Ecommerce: Channel or Strategy? Insights from a Comparative Case Study

completed Research Paper

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Abstract

The transformation of traditional offline operations into digitally integrated offline-online environment has been a difficult challenge for firms from both operational and strategic perspectives, and has become a major topic of research for scholars. We conducted a comparative case study to explore an emerging trend – the convergence of offline and online operations and strategies. This study extends disruptive innovation theory by emphasizing the interactive effect between firms and customers on organizational innovation in the ecommerce environment. We demonstrate that treating online ecommerce as a channel innovation is an essential problem that pushes many traditional firms into a transformational dilemma. We further explore two successful transformational paths and strategies used by our case firms: the resource-complement sustaining renewal and the resource-substitute disruptive renewal. This study provides a theoretical understanding and a practical guide to firms that transform from traditional offline mode to digital online/offline mode.

Keywords: ecommerce, disruptive innovation, sustaining innovation, strategic renewal, channel management, strategic management
Introduction

The transformation of traditional offline operations into digitally integrated offline-online environment has been a difficult challenge for firms from both operational and strategic perspectives. While many new entrants into ecommerce can quickly build their brands and occupy a segment of online markets with considerable sales, most traditional offline firms often struggle in entering the online markets and building brands. The anecdotal evidence from our conversations with managers in many bricks-and-mortar firms appears to suggest that those that failed to build successful ecommerce operations after spending millions and countless human resources tend to believe that ecommerce is just another channel for sales and distribution, and those that succeeded tend to believe that ecommerce as part of a competitive strategy that is synergetic and complementary and must be integrated into the overall operations and strategies. This observation leads to the three primary research questions of this study: 1) Is ecommerce a channel or a strategy? 2) Why does this belief significantly impact the success or failure of traditional offline firms venturing into ecommerce landscape? And 3) is there a right strategic renewal path for traditional firms to transform themselves and succeed in the ecommerce market?

Channel research on ecommerce argues that unclear channel positioning, conflicted pricing, and product similarity are the main causes of failure when traditional firms add ecommerce operations (Webb, 2002; Chiang et al., 2003; Langer et al., 2012; Jen-Ming et al., 2013). Many traditional offline firms are unable to resolve the channel conflicts due to product factors, pricing problems, and supply chain issues (Chiang et al., 2003; Seong, 2003). Although research literature has proposed many ideas for channel synergy and multi-channel optimization, traditional firms appear to still suffer from this difficult dilemma. On the other hand, strategy research argues that ecommerce should be considered for its strategic values instead of simply as an additional channel. Research literature that explores the impact of ecommerce on organizational structures, operations and business model argues for an integrated perspective to strategic implementation, supply chain management, and business value network (Chen et al., 2014; Hoffman et al., 2000; Venkatesan & Kumar, 2004). Clearly, the channel perspective has contributed to the understanding of channel conflict resolution and channel synergy but has missed the analysis of its strategic value, while the strategic perspective has focused on the impact of ecommerce on organizational internals and externals but has not considered the types of strategy and the selection issues. This gap in the literature impedes a comprehensive understanding of the value of ecommerce in theory and practical guidance for mangers in traditional firms facing increasing competition from competitors in ecommerce marketplace.

We argue that strategic renewal (Agarwal and Helfat, 2009) and disruptive innovation theory (Christensen, 1997, 2002) provide salient insight into bridging this gap. Strategic renewal argues firms should refresh or replace organizational attributes that have the potential to substantially affect their long-term prospects (Agarwal and Helfat, 2009). Some studies elaborated how firms refresh or replace organizational attributes such as product design, organizational learning, structural integration, and dynamic capabilities to accomplish strategic renewal (Capron et al., 2009; Gulati et al., 2009; Knott et al., 2009; Puranam et al., 2009). However, little research has explored the strategic renewal issues in transitioning from offline to online. Digital technologies promote online transaction and compel organizational strategy and operations to be customer-oriented. How do offline firms manage online transactions characterized by high fluctuation, wide distribution areas, highly customer-oriented, low price, and high speed? And how do they overcome the organizational inertia and change their strategy and operations? We address these challenges by examining two basic types of strategic renewal - discontinuous strategic transformation and incremental strategic renewal - to elaborate two different transformational paths for offline organizations with distinct resource base, organizational inertia, and entrepreneurship.

