.</i> (2006), Walters (2006), Gattorna (2015)

(continued)

Channels of distribution and order fulfillment	Wide distribution through multiple channels for customers to get easy access	products, perhaps augmented feature or services Channels are the commercial pathways along with products and service sold. Either direct or via trusted outlets	challenge for supplier is continuous improvement Provides easy access to consumer requirements	Limited (narrow and specialised)	Bruce <i>et al.</i> (2004), Jüttner <i>et al.</i> (2006), Gattorna (2015)
Pricing regime and promotion activity	To succeed in this segment, supplier should ideally look for the lowest cost producer in order to drive prices lower than competitors	Price according to strength of brand, moderate price sensitivity and low promotional activity is simply not required	Competitive, moderate price sensitivity, high promotional activity and fashion-style approaches	Price appropriate for a creative solution, no price sensitivity and target early adopters	Childerhouse <i>et al.</i> (2002), Gattorna (2015)
Supply side element	Administration (A)	Integration (I)	Production (P)	Development (D)	
Procurement	If lower cost of production is available through outsourcing, then it is best to outsource, but usually the standard part of the range and only if high reliability can be maintained. Focus on ways to reduce the cost of inputs and processes	Select suppliers on the basis of relationships and capabilities. Attributes involve low cost and high quality, along with capability for speed and flexibility as and when required	Market knowledge and distributions. Select supplier primarily for speed, flexibility and quality	Product, technology and innovation; looks for suppliers with capacity and creative solutions	Mason-Jones <i>et al.</i> (2000), Holmstrom <i>et al.</i> (2001), Huang <i>et al.</i> (2002), Jüttner <i>et al.</i> (2006)
Manufacturing flow management/production	Emphasis is on seeking lowest cost-to-serve for the high volumes involved. The products are usually in the mature stage of their lifecycle, so margins are under pressure and little differentiation is possible	Low volume, high value added. Collaborates to reduce costs. Maximum utilization achievable is consistent with serving clients	Mostly likely to use a combination of in-house and outsourcing production to get required capacity in short lead time; shorter runs; flexible scheduling; make-to-order	Prototypes; customisation	Mason-Jones <i>et al.</i> (2000), Christopher and Towill (2001), Huang <i>et al.</i> (2002), Walters (2006)
Capacity consideration	High reliability, predictable service and ready availability. The demand forecasts are usually fairly reliable so high capacity utilization is sought when serving this segment,	Consistent with delivering a reliable product/service, trying to reach and maintain high levels of capacity utilization, especially as the forecasts are likely to be highly accurate as it is	Short lead times and uses postponement. Deploy excess buffer capacity	Speed is vital. Draw on in-house and external parties for resources in this regard	Fisher (1997), Mason-Jones <i>et al.</i> (2000), Huang <i>et al.</i> (2002), Gattorna (2015), Jüttner <i>et al.</i> (2006)

(continued)

Information technology support	<p>which in turn reduces unit costs</p> <p>Emphasis on transactional system or replace legacy systems with ERP system modular</p>	<p>updated regularly in close consultation with customer</p> <p>Emphasis on customer management; such as, CRM, VMI, or CPFR</p>	<p>The emphasis in this type of supply chain is on achieving a quick response to sometimes unreasonable demands. Using decision making modeling or analytical system to run scenarios; or integrated system for shorter lead time, such as VMI, or Big data analysis</p> <p>Fast decision making, fast delivery; rapid response in unpredictable conditions; low collaboration</p>	<p>Determine what is required to solve the problem</p>	<p>Mason-Jones <i>et al.</i> (2000), Robertson <i>et al.</i> (2002), Gunasekaran <i>et al.</i> (2008), Gattorna (2015)</p>
Customer relationship intensity	<p>Seek economies of scale, low cost production and distribution, forecast demand, mature products, predictable lead time and low collaboration</p>	<p>Share information, seek strategic partnerships and long-term stability, and build mutual trust and mutual dependence collaboration</p>	<p>Meet unplanned/ unplannable demand; innovative solutions, delivered fast; intense relationships, but short term while the problem exists</p>		<p>Jüttner <i>et al.</i> (2006), Vonderemse <i>et al.</i> (2006), Gattorna (2015)</p>
Management element	<p>Hierarchical (A)</p>	<p>Group (I)</p>	<p>Rational (P)</p>	<p>Entrepreneurial (D)</p>	
Shared values	<p>Emphasis on 'deep approach. Efficient, with the ability to provide customers with value for money and security</p>	<p>Emphasis on "quality". Ability to develop long-term, dependent customer relationships</p>	<p>Emphasis on "deep and focused"; a high-energy approach. Reliability, accuracy and responsive to customer needs</p>	<p>Emphasis on "broad" approach. Spontaneity, the ability to anticipate and exceed customer expectations, and flexibility</p>	<p>Chorn (1991), Walters (2006), Gunasekaran <i>et al.</i> (2008), Gattorna (2015)</p>
Resource allocation	<p>Focus on cost reduction</p>	<p>Focus on supporting the relationship to retain customers and service</p>	<p>Build spare capacity to cater for volatile demand</p>	<p>Hedge and deploy resources, sometimes ineffectively</p>	<p>Chorn (1991), Vonderemse <i>et al.</i> (2006), Gunasekaran <i>et al.</i> (2008)</p>
Organizational structure	<p>Use a static organizational structure. Organize clusters around core functions or processes</p>	<p>Relationship cluster, with coexistence of vertical functions and horizontal clusters</p>	<p>Clusters designed for speed and focused on specific sub-segments</p>	<p>Small multi-disciplinary cluster; usually on standby, but can be full-time</p>	<p>Chorn (1991), Browne and Zhang (1999), Jüttner <i>et al.</i> (2006), Vonderemse <i>et al.</i> (2006), Gunasekaran <i>et al.</i> (2008)</p>

(continued)

<p>Culture and leadership</p>	<p>Traditional: leads by procedure and sets a precedent, implements only proven business practices, cost controller, efficiency focus, uses information to control, seeks stability and is risk averse. Dominant coalition: CEO, production, finance and accounting</p>	<p>Couch: conscientious; leads by teaching; concerned for others; loyal, committed, team working and politically astute; seeks agreement by consensus. Dominant coalition: Chief Executive Officer (CEO), HR and R&amp;D</p>	<p>Company baron: leads by objectives; embraces change; goes for growth; focuses on what's important; analytical, fact-based negotiations. Dominant coalition: CEO, marketing, process engineering, sales and operations</p>	<p>Visionary: leads by inspiration; is authentic, informal and decisive; cares about ideas; and values innovation. Dominant coalition: CEO, product R&amp;D and market research</p>	<p>Chorn (1991), Browne and Zhang (1999), Gunasekaran <i>et al.</i> (2008), Gattorna (2015)</p>
<p>Risk and rewards</p>	<p>The demand patterns are relatively predictable, risk is low. However, these customers will quickly move away if alternative sources are found that have lower prices and reliable delivery</p>	<p>As the overriding emotion in this segment is loyalty to supplier and brand, there is low risk only if company remain empathetic to its customers</p>	<p>Because this types of supply chain dealing with a market segment where demand and supply patterns are relatively unpredictable and risk is high. Contingency plans should be prepared to mitigate some of risk of disruption in supply to key customers</p>	<p>High risk for both parties, sometimes new and untested solutions have to be tried</p>	<p>Chorn (1991), Browne and Zhang (1999), Gattorna (2015)</p>

**Note:** Further explanations would be given on the indicator of A-I-P-D in the conceptual framework section

Table I.



---

*Strategic SCM and DCM frameworks*

In line with the paradigm shift, many SCM frameworks have advanced to not only consider various SC configurations but also include a wider research scope. Some of the major SCM and DCM frameworks driving the SCM paradigm shift are listed in Table II. Two types of SC configurations, i.e., lean and agile, were originally discussed as the foundation for their descendant. For example, Fisher (1997) proposed a strategic SC matrix classifying products based on the nature of the demand into two categories – functional vs innovative. Huang *et al.* (2002) took a step further by suggesting a third type of SC named hybrid under the previous matrix. Similarly, Naylor *et al.* (1999) opined that the traditional view on the two types of SC strategy – either lean or agile – was too simplistic. They presented a new method of classification, combining the two strategies with total SC structure based on market knowledge and position of the decoupling point. It specifically differentiates SCs into buy-to-order (fully flexible), make-to-order (agile), assembler-to-order (hybrid), make-to-stock (lean) and ship-to-stock (lean). The transition also shows a gradual enhancement in the integration of process elements, management components and corporate structure (Walters and Rainbird, 2004; Jüttner *et al.*, 2006; Hilletoft, 2009). The key elements incorporated in these frameworks can be mainly classified as below:

- (1) Inter-organization scope (among different companies in the SC):
  - functional (lean)/ship-to-stock;
  - innovative (agile)/make-to-order;
  - hybrid (leagile)/pack-to-order; and
  - fully flexible/buy-to-order.
- (2) Intra-organization scope (within a particular company):
  - strategic management elements: business competitive and shared values, firm infrastructure, human resource management, leadership structure, culture, risk structure, product structure, IT structure;
  - operational process elements:
    - supply side operation: inbound outbound logistics, inventory, procurement, production/manufacturing flow management, procurement; and
    - demand-side operation: marketing emphasis and sales, product development, service, customer relationship, order fulfilment.

As demonstrated in Table II, previous SCM frameworks mostly addressed from one scope, either inter-organization or inter-organization perspective. Only few incorporated both perspectives for an overarching configuration. Besides, theoretical underpinning accounting on how specific elements fully integrated within and across the scopes is still in deficiency.

**A proposed DCM conceptual framework underpinned by the alignment theory**

Upon comparing the various SCM frameworks and identifying their inadequacies, this study proposes a conceptual DCM framework to bridge the research gap (Figure 1). Emphasizing a holistic alignment among intra- and inter-organizations, the proposed framework comprises three DCM scopes, including demand activities described by demand elements, supply activities described by supply elements and strategic management described by management components. This study adopts the strategic fit of the alignment theory (Chorn, 1991) as the underpinning theory and the administration-integration-production-development (A-I-P-D) logic sets (Chorn, 1991; Gattorna, 1998), which was originally applied to organization activities, are extended to apply to supply and demand

Strategic framework	Reference	Theoretical underpinning	Addressed dimension	Addressed element
The value chain framework	Porter and Millar (1985)	na	Intra-organization	Primary activities (evolved physical creation of the product): Inbound logistics, Operations, Outbound logistics, Marketing and sales, Service Support activities (inputs and infrastructure): Firm infrastructure, Human resource management, technology development, procurement
Matching supply chains with products (I)	Fisher (1997)	na	Inter-organization	Types of supply chain (efficient supply chain, responsive supply chain)
SCM framework	Cooper <i>et al.</i> (1997)	na	Intra-organization	Types of products (functional products, innovative products) Business processes (customer relationship, customer service, demand management, order fulfilment, manufacturing flow, procurement, Product development, return channel) Management components (organization structure, IT structure, product structure, leadership structure, culture, risk structure)
SCM Strategies	Naylor <i>et al.</i> (1999)	na	Inter-organization	Material flow (raw material supplier, manufacturer/assembler, retailer, end user) Types of supply chain strategy by posing decoupling point (buy to order, make to order, assemble to order, make to stock, ship to stock)
Integrative model for enabling agile supply chain	Christopher and Towill (2001)	na	Inter and intra-organization	Principles: agile supply chain, postponed fulfilment, rapid replenishment Programs: quick response, lean production, agile supply Actions: setup time reduction, economy of scale production, waste control, process management, vender managed inventory, cross-functional teams
Matching supply chains with products (II)	Huang <i>et al.</i> (2002)	na	Inter-organization	Types of supply chain (agile, hybrid and lean supply chain) Product characteristics (innovative, hybrid and standard products)
Value chain model	Walters and Rainbird (2004)	na	Intra-organization	SCM processes: order processing, evaluate value delivery, order assembly and inventory management, manufacturing, service management DCM processes: customer relationship management, product category, product service, value proposition, value profiling Managing value chain: design and development, procurement, production, marketing, service
Strategic alignment supply chain model	Christopher and Gattorna (2005)	na	Inter and Intra-organization	Supply chain types: fully flexible, agile, lean and continues replenishment Customer segment types: innovative solutions, demand/quick response, efficiency/consistency, collaborative Culture and leadership style Competitive situation
Demand chain	Jüttner <i>et al.</i> (2006)	na	Inter and Intra-organization	Supplier and manufacturing strategy (supplier strategy: QR and CR; manufacturing strategy: agile, leagile, lean)