We draw from disruptive innovation theory to help uncover specific renewal paths by exploring the disruptive features of ecommerce technology and ecommerce business models. Disruptive innovations in ecommerce, such as Web 2.0, cloud computing, data mining, and other Internet technology have attracted significant amount of academic attention (Sultan, 2013; Lee, 2012; Marston et al., 2011). According to Forrester Research (an independent technology and market research company), online customers in China will aggregate to 356 million in 2014, exceeding the entire population of the United States. The explosive growth and disruptive tendency of ecommerce force traditional firms to take actions in order to capture this opportunity and to avoid becoming irrelevant. However, extant studies have explored the impact of disruptive innovations mainly from the technical aspects, and talked little about the disruptive business models or disruptive operation modes. Disruptive innovation theory argues that disruptive innovations developed by new entrants can hurt successful,
well managed firms with “low-end disruption” or “new-market disruption.” (Sabatier et al., 2012; Schmidt and Druehl, 2008). With frequent interactions with competitors and other customers via social media, online customers can quickly learn and compare product quality, after-sales service, and other related information, making the customers’ role in ecommerce much more important than that in the offline environment. Firms that want to be successful in ecommerce have to pay greater attention to customer behavior and sentiment. Thus, there are clear distinctions between the disruptive innovations in the ecommerce environment and these in the traditional market environment.

The above discussion suggests that whether the transformation of traditional firms fails or succeeds is related to the consciousness of “channel or strategy” and the complement operating capability in traditional and ecommerce environment. How to accomplish a successful strategic renewal in the ecommerce environment has become a theoretical and practical managerial challenge. To examine the interactive relationships among channel, strategy, and customer in the transformation process of traditional firms, we chose to conduct a comparative case study with two firms in China: JEANSWEST and COMAGIC. Both of them are traditional offline firms and suffered failures in their initial attempts to develop ecommerce operations. Following different transformational paths, they eventually discovered the key to success and became leading companies in different markets. We are interested in knowing how they introduced ecommerce in their operations and strategies, why they failed initially, and then how they transformed themselves from traditional bricks-and-mortar companies successfully into integrated online-offline industry leaders. Our objective is to propose a strategic renewal framework that explains the transformation processes of the two case firms and provides theoretical and practical insights.

**Literature Review**

The channel perspective tends to focus on the impact of online channels on offline channels, contributing to the resolution of channel conflict. Qualitative studies have investigated channel synergy and channel control in successful cases (Wang and Zhang, 2013; Gilliland and Rudd, 2013), while quantitative studies have focused on the optimization of multi-channels, considering pricing, profit disposition, market segment, order strategy, and etc. (Jiang and Balasubramanian, 2014; Chiang et al., 2003; Seong, 2003). Additionally, some studies focus on the selection of multi-channels such as e-commerce, in-store and m-commerce (Maity and Dass, 2014). In general, online channels and offline channels of a firm can be either synergetic or conflicting (Vislhwathan and Mulvin, 2001). Channel separation is an effective way to relieve the stress of the conflict by defining distinctive roles for the online channels and the offline channels with product and/or price differentiation (Wang and Zhang, 2013). For instance, Huang and Swaminathan (2009) investigated the pricing decisions of a manufacturer and its retailers. However, experience shows that the product and price differentiation strategy may provoke misunderstanding of customers about quality or even brand positioning. Other studies revealed that channel complementation and channel substitution can enhance the channel synergy (Webb, 2002; Seong, 2003). Product complementation and service complementation are the main modes of channel complementation. The former suggests that the online channel is mainly used to offer discount sales or overstocks, while the traditional channel is used for presenting and sales of the new and fashions in season. Service complementation refers to complementing the feature rich traditional channel, such as touch and feel, and personalized communications, with the unique features of online channel, such as convenience and information rich search capability. In the case of channel substitution, traditional firms transit into ecommerce environment and gradually make the traditional channels subordinate or even divested. This reconstitution represents a kind of channel substitution which is usually favored by firms with small size. However, this type of channel strategy has not yet attracted adequate academic interests and research. Overall, the channel perspective on ecommerce has contributed to the ongoing debate on channel conflict, optimization and synergy, but it essentially regards ecommerce as a new channel instead of a competitive strategy.

However, ecommerce as a disruptive innovation has posed significant challenges to traditional firms, because its influence has far exceeded its function as a new channel for sales or distribution. Studies from the strategic perspective of ecommerce have explored its impact on organizational structures, operations, and business models (Chen et al., 2014; Ramanathan et al., 2012; Venkatesan & Kumar, 2004; Hoffman et al., 2000). In contrast to the channel perspective, the strategic perspective stresses the integration of enterprises, supply chain, and even the entire value network in the implementation of ecommerce (Chen, 2013). Some studies also proposed that channel choices should be based on a strategic analysis (Hua et al., 2011). For instance, Grandon and Pearson (2004) reported that
compatibility between ecommerce and a firm's culture, values, and processes is an important factor for ecommerce adoption. For external factors, the role of the firm in a value network, coordination among partners, and involvement of customers in the firm’s innovation process are key elements of the firm’s ecommerce strategy (Venkatesan and Kumar, 2004; Hoffman et al., 2000; Porter, 2001; Zhao et al., 2008). However, extant literature tends to focus on ecommerce adoption and the related factors; the critical questions of how to develop an appropriate ecommerce strategy and implement it successfully have yet to be adequately addressed.

To bridge the gap in ecommerce channel theories and strategy theories, scholars have explored different perspectives on integrating channel research and strategy research in the ecommerce environment. The transformation from traditional firms to ecommerce firms is a kind of strategic renewal process that firms choose in order to acquire or maintain competitive advantages. Due to differences in resources, organizational inertia, and entrepreneurship, different firms may evolve in two main ways—sustaining renewal path and disruptive renewal path, based on two theoretical perspectives: strategic renewal (Agarwal and Helfat, 2009) and disruptive innovation (Christensen, 1997).

**Strategic Renewal:** Agarwal and Helfat (2009) define strategic renewal as the process, content, and outcome of refreshment or replacement of attributes of an organization that have the potential to substantially affect its long-term prospects. The key aspects of strategic renewal relate to refreshment and replacement, rather to all types of change. Relevant studies have explored the issues of new product design, organizational learning, structural integration and dynamic capabilities from the strategic renewal theoretical perspective (Capron et al., 2009; Gulati et al., 2009; Knott et al., 2009; Puranam et al., 2009), and proposed two basic types of strategic renewal: discontinuous strategic transformation and incremental renewal.

Discontinuous strategic transformation characterizes the “competence-destroying change” (Tushman and Anderson, 1986). When suffering from radical external changes, a firm’s core business or other resources may become useless. For traditional firms, in order to survive a digital revolution like ecommerce, they have to make significant changes in multiple dimensions towards the new environment (Huff et al., 1992; Agarwal and Helfat, 2009). On the other hand, incremental renewal is often preferred by large firms with resource constraints (Murray and O’Mahony, 2007; Rothaermel and Hess, 2007). It is characterized by sustaining renewal and path dependency. If firms can reuse their own resources to adapt to the new market environment, they may reduce the need for much larger and more difficult organizational changes (Agarwal and Helfat, 2009). However, a key question of incremental renewal is how to effectively reuse old resources to acquire new competency in the new market, which has not been explored adequately in the extant literature. Other important questions about strategic renewal are: Why do different firms choose different strategic renewal paths? What is the role of technology and business model in strategic renewal? And how to accomplish successful strategic renewal?

**Disruptive Innovation:** Disruptive innovation theory (Christensen, 1997) may help explain what kind of resources firms should have and how to use these resources to innovate in discontinuous strategic transformation and incremental renewal. There are two key concepts in disruptive innovation theory: disruptive innovation and sustaining innovation. As disruptive innovation theory expresses, technology, product, or service with cheaper, simpler and more convenient attributes tend to exceed the capabilities of the dominants on a few dimensions that are appealing to a few fringe customers; and as the disruptive technology, product, or service improves over time, it gradually outgrows the emerging market where it began and starts capturing the attention of mainstream customers, and eventually displaces the dominants within the mainstream market and brings disruptive shocks (Christensen and Bower, 1996; Zhou et al., 2012).

According to Christensen (1997), sustaining innovation is the corresponding concept to disruptive innovation, which represents a continuous or discontinuous improvement of existing products or technologies. Disruptive innovation is distinct from sustaining innovation. As Adner (2002:668) states, “Disruptive technologies ... introduce a different performance package from mainstream technologies along the dimensions of performance that are most important to mainstream customers. As such, in their early development they only serve niche segments that value their non-standard performance attributes. Subsequently, further development raises the disruptive technology’s performance on the focal mainstream attributes to a level sufficient to satisfy mainstream customers.” This view suggests that disruptive innovation not only changes the manner in which a customer behaves, but it also introduces one or more product dimensions previously unseen in a given market (Obal, 2013). In contrast to disruptive innovation, a sustaining innovation does not create new
markets or new value networks but rather only evolves existing ones with better value, which helps achieve sustaining improvement. Sustaining innovation can be either radical innovation or incremental innovation.

In general, established firms prefer sustaining innovation for its expected benefit and manageable risk. Some studies have found that sustaining innovation has been the most effective way for large firms to update products and maintain market share (Gatignon et al., 2002). Furthermore, incumbent firms have likely already developed effective routines for handling their customers, therefore leading to organizational inertia toward disruptive innovation. As such, refocusing their efforts on disruptive innovation would require the incumbent to undertake major changes that do not necessarily build upon their current strengths (Obal, 2013). Christensen (2002) argued it is the organizational inertia of established firms that impedes investment in disruptive innovation projects. Lange et al. (2009) suggested that the inertia of corporate parents constrains their corporate children in disruptive innovation and causes them to be weaker competitors than freestanding start-ups. Incumbents prefer to invest more in incremental innovations that build off of their previous products while new entrants are more likely to invest in radical innovations. In addition, when the product under consideration is a disruptive innovation, the level of uncertainty associate with the product increases even more (Danneels, 2004), which may also cause the hesitation of decision maker. Therefore, as Christensen (2002: pp.65-78) stated, “disruptive technologies developed by new entrants always cause great firms to fall.”