(continued)

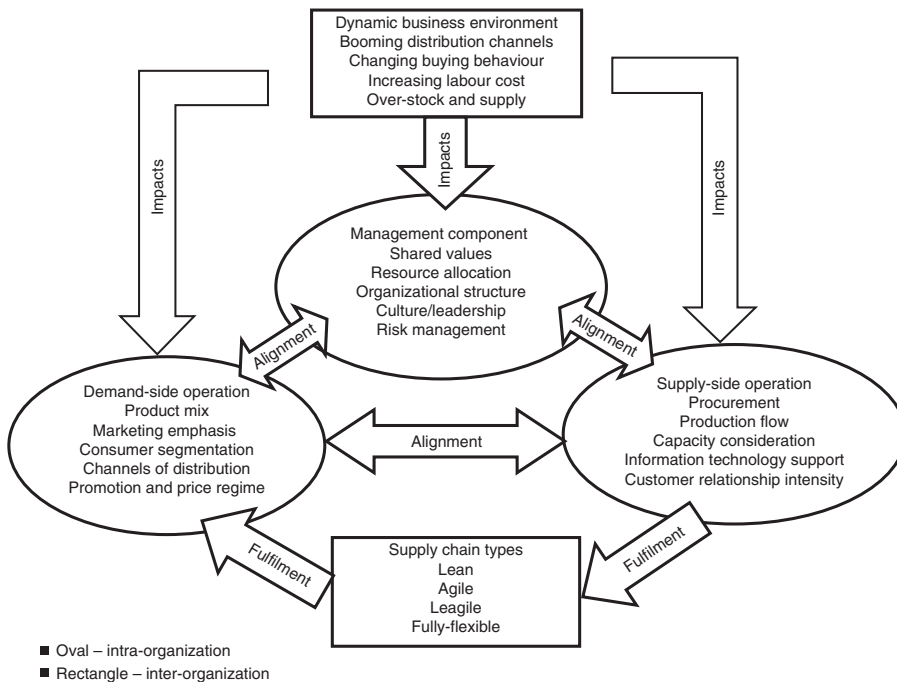
**Table II.**  
Key SCM and DCM frameworks driving the paradigm shift

Strategic framework	Reference	Theoretical underpinning	Addressed dimension	Addressed element
management framework				Distribution strategy (Primary distribution strategy – city and rural; secondary distribution strategy – grocery, general retail, off license, convenience) Demand types (low volume, high value products; high volume, low value products; in-between types)
Demand chain management framework	Hilletoth (2009)	na	Intra-organization	Market management: strategic marketing planning, market research, product development, product commercialization, branding, marketing and sales, lifecycle management Supply chain management: strategic supply chain planning, supply chain design (market research, consumer segmentation, design of solutions), supply chain operation Competitive advantage and business strategy
Aligning products with supply chain processes and strategy	Stavrulaki and Davis (2010)	na	Inter and Intra-organization	This framework combined the feature of Naylor <i>et al.</i> (1999)'s framework and Cooper <i>et al.</i> (1997)'s SCM process framework Logistics process Competitive management focus, Product characteristics and supply chain types
Supply chain portfolio design	Olavson <i>et al.</i> (2010)	na	Intra-organization	Objectives: set the strategic goals for the supply chain Strategy: design supply chains Tactics: re-optimize around the new strategy Triggers for changes in above three (products, competition and macroeconomic factors)
Supply chain integration model	Cao <i>et al.</i> (2015)	Contingency theory Configuration theory	Intra-organization	Organizational culture: development culture, group culture, rational culture, hierarchical culture Supply chain integration: Internal integration, customer integration, supplier integration
Process interface framework for marketing and purchasing integration	Toon <i>et al.</i> (2016)	Structure dynamics Human dynamics Situational dynamics	Intra-organization	Managerial approach to purchasing-marketing coordination (transactional, Integrative, co-management) Co-management Forms of dynamics

Table II.

activities so as to gage the alignment relationship between the internal operation and external situation.

The alignment theory stems from Jung's (1968) theory of psychological types, which states that all conscious mental activities occur in two perceptual processes – sensing and intuition – and two judgment processes – thinking and feeling. Adizes (1976) further developed Jung's (1968) theory and identified four key behavioral types or “logic sets” that exhibit a dominant tendency in management stream. He devised an “Administrator-Integrator-Producer-Entrepreneur” (or “A-I-P-E”) coding system to categorize different management styles. Chorn (1991) and Gattorna (1998) approached the categorization technique from an organizational behavioral perspective and re-labeled the “E” to “D” (Developer). Chorn's (1991) alignment theory proposes four “elements” – competitive situation (marketplace), strategy, culture and leadership – and four “logic sets” – administration (A), integration (I), production (P), and development (D). Each element can be



**Figure 1.**  
A proposed DCM conceptual framework

categorized into one of the four logic sets based on certain attributes. Essentially, the principle of strategic fit considers the degree of alignment that exists between these elements. In this sense, alignment refers to the “appropriateness” of the various elements to one another. According to Chorn (1991), superior performance (measured in a variety of ways) is associated with a high degree of alignment between the elements. The four logics represent the major behavioral forces which can be used to categorize dominant buying behaviors at marketplace, such as efficient, collaborative, innovative and dynamic solutions. Corresponding SC types, such as lean, leagile, agile, fully flexible, and process capabilities, including information technology utilization, sales and operations planning, procurement approach, production, and fulfillment arrangement, can then be identified to align demand with supply (Chorn, 1991; Christopher and Gattorna, 2005).

Based on the above, this study contends that the A-I-P-D logic codes can be linked with the four types of SCs (shown in Table I) to achieve higher business performance. To achieve alignment, elements should share the same logic code across the dimensions. For example, to survive in a turbulent (D) external market condition, a company should adopt innovative solutions (D) to manage market demand, initiate a fully flexible (D) SC strategy to fulfill customer requirements, and nurture an entrepreneurial organization culture and leadership style (D) to enhance flexibility and promote innovations and changes. To measure the level of alignment, the number of matches between logic codes in each element within and between dimensions can be counted to work out a percentage of agreement as follows:

- high level of alignment: 80 percent (four out of five elements in each scope) or more matched with the external condition;
- medium level of alignment: 60 percent (three out of five elements in each scope) to less than 80 percent matched with the external condition; and

- low level of alignment: less than 60 percent (less than three elements in each scope) matched with the external condition.

With such arrangement, the proposed DCM conceptual framework can be used as a tool to explore the level of alignment of firms in an industry and determine if it is related to business performance. As an illustrative example, the analytical technique was applied to investigate the responses of the FA companies in China under the impacts of the latest economic transition which began in 2010. The aim is to determine if there is alignment among the key operation and management processes, and whether the alignment, or the lack thereof, has contributed to the success or failure of the companies during the dynamic economic changes.

### Methodology

According to Yin (2013), case studies are particularly suited to explore complex dynamic phenomena in their natural settings. As the research questions and the context of this study are largely exploratory, a multiple case study using the inductive quality methodology was adopted (Eisenhardt, 1989). According to Daymon and Holloway (2010), interpretive (qualitative) methods are particularly suited to explore people's intentions, motivations and subjective experiences. Tewksbury (2009) also states that knowledge gained through qualitative investigation is more informative, richer and offers enhanced understanding compared to that obtained via quantitative research. Golicic *et al.* (2005) illustrate that a qualitative approach provides researchers with access to deeper levels of understanding of new or complex phenomena by yielding a high level of detail. This lends further justification for using the qualitative approach in this study. To obtain a holistic picture of the FA industry in China, five FA companies, each with a different firm size, SC model and ownership type, were selected for investigation. They were all major players in the trade identified from the industry database published by the National Bureau of Statistics of China published in 2014.

Stratified sampling technique was first used to divide the sampling frame into strata by business model. Purposive sampling technique was then adopted to select the case companies from each strata. Selection criteria used include annual sales revenue, net income, overall growth rate, capital investment in market, ranking of consumer awareness, variety in ownership, and market niche diversity, which together determine the market position of the firm. The first three criteria are used to identify firms with resource strength and development potential. The next two criteria are meant to recognize companies with strong marketing capabilities. The last two criteria are employed to distinguish corporations with sophisticated retailing network. The data sources used include semi-structured interviews, onsite unobtrusive observations, and reviews of internal company reports and databases. Multiple data sources enable data triangulation and complementation, thereby improving validity. To protect the identity of the selected companies, they are labeled as A, B, C, D and E in this study. Table III gives a brief profile of the five case companies.

An interview protocol was developed from a thorough literature review to explore the responses of the five companies to the impacts of the latest economic change. Open-ended questions were used to give the interviewees freedom to discuss their experiences and share their opinions (Turner, 2010). The exploration was centered on the elements of the proposed DCM framework including marketing, SC operation, and organization management. Semi-structured interviews were conducted with three senior managers in each company, such as the head director, product manager, regional sales manager, franchise store manager, and IT consultant, in order to solicit comprehensive views from ground-floor operation to high-level management. The interviews, which were conducted between March and May in 2014, lasted from 30 minutes to 90 minutes. Onsite observations at head offices

Company	Business model	Ownership	Number of staff	Number of retail stores	Year founded	Market niche	Lead time in days	Location	Description	
A	Traditional player	One-stop OEM and retailer	SOE	500	2	1979	Middle to high end	90 (from design to sales)	Nanjing in Jiangsu Province	The company started off as a supplier, processor and producer of silk textile products. It gradually expanded its business to garment production and retailing by introducing its first own brand in 2010 targeting the local silk garment market. It owns ten proprietary companies (i.e. OEM) providing one-stop service for international customers and two retail stores for domestic customers. The company started off as an apparel wholesaler and turned into a franchisor in 2000 when it established its brand of garment. By 2015, it had 3,390 stores – 528 of which were self-owned and 2,862 franchised covering 100% of first-tier cities, 66% second-tier cities and 33% third-tier cities. The company outsources its production and logistics while keeping only the business of branding and product design. Its brand targets the young people casual wear market.
B	Franchise retailer	Franchise retailer	PE	500	3,390 (87% franchised and 13% self-owned)	1997	Low to middle end	45 (from production to sales)	Wenzhou in Zhejiang Province	The company started off as an apparel wholesaler and turned into a franchisor in 2000 when it established its brand of garment. By 2015, it had 3,390 stores – 528 of which were self-owned and 2,862 franchised covering 100% of first-tier cities, 66% second-tier cities and 33% third-tier cities. The company outsources its production and logistics while keeping only the business of branding and product design. Its brand targets the young people casual wear market.
C	SPA	SPA	PE	400	95 (60 in tier 1 cities)	1996	High end	80 (from design to sales)	Guangzhou in Guangdong Province	The company started off as an apparel designing firm and gradually developed into a SPA business in 2001. By 2015, it had 95 stores, 60 of which were in first-tier cities. It provides a range of high-quality hand-made designer products emphasizing the use of sustainable natural materials.
D	New player	Pure online retailer	PE	300 (was 5,000 in 2012)	No physical store	2007	Low end	50 (from design to sales)	Beijing	The company started off as an online apparel business in 2007. As a new B2C player in the FA market, it focused on casual wears for the younger generation. Leveraging the rapid development of social media in China, the business boomed in 2011 with a RMB10 billion

(continued)

**Table III.**  
Company profile of the selected five Chinese FA companies as at 2015

Table III.

Company	Business model	Ownership	Number of staff	Number of retail stores	Year founded	Market niche	Lead time in days	Location	Description
E	Multi-channel retailer	FFE	500	1,800	2001	Middle	30 (from production to sales)	Beijing	<p>sales per annum. However, due to over expansion, the company faced significant challenges in maintaining the scale of business in 2013</p> <p>The company started off as a retailer with physical stores but expanded to multi-channel retailing in 2013 when it launched its online shops. By 2015, it had 1,800 shops - 40% self-owned and 60% franchised - in 300 cities. The brand targets modern female working class with age of 25 or above</p>

**Notes:** Key: Traditional player - firms established with the traditional retail infrastructure before the industrial structural change; new player - firms set up with the new retail infrastructure during the industrial structural change; SPA - specialty private apparel; SOE - state-owned enterprise; PE - private enterprise; FFE - foreign-funded enterprise

and retail shops with multiple visits were then arranged. Notes were taken during the observations. Secondary data, such as financial reports, marketing and SC strategies, were also collected from company documents and databases (Daymon and Holloway, 2010). All the interviews were conducted in Chinese as the interviewees were not proficient in English. The conversations were digitally recorded and subsequently transcribed and translated.

The interview transcripts and the onsite observation notes were synthesized into individual case portfolios with detailed documentation to enhance reliability (Kohlbacher, 2006; Yin, 2013). They were coded by the elements included in the framework and the terms used by the interviewees. Following Miles and Huberman (1994), within-case analysis and cross-case comparison based on inductive reasoning were then conducted. An example of the coding analysis in this study can be found in Appendix 1. It shows the specific process on how the empirical data were coded in elements and matched with the corresponding attributes (refer to Table II). Similarities and differences among the five cases in the 15 elements were identified and summarized in tables to facilitate comparison (Eisenhardt and Graebner, 2007). Findings were triangulated across data sources (Yin, 2013) and clarifications from interviewees were sought where necessary. Using the extended A-I-P-D coding analysis technique, the study is able to determine in each case the perceived alignment among the external business environment and the internal operations.

### Findings and discussions

The within-case analyses reveal the responding actions taken by the five investigated companies to the impacts of the latest economic transition in China from the perspective of the 15 internal elements. Matching against the interview data in Table II, a logic code was assigned to each of the elements observed in the five investigated companies to enable evaluation of alignment across the different cases (refer to Appendix 1). The within-case analysis findings are summarized in Tables IV-VII, respectively. Table VIII compares across the five cases their levels of alignment externally with the business environment and internally among the three scopes.

#### *Responses in demand-side operation*

In general, most of the investigated FA firms (A, B and D) struggled in finding a new competitive edge under the impacts of the latest economic transition though they were eager to make changes on their demand-side operations. As shown in Table IV, for instance, most firms (A, B, D and E) launched multiple channels in an attempt to regain or extend their market shares by maximizing the number of shopping contact points. They either leveraged the expertise of third-party e-commerce companies or their own online stores. E-commerce leveraging alternative selling platforms not only provided an avenue to sustain market volume but also imparted diverse ways of marketing. Apart from traditional commercial advertising, such as TV and newspaper, digital campaigns and social media advertising became a novel marketing fashion (e.g. D and E). Simultaneously, many firms (B, C and E) downsized their physical retail networks to reduce operating cost. This finding corroborates the literature that e-commerce and online retailing development is a common response to increasingly dynamic demand (Chang and Luan, 2010; Yuan and Xu, 2010; Zhou, 2010; Tong and Li, 2013). For the demand elements of product mix and consumer segmentation, not many changes were observed across the five cases. Most firms (A, B and D) found it difficult to leverage a specific product niche or upgrade their product lines to fulfill new demand. Consequently, these firms (A, B, D and E) gradually lost their customers. To them, online channel became a platform to sell markdown products. This finding also reveals that most of the investigated FA firms lacked the flexibility to revise their product designs to meet changing customer needs and preferences. In China, many traditional FA firms started in the 1990s when there was little competition in the domestic market, selling was relatively



**Table IV.**  
Responses of the case companies in demand-side operation to market dynamism

	Company A (SOE)	Company B (Franchised)	Company C (SPA)	Company D (B2C)	Company E (multi-channel)
Demand-side operation	(Before) – the market for Company A had low uncertainty and low competitive intensity (A) (After) – Plunged into market conditions with high competition intensity; shrinking profit with increasing cost (P)	(Before) – the market for Company B had low uncertainty and low competitive intensity (A) (After) – High competitive intensity and high risk. Market is growing and differentiation has emerged (P)	(Before) – the market for Company C was highly uncertain and highly competitive (D) (After) – aimed towards a market niche with low competitive intensity but high uncertainty. Upgraded product design and attributes for the targeted market niche (I)	(Before) – the market for Company D had low uncertainty and low competitive intensity (A) (After) – This segment has become increasingly competitive; many new firms entered the market to compete in this niche (P)	(Before) – the market for Company E had low uncertainty and low competitive intensity (A) (After) – this segment has become increasingly competitive; many new firms entered the market to compete in this niche (P)
Product mix	(Before) – had an efficient production line focused on silk yarn production, silk textile and generic garment export with low cost inputs (A) (After) – unable to realize profile consistency for retail brand (N)	(Before) – relied on ways to cut production cost and aimed for economies of scale with generic product lines (A) (After) – unable to understand the demand of new generation customers and gradually lost the brand identification from its consumer segments (N)	(Before) – started as a designer brand; had five fabric research laboratories in the areas of spinning yarn, weaving fabric, dyeing, knitting and quality control, focused on R&D (D) [After] - Continued to improve on fabric designs and production techniques; enhanced efficiency of product development; aligned the design cycles with the market lifecycle (I)	(Before) – relied on ways to reduce production costs and aimed for economies of scale with generic product lines, mainly shirt apparel (A) (After) – lost development direction; expanded ambitiously into not only other apparel sectors but industries like furniture leading to deteriorating quality and design; unable to define its brand and product mix (N)	(Before) – designed fast affordable fashion for women, focused on ways to reduce production costs and aimed for capacity expansion (A) (After) – sought product differentiation by extending product range into diverse occasion and seasonal themes (P)
Marketing emphasis	(Before) – built on lowest price but reliable quality; marketed the product through internal network and trade events (A) (After) – new designs did not match with the new	(Before) – targeted the generic youth wear market with affordably priced products; marketed on TV, magazines and billboards (A) (After) – product and brand dislocation; lost development	(Before) – Focused on delivering a lifestyle of sustainability, nature and health; worked with local fashion designers for product design and innovation (D)	(Before) – had a clear niche of selling shirt product with reliable quality and affordable price (A) (After) – lost brand identity; enthusiastic on building social media exposure and	(Before) – Targeted lady office wear with affordable modern city style; reliable quality with affordable price (A) (After) – focused on visual display in retail stores to create product diversity;

(continued)

	Company A (SOE)	Company B (Franchised)	Company C (SPA)	Company D (B2C)	Company E (multi-channel)
Demand-side operation	brand or meet consumer expectations (N)	direction by spending heavily on making another brand without success; deteriorated product quality due to cost cutting (N)	After – aligned brand image with product development; built all-in-one experience stores to enhance consumers buying experience; enhanced consumer service by offering high-end VIP service; built brand loyalty (I)	online click rate rather than focusing on marketing the product itself (N)	marketed on diverse retail channels to reach massive inland consumers; improved on customer service (P)
Consumer segmentation	(Before) – worked on few stable product lines with minimal variants; production based on fixed requirements from overseas clients; consumers had little knowledge about the market because it was somewhat monopolized (A) (After) – product mix did not fulfill customers' needs; new products lacked consistency in design and brand profile (N)	(Before) – targeted young adults from age 18 to 25; had stable product line and aimed for capacity expansion; consumers had little knowledge about fashion (A) (After) – lost the connection between its products and its customers (N)	(Before) – targeted consumers looking for innovative designs and lifestyle (P) (After) – Focused on upgrading product design and quality to target high-end consumers; strengthened VIP services, such as organizing various reward activities and discounted prices; built a community and a strong bond with loyal customers (I)	(Before) – targeted working class; had generic product match with affordable price and quality; consumers had little knowledge about fashion (A) (After) – lost target niche; negative consumer reviews; deteriorating product quality (N)	(Before) – worked on creating stable product line with minimal variants and realizable quality; targeted massive working class women who had little requirement for fashion (A) (After) – funnelled down the network to inland consumers; reached a large amount of new users through online and mobile channels; created product diversity for consumers (P) (Before) – adopted franchising and directing ownerships for wide distribution (A) (After) – withdrew franchise ownership; launched omni-channel on third-party e-platforms like Taobao.com; adopted store fulfilment for multiple channel
Channels of distribution	(Before) – export silk market was monopolized by state-owned business; relied on internal network for sales (N) (After) – Reduced dependency on selling through internal network; opened own online store (P)	(Before) – adopted franchise retailing to reach wide distribution (A) (After) – withdrew franchise stores and provided easy access for consumers by building its own online stores and mobile app (P)	(Before) – provided easy access to customers through physical stores (P) (After) – downsized retail stores from 100 shops to 60 shops; opened few direct all-in-one experience stores (I)	(Before) – ran pure online store and had own logistics team for wide distribution (A) (After) – maintained as online store (A)	

(continued)

Table IV.

	Company A (SOE)	Company B (Franchised)	Company C (SPA)	Company D (B2C)	Company E (multi-channel)
Demand-side operation					
Promotion and price regime	(Before) – Not many promotional activities (A) (After) – products did not sell and were marked down for quick sales online (N)	(Before) – acceptable price with low promotional activity (A) (After) – products did not sell and were marked down for quick sales online (N)	(Before) – price appropriate for a creative solution ranged from RMB500 to 800 (D) (After) – price upgraded from to RMB1,000 and 1,500 with an upgraded quality and design, upgraded consumers to VIP (I)	(Before) – compete with relative low price and low promotional activities (A) (After) – products did not sell and were marked down for quick sales online (N)	distribution to control product flows (P) (Before) – had limited promotion activities (A) (After) – Launched a series of sales campaigns with competitive price through online and mobile networks; launched a large number of promotional activities throughout the year for a quick turnover (I)