In the extent literature, most studies tend to explore the success of disruptive innovation from the technical insights in ecommerce environment, such as digital music (Lee, 2012), data mining and Web 2.0 (Sultan, 2013), and other computer mediated communication technologies (Ou et al., 2014). However, as Christensen and Raynor (2003) argued, disruptive technology should not be the unique determinant for a successful disruptive innovation. Christensen and Raynor (2003) proposed a framework consisting of resources, processes and values (RPV) to assess an organization’s capabilities and disabilities in ways that can make disruptive innovation much more likely to succeed. Moreover, some scholars argued that disruptive business model that match new technologies can help new entrants better acquire successful disruptive innovation (Johnson et al., 2008; Sabatier et al., 2012; Yovanof et al., 2008). Hence, in ecommerce marketplace, firms should not depend only on new technologies, but also explore appropriate business models in order to achieve disruptive innovation.

In addition, most studies on disruptive innovation regard firms as the subject of innovation, although customers’ significance in disruptive innovation is significantly increasing in the online environment. Ecommerce technologies, such as online search, online transaction, computer-mediated communication, have provided the customers with more convenient, lower cost, and enriched ways of understanding of products, services, and the firms, resulting in high degrees of involvement of customers in the firms’ operations, promoting the co-evolution of customers and firms. Therefore, it has become necessary to explore and understand the interaction mechanisms between a firm and its customers in the firm’s innovation process in ecommerce environment.

Summary

The literature review has yielded three main findings. First, in the extant ecommerce literature, the channel perspective contributes to the understanding of channel conflict and channel synergy, but omits the analysis of its strategic value; on the other hand, the strategic perspective focuses on the impact of ecommerce on organizational internals and externals, but does not consider the types of strategy and the selection challenges. Second, disruptive innovation theory focuses on firms as the subject of innovation while ecommerce innovations in practice have been generated largely by the co-evolution and the interaction between firms and customers; thus, appropriate theoretical extensions to disruptive innovation theory are called for in the ecommerce environment. Third, recent studies have explored the disruptive characteristics of ecommerce innovations, but mainly based on the technical aspect, thus unable to explain why firms often fail to transform themselves from offline mode to online mode after significant amount of investment in ecommerce technologies.

In order to address these theoretical and practical challenges, we chose two traditional firms which suffered failures in their initial ecommerce transformation attempts but eventually succeeded by following different strategic paths, and conducted an exploratory comparative case study, with the goal of developing a strategic renewal framework that not only explains the transformation processes of the two case firms and but also provides theoretical and managerial insights for future research and practice.
Case Study Design and Methodology

We were interested in knowing how traditional firms transform themselves into ecommerce environment, why some failed and others succeeded, and how to make the transformation successfully. An exploratory case study is preferred to deal with “how” and “why” questions (Yin, 1989, p.13). In addition, we wanted to contrast different types of strategic modes and to present diversity of the transformation patterns; thus two theoretically complementing and contrasting cases were selected to illuminate the distinctions (Elsbach et al., 2010).

The two comparative cases are JEANSWEST which sells casual clothing and COMAGIC which sells children’s furniture. The primary reasons for the selection of these two firms are as follows. First, both of them have suffered failure in their initial ecommerce transformation attempts but eventually became successfully. Second, they had different product types, firm sizes, and possessed different resource endowment (as shown Table 1) which are relatively easier to compare, and help increase the reliability and decrease the sensitivity of our findings (Graebner and Eisenhardt, 2004). Third, and more importantly, their transformation processes have different characteristics and followed different strategic paths.

Case Companies

JEANSWEST Clothing Co., LTD. is a large leisure clothing company, with more than 2,800 outlets and stores in more than 20 provinces across China. In 2009, JEANSWEST started venturing into the highly competitive ecommerce retail market. During the “Single's Day” holiday (11/11) in 2010, JEANSWEST received more than 100 thousand orders online. The “Single’s Day” was launched by T-Mall of TaoBao which is ranked as the leading online marketplace in China by Alexa and iResearch. Now “Single’s Day” has become the biggest ecommerce festival in China and repeatedly broken the online sales records set in previous years. In the first couple of years, JEANSWEST suffered operational mishaps and lost significant number of orders. Eventually, JEANSWEST set a record of 24.72 million RMB in sales on the “Single's Day” in 2011 and 57 million RMB in 2012, becoming the sales champion of casual clothing online. At present, 20% stores of JEANSWEST across the country have set up online shopping systems. Through the coordination of online and offline channels, the company aims at achieving complementary products and services such as category, colors, types, warehousing, logistics, after-sales, and so on.

Guangzhou COMAGIC Animation Technology Co., LTD was founded in December of 2008, and it created the domestic animation-based children’s furniture market. It successively acquired the exclusive authorization of 9 global famous cartoon brands’ licenses for use in children’s furniture in China, including Disney, Hello Kitty, Ali and others. COMAGIC’s online sales channel was initiated in 2011 with only 3 million RMB in revenue, less than 10% of the offline sales revenue. Even though COMAGIC’s online sales reached 1 million RMB on the “Single’s Day” of 2011, it was followed with many after-sales problems in the next 2 months, with a high customer return rate above 50%. Consequently, COMAGIC was given a poor evolution by the T-Mall platform, resulted in forced closing of the online shop. COMAGIC restarted its e-commerce operations on March 15, 2012, with sales revenue reaching 10 million RMB on the “Single’s Day”. The “Single’s Day” sales ran up to 28 million RMB in 2013, with all delivered within one week with lower than 2% customer returns.

| Table 1. Profiles of JEANSWEST and COMAGIC (2013’s data) |
| Case | JEANSWEST | COMAGIC |
| Ownership | Publicly traded company | Privately held |
| Product | Leisure clothing | Children’s cartoon furniture |
| Annual Sales | 3.9 billion RMB | 135 million RMB |
| Staff Number | ~20000 | ~300 |
| Number of tier 1 supplier | ~ 200 | ~ 10 |
| Number of offline stores | 2804 | 110 |

Data Collection

For data acquisition, we used semi-structured interviews as the main data collecting approach, which was supplemented by field observation and secondary data search on the web. The corresponding research questions are listed in Table A in the Appendix. We used a variety of data sources and data
triangulation to improve data validity (Yin, 2008). The research team visited JEANSWEST four times and interviewed fifteen individuals involved in decision making and ecommerce operations, resulting in about 910 minutes of digital recording which was later transcribed by the research team, averaging over 61 minutes for each interviewee (Table 2). For COMAGIC, we visited the company three times and interviewed 10 individuals familiar with the operations and decision making, resulting in about 730 minutes of digital recording, averaging over 73 minutes for each interviewee (Table 2). The research team also visited the offices and plants of these firms and took field notes. A large amount of secondary materials supplied by the firms, such as PowerPoint presentations, product manuals and catalogs, and promotional videos, further enriched our case database.

<table>
<thead>
<tr>
<th>Firms</th>
<th>Position of Interviewees</th>
<th>No. of Interviewees</th>
<th>Total Recording Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>JEANSWEST</td>
<td>CIO(4). Senior Manager of IT Department(4). Deputy Manager of IT Department(1). Manager of Industry and Trade Department(1). Deputy Manager of Industry and Trade Department(3). Purchasing Manager(1). Assistant Purchasing Manager(4)</td>
<td>15 persons 18 person-times</td>
<td>910 minutes</td>
</tr>
<tr>
<td>COMAGIC</td>
<td>CEO(2). Vice-President(4). Product Director of R&amp;D(1). Deputy Director of Finance(1). Furnishing Design Director(1). Brand Director(1). President Assistant(1)</td>
<td>10 persons 11 person-times</td>
<td>730 minutes</td>
</tr>
</tbody>
</table>

**Data Analysis**

In the data analysis phase, we followed criteria and phrases proposed by Eisenhardt (1989) and Yin (2008). First, three researchers coded the transcripts from the two firms, identified core concepts and key statements related to our research questions. By going over the transcripts, we identified some common characteristics of their initial failures, extracted the reasons and identified the potential regularities. In this stage, the coding results were compared between three researchers and as disagreements occurred, discussions followed to improve consistency. In the second stage, based on the open-coding results, three researchers conducted a focus coding in order to form an integrative theorizing framework. For replication and theoretical saturation (Yin, 1989), we went back and forth between the extent literature and the transcripts. Finally, we identified the two strategic models of ecommerce transformation carried out by the two case firms and used other internal events to test the theoretical framework. If theoretical saturation failed to emerge, the steps above were repeated.

**Main Findings**

**Ecommerce as a Channel: Inertia and Initial Failure**

Both JEANSWEST and COMAGIC suffered the similar problems in their initial attempts of introducing ecommerce operations and channels into their traditional offline operations and structures. They believed that ecommerce was just another channel for sales and distribution so that they still depended on the old offline resources to operate the online channels. However, depending on the offline resource was proven to be unable to overcome the organizational inertia which caused significant mismatches between the old structures and the new market features.

**Operational Inertia and Related Problems**

In an offline market, franchisees or retail stores order goods from suppliers and sell the products to customers. This indirect delivery structure helps firms control their business processes. If products have quality problems or slight defects in appearance, the staff in franchisees or retail stores can help to remedy them, which prevents customers from purchasing the problematic products. However, in the ecommerce environment, customers order the products and the suppliers deliver them to the customers directly. Thus, the business processes for fulfilling the orders of online customers cannot be
tightly controlled by the firms, and the online orders are often scattered, fluctuant, and borderless. Depending on traditional operation routines and structures, if firms cannot handle the high level of uncertainty, they will suffer managerial turmoil, and eventually lose control of quality and delivery of their products, which in turn causes dissatisfaction of their online customers. Most traditional firms operating online channels have to confront with this dilemma. This problem is exacerbated by the “Single’s Day” phenomenon in China. Today the “Single’s Day” has become the biggest ecommerce festival in China. In order to take advantage of this important business opportunity, firms are hunting for customers with a multitude of sales promotions.