**Notes:** Key: A – administration; I – integration; P – production; D – development; N – not available

	Company A (SOE)	Company B (Franchised)	Company C (SPA)	Company D (B2C)	Company E (multi-channel)
Supply side operation	(Before) – sourced internally within China to achieve lowest cost (A) (After) – continued with mass production but sourced from neighboring countries to maintain low cost (A)	(Before) – outsourced production of standard products to cut cost; made to stock to achieve economies of scale (A) (After) – continued with previous mass production to maintain low cost (A)	(Before) – partially outsourced to external suppliers; partially self-designed (P) (After) – looked for skillful suppliers and technology innovation; focused on improving R&D with textile and apparel; aimed to work collaboratively with suppliers (D) [Before] – used a combination of in-house and outsourced production; aimed for an agile solution to realize a make-to-order supply chain (P) [After] – integrated different techniques into the production process; attempted to realize a more efficient production schedule consistent with product design cycle (I) [Before] – used multiple 3PLs to achieve flexible delivery; achieved short lead time using postponement strategy (P) [After] – focused on reliable and scheduled delivery; shared information with supply chain partners for better demand forecasts (I)	(Before) – outsourced production of standard products for economies of scale (A) (After) – lost quality control of suppliers; reordering products that could not sell; conflicts arose with suppliers (N) [Before] – relied on high-volume, labor-intensive production; had a long lead time based on seasonal production (A) [After] – kept reproducing the same order; quality deteriorated significantly due to overemphasis on lowest cost (N)	(Before) – worked with over 60 suppliers; outsourced production of standard products for economies of scale (A) (After) – continued with mass production to maintain low cost; achieved shorter production lead time with its suppliers (A) [Before] – relied on high-volume, labor-intensive production; had a long lead time based on seasonal production (A) [After] – shortened the lead time; worked with multiple 3PLs to achieve flexible scheduling leveraging postponement (P)
Production flow	(Before) – relied on high-volume and labor-intensive production (A) [After] – Maintained high volume production; management issues and poor labor conditions became acute as cost increased (A)	(Before) – relied on high-volume and labor-intensive production; had a long lead time based on seasonal production (A) [After] – maintained high-volume production; quality problem, management issues and poor labor conditions became acute as cost increased (A)	(Before) – used multiple 3PLs to achieve flexible delivery; achieved short lead time using postponement strategy (P) [After] – focused on reliable and scheduled delivery; shared information with supply chain partners for better demand forecasts (I)	(Before) – relied on high-volume, labor-intensive production; had a long lead time based on seasonal production (A) [After] – kept reproducing the same order; quality deteriorated significantly due to overemphasis on lowest cost (N)	(Before) – worked with over 60 suppliers; outsourced production of standard products for economies of scale (A) (After) – continued with mass production to maintain low cost; achieved shorter production lead time with its suppliers (A) [Before] – relied on high-volume, labor-intensive production; had a long lead time based on seasonal production (A) [After] – shortened the lead time; worked with multiple 3PLs to achieve flexible scheduling leveraging postponement (P)
Capacity consideration	(Before) – push-based operation with a predictable make-to-stock model (A) [After] – maintained make-to-stock operation; accumulating inventory (A)	(Before) – push-based operation with a predictable make-to-stock model; stock increased dramatically accounting for one third of total assets (A) [After] – ran sales campaigns to get rid of inventory; invested in improved logistics system to increase SC flexibility (P)	(Before) – push-based operation with a predictable make-to-stock model (A) [After] – maintained make-to-stock operation; large stock piling; increasing product quality issues and delivery errors (A)	(Before) – push-based operation with a predictable make-to-stock model (A) [After] – executed more regular stock checks; enabled a shorter lead time by installing a supply chain information system; used store fulfillment for its multiple channel delivery to control inventory and product flow; worked with multiple 3PLs to enhance flexibility (P)	(Before) – worked with over 60 suppliers; outsourced production of standard products for economies of scale (A) (After) – continued with mass production to maintain low cost; achieved shorter production lead time with its suppliers (A) [Before] – relied on high-volume, labor-intensive production; had a long lead time based on seasonal production (A) [After] – shortened the lead time; worked with multiple 3PLs to achieve flexible scheduling leveraging postponement (P)

(continued)

**Table V.**  
Responses of the case companies in supply side operation to market dynamism

	Company A (SOE)	Company B (Franchised)	Company C (SPA)	Company D (B2C)	Company E (multi-channel)
Supply side operation					
Information technology support	[Before] – relied on transactional systems such as e-mail for daily communication; had some finance systems for basic auditing (A) [After] – still relied on the legacy systems (A)	[Before] – focused on transactional systems and manual working (A) [After] – invested 20% of asset to develop own proprietary ERP system; effect was not conspicuous (A)	[Before] – worked with 3PLs for IT service integration (D) [After] – focused on CRM and VMI; tried to achieve an integrative supply chain process to enable continuous planning, forecasting and replenishment (I)	[Before] – relied on transactional systems (A) [After] – maintained the previous transactional system (A)	[Before] – focused on transactional system and manual working (A) [After] – invested in barcode technology; introduced warehouse management system and worked with 3PL service providers to develop information system (P)
Customer relationship intensity	[Before] – sought supply chain economies of scale within the <i>guanxi</i> networks; low skill in collaboration with business partners (A) [After] – <i>Guanxi</i> is not as important as previous; looking for partnership in neighboring countries (N)	[Before] – low cost production and distribution; forecast demand; predictable lead time; low collaboration (A) [After] – worked with logistics team for fast delivery; improved responsiveness by developing information systems (P)	[Before] – worked with 3PLs for flexible solutions; aimed for an integrated IS platform; maintained a flexible collaboration with partners (D) [After] – enhanced IS capability for an integrated supply chain; shared information and sought long-term partnerships with its suppliers and OEMs for mutual benefit; focused on building mutual trust (I)	[Before] – sought economies of scale; low-cost production and distribution; predictable lead time; low collaboration (A) [After] – worked with multiple 3PL service providers for fast delivery and IS integration to enhance flexibility in the supply chain; achieved rapid response in unpredictable conditions (P)	[Before] – sought economies of scale; low-cost production and distribution; predictable lead time; low collaboration (A) [After] – worked with multiple 3PL service providers for fast delivery and IS integration to enhance flexibility in the supply chain; achieved rapid response in unpredictable conditions (P)

Notes: Key: A – administration; I – integration; P – production; D – development; N – not available

Strategic management	Company A (SOE)	Company B (Franchised)	Company C (SPA)	Company D (B2C)	Company E (Multi-channel)
Shared values	[Before] – relied on building efficient supply chain, able to provide customers with value for money and security (A) [After] – previous advantages gradually lost their competitiveness under the new environment (N)	[Before] – focused on “expansion”; high-energy approach; reliability and accuracy (A) [After] – lost the focus on customer service in the business transformation (N)	[Before] – had a strong focus on developing a competitive design brand; able to anticipate and exceed customer expectations (D) [After] – focused on product R&D and quality improvement; strengthened internal capabilities; focused on providing high-value consumer service and developed long-term customer relationships (f)	[Before] – excelled in online marketing; able to provide reliable services and products with high quality customer services (A) [After] – lost the focus on customer service due to aggressive expansion (N)	[Before] – focused on sales and value for money (A) [After] – provided responsive services by building multiple distributing channels and restructuring different product mix to create product variety to fulfill new demand (P)
Resource allocation	[Before] – owned much capital and invested mainly in building infrastructure and heavy industry; focused on capacity expansion (N) [After] – same as previous (N)	[Before] – invested in capacity expansion and licensing franchisees (N) [After] – spent significantly in marketing and sales; rushed to invest in different projects (N)	[Before] – looked for potential to grow; deployed the resources to target market niches and explore direction to compete (D) [After] – focused on building internal supply chain capabilities; resource allocated to R&D and improving consumer service (f)	[Before] – invested in marketing and branding and set up own logistics network (N) [After] – invested significantly in marketing, building popularity, and increasing media exposure (N)	[Before] – focused on cost reduction and driving sales (A) [After] – built multiple channels to cater for a new demand; focused on marketing products simultaneously on different channels (P)
Business structure	[Before] – used a centralized structure and administrative system (A) [After] – maintained its centralized structure with a hierarchy of administration (A)	[Before] – organized clusters around core processes of sales and marketing (A) [After] – maintained as previous; all functions played a supportive role for sales and marketing team (A)	[Before] – maintained separate small teams for marketing and sales, consumer service and product aftersales maintenance (D) [After] – set up a cross-functional purchasing team; started a cluster with a matrix organization structure comprising teams of vertical	[Before] – organized clusters around core processes of sales and marketing (A) [After] – kept changing culture and restructuring organization several times; cut staff due to internal financial crisis and kept trading share in public; changed directions of development (N)	[Before] – organized clusters around core processes of sales and marketing (A) [After] – unclear responsibilities existed between layers of organization structure which was mainly set up to support sales team (A)

(continued)

**Table VI.**  
Responses of the case companies in strategic management to market dynamism

Strategic management	Company A (SOE)	Company B (Franchised)	Company C (SPA)	Company D (B2C)	Company E. (Multi-channel)
Culture and leadership	[Before] – sought stability, led by procedure and precedent; worked in a top-down system with procedures and central control by government (A) [After] – maintained as previous (A)	[Before] – led by CEO to focus on sales and capacity expansion; result-oriented control using information (A) [After] – corporate culture kept changing; tried different business projects, some had damaging effect on business development (N)	functions and horizontal processes (I) [Before] – led by inspiration; nurtured value of creative innovation (D) [After] – nurtured a creative team; retained staff with supportive training programs; created an innovative environment for young designers; carried out extensive market research to develop business objectives (I)	[Before] – led by CEO to focus on sales and capacity expansion; result-oriented control using information (A) [After] – corporate culture kept changing; tried different business projects, some had damaging effect on business development (N)	[Before] – led by CEO to focus on sales and capacity expansion; result-oriented control using information (A) [After] – invested on sales and marketing; new plans were carried out to control the product flow, such as cutting order budget and regular stock checking (F)
Risk management	[Before]–market was dominated by the company (N) [After] – with the pace of market privatization, SOEs are confronting with higher market competition (N)	[Before] – had limited risk through outsourcing production and delivery upstream and licencing franchise downstream; did not hold any asset (A) [After] – accumulated large amount of inventory that did not sell; company finance surfted from a few unsuccessful investments (N)	[Before] – confronted with risk of not being recognized; struggled between capacity expansion and holding on special design niche (D) [After] – company grows steadily and has a stable VIP consumer share of the local market; previous risk reduced (I)	[Before] – relatively low risk in the targeted niche as there were not many competitors when company entered the market (A) [After] – company relied on financial support from external investors bonded by <i>guanxi</i> to escape itself from bankruptcy (N)	[Before] – low market risk as the market was not saturated (A) [After] – worked towards a responsive supply chain with multiple 3PLs for risk sharing; leveraging the IS of 3PL, instead of developing its own (F)

**Notes:** Key: A – administration; I – integration; P – production; D – development; N – not available

Dimension	External impact	Responding action
Demand-side operation	More segmented market with diverse buying behaviors (d'Astous and Li, 2009; Chang and Luan, 2010; Zhou, 2010; Wang and Guo, 2014; Fung Business Intelligence Centre, 2014) Fiercer competition on the retail market (Kwan <i>et al.</i> , 2003; Liu, 2007; Hong, 2006; Zhao, 2013; Tong and Li, 2013) Thriving e-commerce (Wong <i>et al.</i> , 2004; Retail and Ecommerce, 2016; <i>The Economist</i> , 2013; Hua and Guo, 2012)	Set up online stores in addition to the physical outlets (Companies A, B and E) or further expand the online business (Company D) Launched omni-channel by integrating mobile, online and offline retailing to a seamless platform (Company E) Downsized physical franchised retail network due to high maintenance cost (Companies B, C and E) Advertised on social media platforms to increase brand exposure (Company D)
Supply side operation	Increasing manufacturing cost (Chen and Shih, 2004; Hong, 2006; Yuan and Xu, 2010; Wang and Guo, 2014) Oversupply and overstock issues (Mo, 2010; Wang and Guo, 2014; Hua and Guo, 2012)	Collaborated with multiple small SPLs to achieve higher responsiveness (Companies C and E) Leveraged information technology and ERP system to enhance supply chain efficiency (Companies B, C and E) Used markdowns and online sales campaigns to clear inventory (Companies A, B, D and E)
Strategic management	Emergence of different business models (Yi and Jaffe, 2007; Yu and Ramanathan, 2012; Hua and Guo, 2012; Zhou, 2010) New entrepreneurship (Kshetri, 2009; Fung Business Intelligence Center, 2014; Retail and Ecommerce, 2016; <i>The Economist</i> , 2013)	Explored various business strategies to adapt to the changes in external business environment (Companies B and D) Explored different styles in leadership and organization culture to promote internal restructuring (Companies B and D)

**Table VII.**  
Summary of key transitional actions taken by the five FA companies

easy, and pressure to develop a competitive edge through product differentiation was not high. As such, they merely relied on capacity expansion to sustain growth with general products rather than defining a niche product. Consequently, they were not able to cope with the changes in customer demand other than volume.