However, in our case firm JEANSWEST, the traditional operation model had explicit zone boundaries for franchisees and the limited capacity of individual franchisees could not handle the explosion of orders on that day. JEANSWEST suffered because its region-dependent storage system, designed to supply regional offline franchisees or retail stores, could not support ordered products rapidly cross regions if one of the regional storages was out of stock. The CIO of JEANSWEST said:

“For example, a customer in Beijing wanted to buy the clothes online; however, it happened that there was no inventory in Beijing but in Guangzhou. The Guangzhou store could help by shipping the clothes to that customer. But, the Guangzhou store could not be sure whether the remaining inventory could satisfy both online and offline customers in Guangzhou. It is difficult to carry out cross-region transfers, which always gets us into trouble. Online customers only care about how soon they can receive their clothes and could care less about who send them. As a result, initially, we had difficulties dealing with online and offline customers.”

For COMAGIC, traditional production and delivery speeds were far below the requirements of online customers. In the traditional product design and production mode, furniture production is time-consuming, taking almost 2 months on average. When COMAGIC first put its products online, it received about one million RMB orders in one day. However, challenges came one after another. The delivery time was up to 30 to 60 days, which was far beyond what the customers could bear. Even more serious was that many finished products were damaged on the long and bumpy roads to customers because of decentralized orders resulted in the less-than-full-truck loads instead of the traditional full-truck loads. Mountains of negative feedbacks and complaints led to massive losses, and eventually COMAGIC was forced to close its flagship online store. The CEO of COMAGIC said:

“Because the speed of shipping was too slow and the damage rate of products during delivery was too high, there was a lot of complaints and required significant amount of after-sales services. At that time, the rate of returns was over 50%, which means that we could not keep pace with ecommerce’s fast speed. What’s worse, the rating from T-mall decreased to 3.6, and TaoBao sent us serious warnings that our company had to close the online store.”

Strategic Inertia and Related Problems

Neither JEANSWEST nor COMAGIC viewed ecommerce channels from strategic perspectives in their initial attempts, as shown in multiple indicators. First, they did not use professional ecommerce staff or train their original staff for relevant skills, which meant that the personnel operating the new online business still relied on their offline understanding of customers and traditional operating skills. The director of furniture design of COMAGIC stated:

“We thought we knew them, did the work we usually did, and we just opened another channel to sell our products. We changed nothing.”

Second, the internal technology did not match and support online sales. JEANSWEST now operates about 400 information systems with strong technology integration capability. However, when they initially started ecommerce as an online channel, they did not integrate with the existing information systems, which led to inconsistent supply data and inventory data. The senior manager of IT department stated:

“We thought we did not need to change our system design much. And it seemed really easy to do ecommerce. It was unexpected that the explosion of orders almost paralyzed our systems and there were errors everywhere.”

Third, the original business structures could not resolve the issue of conflicts of interest among different sales regions. In the traditional business model of JEANSWEST, each franchisee or retail store manages its own business in one region. They seldom have conflicts of interest with each other. However, online customers added dynamics and liquidity among different regions. As one of JEANSWEST interviewees mentioned, some customers bought a piece of clothing from an online
store owned by a franchisee in Beijing, but wanted to exchange it for some quality issues in another city Guangzhou. In this situation, franchisees or retail stores in Guangzhou was likely to refuse the exchanges or returns because they did not know how to recover the loss if they accepted the exchange. In another situation, if a store in Beijing was out of stock of certain items, the parent company might ask the Guangzhou branch to help, which might cause another problem: this sale was ordered by the Beijing store but supplied by the Guangzhou store, where should it be accounted to?

Cognition Inertia and Related Problems

Our case evidence shows that cognitive inertia is a key factor in the initial adoption of offline operations and strategies for online environment. During their initial attempts, JEANSWEST and COMAGIC served online customers in the same way as they did for off-line customers in terms of delivery, exchanges, and returns service, and even the product designs were the same as those for the offline customers. “Maybe the only thing we recognized was that online products should be cheaper than the offline counterparts”, said the CIO of JEANSWEST. However, online customers have totally different characteristics compared with offline customers. First, they have little patience to wait for the ordered products to be delivered. It was frequently mentioned by many interviewees in the two firms that online customers were willing to wait only for 3-5 days for their orders to be delivered in China, which is significantly shorter than the traditional delivery time in the furniture industry which seldom sells in stock. Thus, once the online products are out of stock, if the firms cannot produce swiftly, they will have to face the dissatisfaction of online customers and suffer from the negative feedbacks. Second, online customers are more critical and picky on both the products and the services. Because thousands of brands and firms sell online, customers can compare a product with similar types or substitutes easily, creating a fierce competitive online environment. The president’s assistant of COMAGIC stated:

“If the customer-service worker is not able to respond to a customer’s questions online, then the customer will feel unsatisfied with the service and seek for other brands or firms online.”