*Responses in supply side operation*

Interviews with the senior managers of the five FA firms reveal a common pattern of responses in supply operation as shown in Table V. Hindered by increasing production cost, many firms (A, B, D and E) found it difficult to upgrade their product lines. Only firm C could focus on improving material quality and production skills with its suppliers. Most firms were not able to transform their SCs from mass production lines into value-added networks. Although the literature has pinpointed cost rising and overstock as major causes of SC disruption in China, solutions were not widely prescribed (Liu, 2007; Wang and Guo, 2014). The finding of this study reveals that to address the cost issues, many firms (e.g. firms B, C and E) switched their focus from increasing production volume and upgrading infrastructure to improving logistics capacity for total SC efficiency enhancement. This would involve higher production skill, knowledge and capital to enable an overall product line upgrade. Leveraging the technological capability and logistics expertise of third-party service providers, firms C and E were able to realize an integrated platform to control inventory and product flow. In terms of internal information system, a few firms, such as firm B, started to develop their own ERP modules for SC process integration. However, heavy capital investment often made the potential return not cost-effective. Firm B was seen to have trouble in achieving a scale of process integration internally and externally. This finding corroborates the literature that booming e-commerce market in China is largely leveraged by few dominant platform players, such as Alibaba, Tmall and JD.com. (Retail and Ecommerce, 2016; *The Economist*, 2013), which positioned

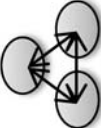
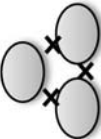
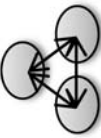
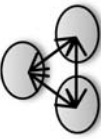


**Table VIII.**  
Comparison of  
external and internal  
alignment of the five  
case companies

	Company A		Company B		Company C	
	Before	After	Before	After	Before	After
<i>External market conditions under structural change</i>						
Demand-side operation	A	P	A	P	D	I
Product mix	A	N	A	N	D	I
Marketing emphasis	A	N	A	N	D	I
Consumer segmentation	A	N	A	N	P	I
Channels of distribution	N	P	A	P	P	I
Promotion and price regime	A	N	A	N	D	I
	80% A	20% P	100% A	20% P	60% D	100% I
Supply side operation						
Procurement	A	A	A	A	P	D
Production flow	A	A	A	A	P	I
Capacity consideration	A	N	A	P	P	I
Information technology support	A	A	A	A	D	I
Customer relationship intensity	A	N	A	P	D	I
	100% A	60% A	100% A	40% P	40% D	80% I
Strategic management						
Shared values	A	N	A	N	D	I
Resource allocation	N	N	N	N	D	I
Culture and leadership	A	A	A	N	D	I
Business structure	A	A	A	A	D	I
Risk management	N	N	A	N	D	I
	60% A	40% A	80% A	20% A	100% D	100% I
Internal alignment on the research framework						
Level of internal alignment	Medium	Low	High	Low	Low	High
Level of external alignment	Partially aligned	Misaligned	Aligned	Misaligned	Partially aligned	Aligned

(continued)

*External market conditions under structural change*

	Company D		Company E	
	Before	After	Before	After
Demand-side operation	A	P	A	P
Product mix	A	N	A	P
Marketing emphasis	A	N	A	P
Consumer segmentation	A	N	A	P
Channels of distribution	A	A	A	P
Promotion and price regime	A	N	A	P
	100% A	20% A	100% A	100% P
Supply side operation				
Procurement	A	N	A	A
Production flow	A	N	A	P
Capacity consideration	A	A	A	P
Information technology support	A	A	A	P
Customer relationship intensity	A	N	A	P
	100% A	40% A	100% A	80% P
Strategic management				
Shared values	A	N	A	P
Resource allocation	N	N	A	P
Culture and leadership	A	N	A	P
Business structure	A	N	A	A
Risk management	A	N	A	P
	80% A	-	100% A	80% P
Internal alignment on the research framework				
Level of internal alignment	High Aligned	Low Misaligned	High Aligned	High Aligned

**Notes:** Key: A – administration; I – integration; P – production; D – development; N – not available. High level of alignment ↔ : 80 percent or more of the internal activities match with the external condition. Medium level of alignment ↔ : 60 percent to less than 80 percent of the internal activities match with the external condition. Low level of alignment x: less than 60 percent of the internal activities match with external condition

Table VIII.

themselves well to capitalize on growing consumer demand by creating their own payment systems (e.g. Alibaba's Alipay) and logistical services (e.g. JD.com operates a self-owned logistics network).

#### *Responses in management component*

Compared to the other two dimensions, responses of the five investigated FA firms in organization management, as shown in Table VI, were not conspicuous. As a remnant of the country's planned economic system, many company owners or directors (A, B, D and E) were prone to have a simple and rigid attitude toward their business, with a single purpose of maximizing profit through mass production and market capacity expansion. These firms used to have a sale-driven mindset with a top-down organization structure. Under the new market dynamism, many firms (B, C, D and E), especially private ones, were eager to try out new strategies and adjust their business models to strive for success. This finding echoes the literature reporting the emergence of the mass entrepreneurship (Fung Business Intelligence Centre, 2014; Retail and Ecommerce, 2016). However, these efforts were mostly not well planned. Firms adopting a trial-and-error approach, such as Companies B and D, failed in identifying an appropriate business model resulting in unstable corporate culture and organization structure. Among the five interviewed companies, only two (C and E) succeeded to provide incentive for the business structure shift and forge the required capabilities and culture to align with the restructuring. Interviews and onsite observations suggested that organizations with top-down leadership (A, B and D) found it difficult to respond or adapt to the economic changes. This was mainly because innovative thinking had not been a common trait of middle-level managers in the culture and the institutional environment of China. As for ground-floor staff, they were unexceptionally required to be obedient and efficient in implementing orders or decisions made by the higher authority. In other words, rigid management style with a traditional institutional mindset could prevent a firm from transforming itself into a flexible and adaptive enterprise during economic transition. As far as changes in organization management are concerned, it was observed that most of the investigated firms (A, B and D) had not initiated any. Only two firms (C and E) had explored feasibility of leveraging other strategies and business models to adapt to the change. Abridging the findings in Tables IV, V and VI, Table VII summarizes the transitional actions taken by the five investigated FA firms to respond to the changes of the external business environment.

#### *External and internal alignment of the five case companies*

As shown in Table VIII, dynamic internal alignment was not commonly observed in the five investigated cases. Under the impacts of the latest economic transition, two companies demonstrated a considerable amount of overreaction (B and D) or little or no reaction at all (e.g. firm A). The findings suggested that although some firms had initiated significant restructuring in one scope (e.g. Firm B and D rolled out different plans to set up diverse retail channels and invested heavily on marketing), they still suffered from a loss of internal focus and value due to overreaction to the external change. These two firms faced a series of financial problems and management challenges during the economic transition. As a result, Company B's revenue dropped continuously from RMB9.94 billion to RMB6.62 billion from 2011 to 2014. Company D had exhausted seven rounds of capital investment fund from investors in expanding its business without a clear focus and reached the point of declaring bankruptcy at the end of 2014. These findings suggest that without proper alignment among internal DCM scopes and adequate planning to match recourses and capabilities with opportunities arising from changes in external business environment, mere act at tactical level (e.g. jumping onto the bandwagon of opening online store rather than upgrading product mix) would weaken the competitiveness of a firm in a turbulent market.

Basically, only two companies (C and E) were able to initiate appropriate internal restructuring to align with the changing external business environment. Companies C and E have initiated restructuring in all the three DSM scopes synergistically in response to the impacts of the economic change. They both seemed to perform better in business in comparison with the other three firms which had only initiated changes in one or two dimensions. Company C had an estimated asset value of RMB1 billion with a positive liquidity and a steady growth rate of 30 percent per year in 2014. Company E was ranked one of the bestselling brands among all female apparel products in China (Jiemian.com, 2015). Its online sales reached RMB10 million in 2014.

In short, findings summarized in Table VIII revealed that alignment with the external changing market situation and among the three DCM scopes was not a common practice of the five investigated FA companies at the time of investigation. Most firms responded to the external change only in the retail marketing aspect. Some subsequently introduced changes in SC operation and then in organization management. However, there was limited effort in ensuring alignment among the three internal scopes and only a couple of firms succeeded in doing so. The synergetic internal restructuring of these two firms seemed to have impacted positively on their performance in comparison with the other three firms. The findings also suggested that whether a company was able to leverage alignment between its demand and supply in response to the external situation was closely related to the mindset of the management. If the senior management of the company could nurture a high level of consistency in changes among all the three scopes, resources required for the restructuring would more likely to be allocated. The study also revealed that strategic fit could be realized incrementally by aligning one or two elements in each dimension at a time instead of trying to align all elements in one scope in one go. Incremental alignment can also reduce the possibility of generating negative side effects for the company during the transition. With a gradual change in a few elements under each dimension, a medium level of alignment can be achieved which can serve as a stepping stone for the development of a higher level of alignment in future. For example, Company E started off to align the elements of product mix and distribution channels in the market management area with the elements of SC operation and logistics capability in the SCM area. The firm succeeded to link these restructurings in a synergetic manner to achieve a new scale of development, thereby consolidating its competitive position in the market. With the above observations, analyses and conclusions, the research objective of this study is primarily achieved.

## Conclusions

This study has put forward a conceptual DCM framework underpinned by the alignment theory and applied it to explore an industry with dynamic demand uncertainties. Five representative FA companies in China with different sizes, ownership types, and business models were selected to investigate how they restructured their internal capabilities and resources in response to the impacts brought by the country's economic changes. The findings of this research corroborate the underpinning alignment theory that firms with a higher alignment among its demand, supply, and organization management scopes can achieve better performance.

The strategic alignment concept and measurement tool of the DCM framework offers an approach for firms to monitor its development process and continuously assess and improve their internal capabilities in adapting to the changes in the external market situation. Alignment is a continuous process constantly requiring adjustment due to the dynamic nature of the external competitive business environment. As such, a firm may achieve a highly aligned strategic fit at a specific point of time upon internal restructuring. It should not, however, expect a permanent fit and needs to make adaptive adjustments in all the three dimensions on a regular basis. Continuous development requires a flexible

control of internal resources and capabilities to cope with sudden changes in the external market. It is closely related to the management structure and culture of the organization which can impact on the robustness of the firm in the long run. Outcomes of this study lead to the following:

- Observation of a DCM alignment in a company in relation to its performance reflects only the current situation instead of being a verdict on the firm's long-term achievement.
- A company that is underperforming at present can be in the process of re-adjusting its strategy and developing the required internal capabilities for achieving the DCM alignment in the long run.
- Appropriate changes in certain elements in the three dimensions can gradually drive a misaligned company back to a healthier, more aligned structure with improved performance.
- The presence of a misalignment or partially aligned condition can lead to a decline in performance of a firm. This can be regarded as the "cost" incurred from misalignment and can be reduced as the situation improves leading to an increase in the organization's efficiency.

This study extends the application of the A-I-P-D logic set under the alignment theory to the SCM field. This endeavor successfully transforms the proposed DCM framework from a theoretical concept to a practical tool to help evaluate empirically the alignment and strategic fit of a firm and, potentially, their relationship with firm performance. As the Chinese FA market is constantly evolving due to globalization, the findings of this study not only assist the local FA companies in coping with the dynamic uncertainties of the market demand but also shed light on the future developments of the global FA industry. Besides, the alignment measurement tool embedded in the proposed DCM framework can help enhance the chances of business success during implementation.

Like many other exploratory studies, this research suffers from a number of limitations. Although theoretical stratified sampling had been employed to identify the five cases, each with a different business model and ownership type, only one case under each stratum was selected for investigation. Hence, the generalizability of the findings remains to be confirmed with further studies using a larger sample. In addition, the method of using the A-I-P-D coding to determine alignment relationships can be further improved. At present, the coding method is developed using the original four logic sets of the alignment theory. Future studies on the use of this theory in SCM may assist in identifying additional specific logic sets that could be more applicable in the business practice. Finally, this study is mainly exploratory in nature and designed for the purpose of understanding whether the DCM concept can serve as an appropriate analytical lens to investigate the dynamic business environment of Chinese FA industry. The actual challenges or issues encountered in practising the alignment by the FA firms have not been addressed. Future research using quantitative tools may help validate the applicability of the DCM framework in different research contexts particularly the relationship between alignment and firm performance.

## References

- Adizes, I. (1976), "Mismanagement styles", *California Management Review*, Vol. 19 No. 2, pp. 5-20.
- Al-Mudimigh, A.S., Zairi, M. and Ahmed, A.M.M. (2004), "Extending the concept of supply chain: the effective management of value chains", *International Journal of Production Economics*, Vol. 87 No. 3, pp. 309-320.
- Barnes, L. and Greenwood, G. (2006), "Fast fashioning the supply chain: shaping the research agenda", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 10 No. 3, pp. 259-271.

- Broadbent, M. and Weill, P. (1993), "Improving business and information strategy alignment: learning from the banking industry", *IBM Systems Journal*, Vol. 32 No. 1, pp. 162-179.
- Browne, J. and Zhang, J. (1999), "Extended and virtual enterprises – similarities and differences", *International Journal of Agile Management Systems*, Vol. 1 No. 1, pp. 30-36.
- Bruce, M., Daly, L. and Towers, N. (2004), "Lean or agile: a solution for supply chain management in the textiles and clothing industry", *International Journal of Operations & Production Management*, Vol. 24 No. 2, pp. 151-170.
- Brun, A. and Castelli, C. (2008), "Supply chain strategy in the fashion industry: developing a portfolio model depending on product, retail channel and brand", *International Journal of Production Economics*, Vol. 116 No. 2, pp. 169-181.
- Canever, M.D., Van Trijp, H.C. and Beers, G. (2008), "The emergent demand chain management: key features and illustration from the beef business", *Supply Chain Management: An International Journal*, Vol. 13 No. 2, pp. 104-115.
- Cao, N., Zhang, Z., To, K.M. and Ng, P.K. (2008), "How are supply chains coordinated? An empirical observation in textile-apparel businesses", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 12 No. 3, pp. 384-397.
- Cao, Z., Huo, B., Li, Y. and Zhao, X. (2015), "The impact of organizational culture on supply chain integration: a contingency and configuration approach", *Supply Chain Management: An International Journal*, Vol. 20 No. 1, pp. 24-41.
- Chan, P.Y. (2011), "Fashion retailing in China: an examination of its development and issues", in Zou, S.M. and Fu, H.F. (Eds), *International Marketing (Advances in International Marketing)*, Vol. 21, Emerald Group Publishing Limited, Bradford, pp. 75-110.
- Chandra, C. and Kumar, S. (2000), "Supply chain management in theory and practice: a passing fad or a fundamental change?", *Industrial Management & Data Systems*, Vol. 100 No. 3, pp. 100-114.
- Chang, E.C. and Luan, B. (2010), "Chinese consumers' perception of hypermarket store image", *Asia Pacific Journal of Marketing and Logistics*, Vol. 22 No. 4, pp. 512-527.
- Chao, W. and Lu, L. (2015), "Textile industry at the crossroads of change", *China Daily*, New York, NY, January 5, p. 16, available at: [http://usa.chinadaily.com.cn/epaper/2015-01/05/content\\_19240996.htm](http://usa.chinadaily.com.cn/epaper/2015-01/05/content_19240996.htm) (accessed March 13, 2016).
- Chen, C.H. and Shih, H.T. (2004), "The impact of WTO accession on the Chinese garment industry", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 8 No. 2, pp. 221-229.
- Childerhouse, P., Aitken, J. and Towill, D.R. (2002), "Analysis and design of focused demand chains", *Journal of Operations Management*, Vol. 20 No. 6, pp. 675-689.
- Chorn, N.H. (1991), "The alignment theory: creating strategic fit", *Management Decision*, Vol. 29 No. 1, pp. 20-24.
- Christopher, M. (2000), "The agile supply chain: competing in volatile markets", *Industrial Marketing Management*, Vol. 29 No. 1, pp. 37-44.
- Christopher, M. and Gattorna, J. (2005), "Supply chain cost management and value-based pricing", *Industrial Marketing Management*, Vol. 34 No. 2, pp. 115-121.
- Christopher, M. and Towill, D. (2001), "An integrated model for the design of agile supply chains", *International Journal of Physical Distribution & Logistics Management*, Vol. 31 No. 4, pp. 235-246.
- Christopher, M., Peck, H. and Towill, D. (2006), "A taxonomy for selecting global supply chain strategies", *The International Journal of Logistics Management*, Vol. 17 No. 2, pp. 277-287.
- Comm, C.L. and Mathaisel, D.F. (2005), "An exploratory analysis in applying lean manufacturing to a labour-intensive industry in China", *Asia Pacific Journal of Marketing and Logistics*, Vol. 17 No. 4, pp. 63-80.
- Cooper, M.C., Lambert, D.M. and Pagh, J.D. (1997), "Supply chain management: more than a new name for logistics", *The International Journal of Logistics Management*, Vol. 8 No. 1, pp. 1-14.
- d'Astous, A. and Li, D. (2009), "Perceptions of countries based on personality traits: a study in China", *Asia Pacific Journal of Marketing and Logistics*, Vol. 21 No. 4, pp. 475-488.

- Davenport, T.H. (1993), *Process Innovation: Reengineering Work Through Information Technology*, Harvard Business Press, Brighton.
- Daymon, C. and Holloway, I. (2010), *Qualitative Research Methods in Public Relations and Marketing Communications*, Routledge, London.
- De Brito, M.P., Carbone, V. and Blanquart, C.M. (2008), "Towards a sustainable fashion retail supply chain in Europe: organisation and performance", *International Journal of Production Economics*, Vol. 114 No. 2, pp. 534-553.
- Defee, C.C. and Fugate, B.S. (2010), "Changing perspective of capabilities in the dynamic supply chain era", *The International Journal of Logistics Management*, Vol. 21 No. 2, pp. 180-206.
- Eisenhardt, K.M. (1989), "Building theories from case study research", *Academy of Management Review*, Vol. 14 No. 4, pp. 532-550.
- Eisenhardt, K.M. and Graebner, M.E. (2007), "Theory building from cases: opportunities and challenges", *Academy of Management Journal*, Vol. 50 No. 1, pp. 25-32.
- Esper, T.L., Ellinger, A.E., Stank, T.P., Flint, D.J. and Moon, M. (2010), "Demand and supply integration: a conceptual framework of value creation through knowledge management", *Journal of the Academy of Marketing Science*, Vol. 38 No. 1, pp. 5-18.
- Euromonitor International (2014), "China to overtake US as largest apparel market by 2017", available at: <http://blog.euromonitor.com/2014/04/china-to-overtake-us-as-largest-apparel-market-by-2017.html> (accessed May 14, 2017).
- Fisher, M.L. (1997), "What is the right supply chain for your product", *Harvard Business Review*, March-April, pp. 105-116.
- Flint, D.J. (2004), "Strategic marketing in global supply chains: four challenges", *Industrial Marketing Management*, Vol. 33 No. 1, pp. 45-50.
- Flynn, B.B., Huo, B. and Zhao, X. (2010), "The impact of supply chain integration on performance: a contingency and configuration approach", *Journal of Operations Management*, Vol. 28 No. 1, pp. 58-71.
- Frohlich, M.T. and Westbrook, R. (2002), "Demand chain management in manufacturing and services: web-based integration, drivers and performance", *Journal of Operations Management*, Vol. 20 No. 6, pp. 729-745.
- Fung Business Intelligence Centre (2014), "China's apparel market, 2014", available at: [www.funggroup.com/eng/knowledge/research/industry\\_series25.pdf](http://www.funggroup.com/eng/knowledge/research/industry_series25.pdf) (accessed May 10, 2016).
- Gattorna, J. (1998), *Strategic Supply Chain Alignment: Best Practice in Supply Chain Management*, Gower Publishing Limited, Farnham.
- Gattorna, J. (2015), *Dynamic Supply Chains*, Pearson Education Limited, London.
- Golicic, S.L., Davis, D.F. and McCarthy, T.M. (2005), "A balanced approach to research in supply chain management", in Kotzab, H., Seuring, S., Muller, M. and Reiner, G. (Eds), *Research Methodologies in Supply Chain Management*, Physica-Verlag, Heidelberg, pp. 15-29.
- Gunasekaran, A., Lai, K-h and Edwin Cheng, T.C. (2008), "Responsive supply chain: a competitive strategy in a networked economy", *Omega*, Vol. 36 No. 4, pp. 549-564.
- Henderson, J.C. and Venkatraman, H. (1993), "Strategic alignment: leveraging information technology for transforming organizations", *IBM Systems Journal*, Vol. 32 No. 1, pp. 472-484.
- Hewitt, F. (1994), "Supply chain redesign", *The International Journal of Logistics Management*, Vol. 5 No. 2, pp. 1-10.
- Hilletofth, P. (2009), "How to develop a differentiated supply chain strategy", *Industrial Management & Data Systems*, Vol. 109 No. 1, pp. 16-33.
- Hilletofth, P., Ericsson, D. and Christopher, M. (2009), "Demand chain management: a Swedish industrial case study", *Industrial Management & Data Systems*, Vol. 109 No. 9, pp. 1179-1196.
- Hines, T. (2004), *Supply Chain Strategies: Customer-Driven and Customer-Focused*, Routledge, London.

- Holmström, J., Louhiluoto, P., Vasara, A. and Hoover, W.E. Jr (2001), "The other end of the supply chain", *Supply Chain Forum: An International Journal*, Vol. 2 No. 1, pp. 22-25.
- Hong, B.G. (2006), "Sheng cun yu fa zhan zhi lu (Future development of Chinese textile and apparel industry)", *Hang Ye Tou Xi*, Te qu jing ji, pp. 329-330.
- Hua, S. and Guo, H.J. (2012), "Wo guo fang zhi qi ye zhuan yi de te dian he ying xiang yin su fen xi [Industrial aggregation under Chinese textile industry]", *Hang Ye Guan Cha*, fang zhi dao bao, pp. 16-22.
- Huang, S.H., Uppal, M. and Shi, J. (2002), "A product driven approach to manufacturing supply chain selection", *Supply Chain Management: An International Journal*, Vol. 7 No. 4, pp. 189-199.
- Jiemian.com (2015), "Xian xia men dian dan ri fa huo shi ba wan dan, fu shi ju tou lin zhi shi ru he zuo dao de? (A hundred eighteen thousand parcels delivered from offline physical stores to the online consumers per day, how Bestseller does)", available at: [www.jiemian.com/article/350006.html](http://www.jiemian.com/article/350006.html) (accessed May 10, 2016).
- Jung, C.G. (1968), *Analytical Psychology: It's Theory and Practice*, Routledge, London.
- Jüttner, U., Christopher, M. and Baker, S. (2007), "Demand chain management-integrating marketing and supply chain management", *Industrial Marketing Management*, Vol. 36 No. 3, pp. 377-392.
- Jüttner, U., Godsell, J. and Christopher, M.G. (2006), "Demand chain alignment competence – delivering value through product life cycle management", *Industrial Marketing Management*, Vol. 35 No. 8, pp. 989-1001.
- Kohlbacher, F. (2006), "The use of qualitative content analysis in case study research", *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, Vol. 7 No. 1, available at: <http://nbn-resolving.de/urn:nbn:de:0114-fqs0601211>
- Kshetri, N. (2009), "The development of market orientation: a consideration of institutional influence in China", *Asia Pacific Journal of Marketing and Logistics*, Vol. 21 No. 1, pp. 19-40.
- Kwan, C.Y., Yeung, K.W. and Au, K.F. (2003), "A statistical investigation of the changing apparel retailing environment in China", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 7 No. 1, pp. 87-100.
- Lam, J.K. and Postle, R. (2006), "Textile and apparel supply chain management in Hong Kong", *International Journal of Clothing Science and Technology*, Vol. 18 No. 4, pp. 265-277.
- Lambert, D.M., Cooper, M.C. and Pagh, J.D. (1998), "Supply chain management: implementation issues and research opportunities", *The International Journal of Logistics Management*, Vol. 9 No. 2, pp. 1-20.
- Lee, H.L. (2002), "Aligning supply chain strategies with product uncertainties", *California Management Review*, Vol. 44 No. 3, pp. 105-119.
- Liu, K. (2007), "Unfolding the post-transition era: the landscape and mindscape of China's retail industry after 2004", *Asia Pacific Journal of Marketing and Logistics*, Vol. 19 No. 4, pp. 398-412.
- Lu, S. and Dickson, A.M. (2015), "Where is China's textile and apparel industry going?", China Policy Institute, Nottingham, available at: <https://cpianalysis.org/2015/07/24/where-is-chinas-textile-and-apparel-industry-going/> (accessed May 10, 2016).
- Lyons, A.C., Mondragon, A.E.C., Piller, F. and Poler, R. (2012), *Customer-Driven Supply Chains: From Glass Pipelines to Open Innovation Networks*, Springer Science & Business Media, London.
- McFarlane, F.W. (1984), "Information technology changes the way you compete", *Harvard Business Review*, Reprint Service, Brighton, pp. 98-109.
- Mason-Jones, R., Naylor, B. and Towill, D.R. (2000), "Engineering the leagile supply chain", *International Journal of Agile Management Systems*, Vol. 2 No. 1, pp. 54-61.
- Masson, R., Iosif, L., MacKerron, G. and Fernie, J. (2007), "Managing complexity in agile global fashion industry supply chains", *The International Journal of Logistics Management*, Vol. 18 No. 2, pp. 238-254.



- Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis: A Methods Sourcebook*, Sage, London.
- Mo, H.P. (2010), "Zhejiang sheng zhong xiao fang zhi qi ye chu kou xian zhuang yu dui ce fen xi [A study for Chinese small and medium size textile manufacturers in Zhejiang Province]", *Chan Ye Jing Ji*, Vol. 2010 No. 12X, pp. 183-185.
- Naylor, J.B., Naim, M.M. and Berry, D. (1999), "Leagility: integrating the lean and agile manufacturing paradigms in the total supply chain", *International Journal of Production Economics*, Vol. 62 No. 1, pp. 107-118.
- Ohno, T. (1988), *Toyota Production System: Beyond Large-Scale Production*, Productivity Press, New York, NY.
- Olavson, T., Lee, H. and DeNyse, G. (2010), "A portfolio approach to supply chain design", *Supply Chain Management Review*, Vol. 14 No. 4, pp. 20-27.
- Oliver, R.K. and Webber, M.D. (1982), "Supply chain management: logistics catches up with strategy", *Outlook*, Vol. 5 No. 1, pp. 42-47.
- Porter, M.E. and Millar, V.E. (1985), "How information gives you competitive advantage", *Harvard Business Review*, Vol. 63 No. 4, pp. 149-152.
- Qiu, H. (2008), "Quan qiu jia zhi lian shi jiao xia wo guo fang zhi fu zhuang ye sheng ji de lu jing xuan ze (China's textile and apparel industry upgrade under development of the global value chain)", *Bei Fang Jing Ji*, Vol. 2008 No. 2, pp. 44-46.
- Rainbird, M. (2004), "Demand and supply chains: the value catalyst", *International Journal of Physical Distribution & Logistics Management*, Vol. 34 Nos 3/4, pp. 230-250.
- Retail and Ecommerce (2016), "China eclipses the US to Become the world's largest retail market", eMarketer, available at: [www.emarketer.com/Article/China-Eclipses-US-Become-Worlds-Largest-Retail-Market/1014364](http://www.emarketer.com/Article/China-Eclipses-US-Become-Worlds-Largest-Retail-Market/1014364) (accessed September 2, 2016).
- Robertson, P.W., Gibson, P.R. and Flanagan, J.T. (2002), "Strategic supply chain development by integration of key global logistical process linkages", *International Journal of Production Research*, Vol. 40 No. 16, pp. 4021-4040.
- Sin, L.Y., Ho, S.C. and So, S.L. (2000), "Research on advertising in mainland China: a review and assessment", *Asia Pacific Journal of Marketing and Logistics*, Vol. 12 No. 1, pp. 37-65.
- Spear, S. and Bowen, H.K. (1999), "Decoding the DNA of the Toyota production system", *Harvard Business Review*, September-October, pp. 96-108.
- Srinivasan, K., Kekre, S. and Mukhopadhyay, T. (1994), "Impact of electronic data interchange technology on JIT shipments", *Management Science*, Vol. 40 No. 10, pp. 1291-1304.
- Stavroulaki, E. and Davis, M. (2010), "Aligning products with supply chain processes and strategy", *The International Journal of Logistics Management*, Vol. 21 No. 1, pp. 127-151.
- Stratton, R. and Warburton, R. (2003), "The strategic integration of agile and lean supply", *International Journal of Production Economics*, Vol. 85 No. 2, pp. 183-198.
- Sukati, I., Hamid, A.B., Baharun, R. and Yusoff, R.M. (2012), "The study of supply chain management strategy and practices on supply chain performance", *Procedia-Social and Behavioral Sciences*, Vol. 2012 No. 40, pp. 225-233.
- Tai, S.H. (2007), "Correlates of successful brand advertising in China", *Asia Pacific Journal of Marketing and Logistics*, Vol. 19 No. 1, pp. 40-56.
- Tan, K.C. (2001), "A framework of supply chain management literature", *European Journal of Purchasing & Supply Management*, Vol. 7 No. 1, pp. 39-48.
- Tan, K.C., Kannan, V.R. and Handfield, R.B. (1998), "Supply chain management: supplier performance and firm performance", *Journal of Supply Chain Management*, Vol. 34 No. 3, pp. 2-9.
- Tewksbury, R. (2009), "Qualitative versus quantitative methods: understanding why qualitative methods are superior for criminology and criminal justice", *Journal of Theoretical and Philosophical Criminology*, Vol. 1 No. 1, pp. 38-58.

- The Economist* (2013), "The Alibaba phenomenon China's e-commerce giant could generate enormous wealth – provided the country's rulers leave it alone", available at: [www.economist.com/news/leaders/21573981-chinas-e-commerce-giant-could-generate-enormous-wealth-provided-countrys-rulers-leave-it](http://www.economist.com/news/leaders/21573981-chinas-e-commerce-giant-could-generate-enormous-wealth-provided-countrys-rulers-leave-it) (accessed May 10, 2016).
- Thomas, D.J. and Griffin, P.M. (1996), "Coordinated supply chain management", *European Journal of Operational Research*, Vol. 94 No. 1, pp. 1-15.
- Tong, X. and Li, C. (2013), "Impact of brand personality and consumer ethnocentrism in China's sportswear market", *Asia Pacific Journal of Marketing and Logistics*, Vol. 25 No. 3, pp. 491-509.
- Toon, M.A., Morgan, R.E., Lindgreen, A., Vanhamme, J. and Hingley, M.K. (2016), "Processes and integration in the interaction of purchasing and marketing: considering synergy and symbiosis", *Industrial Marketing Management*, Vol. 52, January, pp. 74-81.
- Treville, S., Shapiro, R.D. and Hameri, A.-P. (2004), "From supply chain to demand chain: the role of lead time reduction in improving demand chain performance", *Journal of Operations Management*, Vol. 21 No. 6, pp. 613-627.
- Turner, D.W. III (2010), "Qualitative interview design: a practical guide for novice investigators", *The Qualitative Report*, Vol. 15 No. 3, pp. 754-760.
- Van Landeghem, H. and Vanmaele, H. (2002), "Robust planning: a new paradigm for demand chain planning", *Journal of Operations Management*, Vol. 20 No. 6, pp. 769-783.
- Vonderembse, M.A., Uppal, M., Huang, S.H. and Dismukes, J.P. (2006), "Designing supply chains: towards theory development", *International Journal of Production Economics*, Vol. 100 No. 2, pp. 223-238.
- Walters, D. (2006), "Effectiveness and efficiency: the role of demand chain management", *The International Journal of Logistics Management*, Vol. 17 No. 1, pp. 75-94.
- Walters, D. and Rainbird, M. (2004), "The demand chain as an integral component of the value chain", *Journal of Consumer Marketing*, Vol. 21 No. 7, pp. 465-475.
- Wang, F. and Guo, M. (2014), "Wo guo fang zhi fu zhuang ye zai quan qiu jia zhi lian zhong de di wei (The role of local textile and apparel firms in the global value chain)", *Jing Mao Lun Tan*, Vol. 2014 No. 12, pp. 14-24.
- Williams, T., Maull, R. and Ellis, B. (2002), "Demand chain management theory: constraints and development from global aerospace supply webs", *Journal of Operations Management*, Vol. 20 No. 6, pp. 691-706.
- Wong, X., Yen, D.C. and Fang, X. (2004), "E-commerce development in China and its implication for business", *Asia Pacific Journal of Marketing and Logistics*, Vol. 16 No. 3, pp. 68-83.
- Wu, T., Jim Wu, Y.-C., Chen, Y.J. and Goh, M. (2014), "Aligning supply chain strategy with corporate environmental strategy: a contingency approach", *International Journal of Production Economics*, Vol. 147, January, pp. 220-229.
- Ye, Y. and Lau, K. (2014), "Managing demand and supply networks of the Chinese fashion apparel industry under the complexity of the new economy transitions", *Hamburg International Conference of Logistics (HICL 2014)*, pp. 49-84.
- Ye, Y., Lau, K. and Teo, L. (2013), "Demand-supply chain management for the Chinese fast fashion apparel industry", in Grimmer, M. (Ed.), *Proceedings of 27th Australian and New Zealand Academy of Management Conference (ANZAM 2013)*, Tasmania, pp. 1-26.
- Yi, C.Y., Ngai, E.W.T. and Moon, K.L. (2011), "Supply chain flexibility in an uncertain environment: exploratory findings from five case studies", *Supply Chain Management: An International Journal*, Vol. 16 No. 4, pp. 271-283.
- Yi, L. and Jaffe, E.D. (2007), "Economic development and channel evolution in the people's Republic of China", *Asia Pacific Journal of Marketing and Logistics*, Vol. 19 No. 1, pp. 22-39.
- Yin, R.K. (2013), *Case Study Research: Design and Methods*, Sage Publications, London.
- Yu, W. and Ramanathan, R. (2012), "Managing strategic business relationships in retail operations: evidence from China", *Asia Pacific Journal of Marketing and Logistics*, Vol. 24 No. 3, pp. 372-393.

- Yuan, X. and Xu, N. (2010), "Wo guo fang zhi fu zhuang ye fa zhang li cheng yu xian zhuang fen xi [Development of China's textile and apparel industry]", *Jing Ji Yan Jiu Dao Kan*, Vol. 14 No. 88, pp. 25-26.
- Zhao, J. (2013), *The Chinese Fashion Industry: An Ethnographic Approach*, Bloomsbury, London.
- Zhou, Y. (2010), "Zhongguo fu zhuang ye de fa zhan xin qu shi [New developing trend of apparel industry in China]", *Zhongguo Fang Zhi Gong Ye Xie Hui Tong Ji Zhong Xin Ke Ti Zu*, Vol. 2010 No. 6, pp. 133-134.
- Zhu, Y., Chen, T. and Zhou, J. (2010), "Wo guo fang zhi fu chuang hang ye FDI yi chu xiao ying yan jiu: yin su, ji zhi yu dui ce si kao (An empirical study on FDI international knowledge spill overs and regional economic development in China)", *Tsinghua Da Xue Xue Bao: Zhe Xue She Hui Ke Xue Ban*, Vol. 25 No. 4, pp. 113-125.