Last but not the least, interactions among customers have changed dramatically because of information technology, such as instant messages, feedback systems, and message boxes, and social media (Ou et al., 2014). In the traditional business environment, customers only interact with the people they know and have direct contact, talking about the quality of products or sharing the usage experiences. In contrast, the Internet has provided easier and cheaper ways and an integrated platform for customers to search products, share experiences, and complain about the firms, products, or services. The popularity of online stores and discussion forums demonstrates this trend. On the other hand, the interactions among customers have exerted significant influences on the firms’ sales. If one customer has a negative comment and presents it on an online forum or on the comment page of a store, thousands of customers will see it and will be hesitate to buy this product. As the Deputy Manager of IT Department described:

“If one customer says this cloth has color issues, our customer-service rep will have to answer many questions about it. Other customers may worry about it and we do not know how many customers would decide not to buy this cloth due to this comment.”

Based these analyses and discussions, we propose:

**Proposition 1:** Operational inertia, strategic inertia, and cognitive inertia are the primary factors that cause traditional firms to adopt the old offline business model for the new online operations, which often leads to mismatch between the old business processes and the new demands of the online market.

**Sustaining Renewal Path: The JEANSWEST Case**

The early setbacks promoted JEANSWEST to carefully investigate the problems and their causes in its initial ecommerce attempt. They concluded that they were too dependent on the mature offline operation model and failed to allocate relative resources and adjust business processes to develop the agility that was required to respond to online market fluctuations. Thus, they relearned and better understood the way online customers behaved. In order to take advantage of the abundant offline resources (2800 stores and the external and internal, strategic and operational resources behind them), it explored ways to use existing resources as a springboard to achieve success in ecommerce. To achieve this goal, JEANSWEST designed and implemented a resource-complement strategy to enable the two channels to mutually support each other, with shared R&D, supply chain, and IT
In the area of product design, JEANSWEST collected comments and feedbacks of customers online and at the same time communicated with offline customers during their fitting, selecting, and purchasing time to better understand their thoughts and feelings. In online environment, customers could easily tell the firm whether they liked this product or not, but rarely a deep explanation for why. In contrast, in offline stores, sales reps could communicate with the customers face-to-face and perform an in-depth discussion. For a new product launch, online customers could give a quick feedback which helped the firm know if this new product would be popular or not and avoided massive inventory buildup. Data collection from online and offline helped the R&D staff know the “ifs” and “whys” with the depth and breadth of the data. On the other hand, the sharing of R&D team for online and offline products also enabled JEANSWEST to increase product variety and enhanced competitiveness.

JEANSWEST adjusted its supply chain operation and structure to support online and offline in the areas of storage, delivery, and after-sales services. For storage, JEANSWEST designed a distributed inventory management system, allowing workers to deliver orders from the nearest warehouse, and each warehouse could supply or be supplied by another. This distributed inventory management model depended on the coordination by the parent company to effectively respond to market fluctuations. For delivery, JEANSWEST introduced the third-part logistics to achieve faster delivery, and by relying on monitoring and tracking technologies JEANSWEST could control the service quality in delivery process. For after-sales services, JEANSWEST broke the boundaries of different regional companies through central coordination and redesigned the incentive mechanism to encourage customers-oriented services by all franchisees. Customers anywhere can exchange or return a product to the local flagship store, which produced higher levels of consumer satisfaction. What's more, the information system would track this returned product to its source and identify the problems. As the CIO of JEANSWEST described:

“Now, every offline stores can be a little warehouse, and if one is out of stock or the distributed warehouse is out of stock to satisfy the online customers, we can fulfill the orders from the nearest offline stores. We have 2800 offline stores, which means we can do better in responding to online fluctuations. As our information systems have linked almost all offline and online stores, you can exchange your products anywhere.”

JEANSWEST is now among the top 500 companies in manufacturing industry with most advanced and extensive IT applications in China. JEANSWEST operates almost 400 different information systems to support its business. After suffering the initial failure in its ecommerce venture, JEANSWEST set up an ecommerce management system and enhanced the coordination with the existing systems. The existing skills in information systems helped the firm avoid unnecessary detours and mistakes. The operating skills supported the smooth cooperation between the online and offline
systems, including the ecommerce system, ERP, CRM and SCM. In addition, due to the data analytics used in the background, JEANSWEST could quickly find problems in the company’s websites and correct them in time. Perhaps more importantly, coordination among the different information systems enabled distributed inventory management and systematic customer information collection and analysis, which in turn helped the development of both online and offline businesses. As the CIO of JEANSWEST described:

“We are doing better than before. The integration of IS promotes internal and external business operations, especially helps us to catch up with the speed of ecommerce. Now we can not only satisfy our customers with good product quality and fast delivery, but also predict the fluctuations and the potential demand of online customers, which helps us a lot.”