### Further reading

- Christopher, M. and Peck, H. (2012), *Marketing Logistics*, Routledge, London.
- Fung Business Intelligence Center (2013), "China's apparel market, 2013", available at: [www.funggroup.com/eng/knowledge/research/industry\\_series23.pdf](http://www.funggroup.com/eng/knowledge/research/industry_series23.pdf) (accessed May 10, 2016).
- Green, K.W., Whitten, D. and Inman, R.A. (2012), "Aligning marketing strategies throughout the supply chain to enhance performance", *Industrial Marketing Management*, Vol. 41 No. 6, pp. 1008-1018.
- Kam, B.H., Chen, L. and Wilding, R. (2011), "Managing production outsourcing risks in China's apparel industry: a case study of two apparel retailers", *Supply Chain Management: An International Journal*, Vol. 16 No. 6, pp. 428-445.
- Ketchen, D.J. Jr and Hult, G.T.M. (2007), "Bridging organization theory and supply chain management: the case of best value supply chains", *Journal of Operations Management*, Vol. 25 No. 2, pp. 573-580.
- Ketchen, J.D.J., Rebarick, W., Hult, G.T.M. and Meyer, D. (2008), "Best value supply chains: a key competitive weapon for the 21st century", *Business Horizons*, Vol. 51 No. 3, pp. 235-243.
- Lambert, D.M. and Cooper, M.C. (2000), "Issues in supply chain management", *Industrial Marketing Management*, Vol. 29 No. 1, pp. 65-83.
- Láinez, J.M., Reklaitis, G.V. and Puigjaner, L. (2010), "Linking marketing and supply chain models for improved business strategic decision support", *Computers & Chemical Engineering*, Vol. 34 No. 12, pp. 2107-2117.
- Langenberg, K.U., Seifert, R.W. and Tancrez, J.-S. (2012), "Aligning supply chain portfolios with product portfolios", *International Journal of Production Economics*, Vol. 135 No. 1, pp. 500-513.
- Lee, H.L. (2004), "The triple-A supply chain", *Harvard Business Review*, Vol. 82 No. 10, pp. 102-113.
- Liker, J.K. and Choi, T.Y. (2004), "Building deep supplier relationships", *Harvard Business Review*, Vol. 82 No. 12, pp. 104-113.
- Srivastava, R.K., Shervani, T.A. and Fahey, L. (1999), "Marketing, business processes, and shareholder value: an organizationally embedded view of marketing activities and the discipline of marketing", *The Journal of Marketing*, Vol. 63, Special Issue, pp. 168-179.

### Corresponding author

Ying Ye can be contacted at: [ying.ye@rmit.edu.au](mailto:ying.ye@rmit.edu.au)

## Appendix. Example of within-case data analysis (matching interview data with A-I-P-D logic codes)

DCM scopes	Elements	Key evidence gather from interviews	Key actions summarized by evidence	Code
Demand-side Operation	Product mix	"We are leveraging our customers by extending our design themes and adding more on trendy elements into our basic collections to create diversity for one theme and also use accessories to enhance look and create diversity." — Sales manager in Shanghai	<ul style="list-style-type: none"> <li>Introduce more product styles in line with various occasions.</li> <li>Create product differentiation by matching basic products with accessories or creative visual display.</li> </ul>	P
	Marketing emphasis	"We used to skill basic office wear, however people nowadays are looking for diversity. By managing the visual display, we can introduce our consumers to different styles by march simple clothing diversity and encourage purchasing." — Product manager in Shanghai	<ul style="list-style-type: none"> <li>Focus on visual display to create diversity</li> <li>Marketing online.</li> <li>Quick response to changing requirements</li> </ul>	P
	Consumer segmentation	"Knowing your own consumer group is important for locating your store and display the store based on their tastes. This also helps the store make better decisions in product ordering. For example, if a store is located near a university campus, most of coming customers are students who prefer casual wear with an affordable price. Also, if a store is located near a business centre, those customers might look for an urban classy style without considering too much on price." — Sales manager in Shanghai "We now have online store and last year, we have started to work with Tencent and launched our mobile platform." — Product manager in Shanghai	<ul style="list-style-type: none"> <li>Funnel down the network to diverse consumer groups</li> <li>Reach out a large amount of new users through online and mobile channels.</li> </ul>	P
Supply-side Operation	Channels of distribution	"We have withdrawn some of the franchise stores that had a low sales return and worked with Taobao to launch our online store in 2009. We are downsizing our physical stores as now most of companies are going online. Now we have most physical stores direct-owned." — Sales manager in Shanghai	<ul style="list-style-type: none"> <li>Withdraw franchise ownership, and fully adopt direct ownership.</li> <li>Launch online store.</li> <li>Open mobile application and social platform to reach new users.</li> </ul>	P
	Promotion and price regime	"Since we have restructured our sales channel, and cut down numbers of franchising stores where overstock occurred and dragged our sales, now we are trying to get rid of stock by sell through online outlet or through discounted seasonal promotions." — Sales manager in Shanghai "We've got over 60 OEM suppliers in city of Guangzhou and Dongguan. We look for best price deal since some of them with us for a long time." — Product manager in Shanghai	<ul style="list-style-type: none"> <li>Launch sales campaigns through online and mobile network.</li> <li>Release a high number of promotional activities throughout seasonal sales</li> <li>Outsource production to OEMs for lowest price.</li> </ul>	P
	Production flow	"Previously we worked on long lead-time production cycle. We used to pre-select the style for the whole financial year before put into production plan. The production lead time sometimes can stretch to 6 months. Whereas now, we require a shorter lifecycle and head office got us a seasonal timeline to put into system and regular stock takes are carried out in each store warehouse to prevent overstock." — Product manager in Shanghai	<ul style="list-style-type: none"> <li>Require shorter production lead-time monthly.</li> <li>Get regular feedback to the head office</li> </ul>	P
Capacity consideration	"When it comes to downstream transportation and product delivery, since we have multiple channels, including online, mobile and physical. To avoid complexity, we adopt store fulfillment model. Orders are assigned and consigned to regional stores based on geographic location. For second tier parcel delivery, we hired multiple small 3PLs to reach out for us from regional store warehouses." — Regional manager from head-office	<ul style="list-style-type: none"> <li>Use store fulfillment for its multiple channel delivery to control inventory and product flow.</li> <li>Work with small 3PLs for last-mile online order delivery in order to</li> </ul>	P	

### A-I-P-D Coding Descriptor:

#### Product mix element

A: Commodity products, stable product line, minimal variants

I: Focus on mature, branded and augmented products

P: Larger range, choice important, differentiated products in growing markets

D: Customized products for innovation, growth through product and market development

### A-I-P-D Coding Descriptor:

#### Sourcing and procurement element

A: Outsource standard products to achieve lowest cost production

I: Select suppliers based on relationships and capabilities

P: Select suppliers with market knowledge and capabilities

D: Product technology innovation; look for suppliers with capacity and creative solutions

<p>IT support</p>	<p><i>"As mentioned, now we have an ordering system and seasonal production cycle in plan whereas in the downstream retail, we have POS machine to record everyday sales and take stock regularly. However, in terms of inventory management or product delivery, we don't have integrated system. Orders from online and mobile platform are organized by third-party service providers, which might need time to merge with our internal system."</i> — Regional manager from head-office</p> <p><i>"Though we could achieve better economic aggregation and inventory control through IS integration or infrastructure planning, this part of the service is still under exploration. We are facing many technical IT limitations after we implemented multiple channels. It is also causing many fragmented managerial problems and conflicts between internal parties. However, we are able to work out by using store fulfillment and working with multiple highly-efficient 3PLs to reduce the risk at the moment."</i> — Regional manager from head-office</p>	<p>P</p> <p>enhance the customer service.</p> <ul style="list-style-type: none"> <li>■ Use IT to improve efficiency, such as barcoding technology to track products in transition and POS in store transactions.</li> <li>■ Set up order procurement system.</li> <li>■ Work with third-party service providers for system development</li> </ul>
<p>Customer relationship intensity</p>	<p>P</p> <ul style="list-style-type: none"> <li>■ Work with multiple third-party service providers for fast delivery and IS integration to enhance flexibility in the supply chain</li> <li>■ Achieve rapid response in unpredictable conditions</li> </ul>	<p>P</p> <ul style="list-style-type: none"> <li>■ Focus on high sales</li> <li>■ Provide relative responsive service by building multiple sales channels</li> <li>■ Focus on store fulfillment distribution to control product flow</li> <li>■ Work flexibly with small 3PLs for responsive parcel delivery service</li> </ul>
<p>Management Component</p> <p>Shared values</p>	<p>P</p> <p><i>"Our CEO was a sales person and focused on driving a highly-sales returned company. Though the current system has many flaws, like fragmented IS and transitional disorders, and it might not be the most effective process, but it is the most efficient one to fulfill the volatile demand as responsive as we can."</i> — Regional manager from head-office</p>	<p>P</p> <ul style="list-style-type: none"> <li>■ Focus on high sales</li> <li>■ Provide relative responsive service by building multiple sales channels</li> <li>■ Focus on store fulfillment distribution to control product flow</li> <li>■ Work flexibly with small 3PLs for responsive parcel delivery service</li> </ul>
<p>Resource allocation</p>	<p>P</p> <p><i>"The supply chain still is built on a make-to-stock structure, however, the spare capacity is leveraged by gaining new consumers in multiple channels, and a responsive delivery service also is provided by working with multiple 3PL partners. We are able to sustain on the previous model by finding new capacity and building multiple-channel to reach out more customer groups."</i> — Regional manager from head-office</p>	<p>P</p> <ul style="list-style-type: none"> <li>■ Building multiple channels to leverage new demand</li> <li>■ Investing in sales and marketing.</li> </ul>
<p>Business structure</p>	<p>A</p> <p><i>"We are required to do sales report on daily, weekly and monthly sales data, however, no one read report every days. If the products are detected with a problem, we don't really know who caused the damage. We have to listen to regional sales manager's order and fulfill the sales target."</i> — Product manager in Shanghai</p> <p><i>"Additional documents can be provided in terms of business structure of this company."</i></p>	<p>A</p> <ul style="list-style-type: none"> <li>■ Unclear responsibility exists between structure layers</li> <li>■ Structure mainly grounded to support sales team.</li> </ul>
<p>Culture and leadership</p>	<p>P</p> <p><i>"We are pretty sales-driven. When problems occurred relate to product, such as quality issues or ordering issues, unless it is pretty urgent with sales delay, nobody really care that much. Sometimes, we report issues to top management end up with no reply. But anything to do with sales team, head office will prioritize."</i> — Product manager in Shanghai</p> <p><i>*For response from managerial perspective, refer inherently to elements of Competitive Edge and Resource Allocation</i></p>	<p>P</p> <ul style="list-style-type: none"> <li>■ Investing in sales and marketing.</li> <li>■ New plans are carried out to control product flow, such as cutting order budgets and regular stock checking.</li> </ul>
<p>Risk management</p>	<p>P</p> <p>Refer to the above elements</p>	<p>P</p> <ul style="list-style-type: none"> <li>■ Working towards a responsive supply chain with multiple 3PLs for risk sharing.</li> <li>■ Borrowing 3PL IS instead of investing solely in system design.</li> </ul>

**A-I-P-D Coding Descriptor:**  
**Competitive edge element**

A: Focus on 'deep' approach; efficient; ability to provide customers with value for money; security

I: Focus on 'quality'; ability to develop long-term, dependent customer relationships

P: 'Deep and focused', 'high-energy approach; reliability, accuracy, responsive to customer needs

D: 'Broad' approach; spontaneity; ability to anticipate and exceed customer expectations; flexibility

\*This example data was extracted from Company E's interview data.