What JEANSWEST had accomplished is essentially pioneered a path of sustaining renewal for traditional firms to successfully develop the online business by taking advantage of the rich resources in the offline business, and the key to this success is the complementarity of the resources between the offline and the online businesses. These analyses and discussions lead us to propose:

**Proposition 2:** Resource-complement sustaining renewal is a way to take advantage of the abundant offline resources to complement and support the online operation.

**Disruptive Renewal Path: The COMAGIC Case**

Different from JEANSWEST, COMAGIC owned only about 110 offline stores before venturing into ecommerce, which meant there were little resources it could leverage on. To recover from its initial failures, COMAGIC revised its strategy and decided to give priority to ecommerce market development. To overcome cognitive inertia which was attributed to causing the initial failures, COMAGIC reconstituted its operational processes and strategic structures, and enlisted the help of Tangshuo, a consulting firm that specialized in analyzing online customers and helping firms know their customers better. As a result of the product redesign, supply chain reconstitution, and customer service updates, as shown in Figure 2, COMAGIC now has become the leading children cartoon furniture company in China. COMAGIC’s success in ecommerce can be attributed to a number of strategic factors.

![A resource-substitute strategy](image)

First, COMAGIC redesigned its products specifically oriented toward ecommerce market. For example, the new product line, called "Rubik's Cube Series", had a number of characteristics designed with online market in mind. It had standardized assembling structures. Although every product had...
different appearances, their assembly components were almost identical. This standardized structure was essential for increasing production speed and lowering cost, which also helped improve the efficiency of the supply chain. It allowed for delivering customized patterns as well. COMAGIC was the only company in China that had bought the licenses of cartoon images of Disney, popular Japanese anime, and other cartoon brands. If customers wanted cartoon characters on the furniture, COMAGIC could satisfy this desire by printing these images with industrial inkjet devices that took only a few minutes. Even the requests to use pictures of the children or family photos could be satisfied. As the vice president of COMAGIC stated:

“Just give us your pictures, any pictures, or famous images that we are allowed to use, we can print them on our products. This is one of our features that attracted our customers most.”

In addition, the standardized structures with simplified components allowed DIY (do-it-yourself) installation by customers. One serious problem in the initial ecommerce attempt was that customers were unable to assemble furniture with complex components. The lack of professional instructions and home installation services did not allow for the old-design products to fit the ecommerce market. After the product redesign, every component is simplified and easy to identify and install. With the aid of installation brochures, videos, and drawings, customers could assemble the furniture as if playing blocks game with family. What’s even more interesting, the finished products might have different shapes due to different assembling plans used by the customers.

Second, COMAGIC’s success was directly linked to its effort on supply chain reconstitution that fixed the slow-paced distribution system and the broken products with less-than-truck-load issue. COMAGIC introduced third-part logistics to achieve faster delivery and signed strategic cooperation contracts with two main partners to ensure service quality. Meanwhile, it also entered cooperation agreements with additional third-part logistics to deal with unexpected market fluctuations. COMAGIC also outsourced production to two main strategic partners, and entered cooperation agreements with three additional manufacturers to respond to orders explosions that might occur in special events. In addition, COMAGIC enhanced its product packaging in order to significantly reduce the damage after the products left the production facilities. One experiment showed that new packaging could protect the products from being damaged even if it was dropped from 2 meters off the ground. The CIO of COMAGIC stated:

“We no longer have to worry about our customers receiving a broken product no matter which logistics firms we use. This packaging is at the highest level [for product protection].”

Finally, COMAGIC updated its customer service operations. It entered marketing agreements with mainstream ecommerce websites to facilitate multi-channel marketing. With this strategy, it was convenient for customers to identify COMAGIC products and compare with different sales promotion on different B2C platforms. It also repositioned offline stores as service-oriented centers. In general, COMAGIC furniture cost thousands RMB or more to purchase. Some customers hesitated to purchase such expensive products without touching or seeing it first by themselves. The conversion of offline stores to service-oriented centers offered customers with this experience. Sales reps in offline stores could communicate with customers and discuss product ideas with them, which proved to be beneficial for getting higher purchase rate. COMAGIC also significantly enhanced the interactions between the online platform and the offline stores. Now, COMAGIC harmonizes online product offering, price, and exchanges and returns service with those in the offline stores. If a customer wants to purchase a COMAGIC product online but has worries about its quality or visual effects, he or she can go to an offline store to experience it first. If a customer passes by an offline store first, and is attracted to a product, the in-store sales reps can help him or her know it better. Meanwhile, if the customer decides to choose this brand but wants to see other product series or has some customization requirements, the sales rep can guide the customer to the online platform with a QR code which may offer a discount of up to 5%. The QR code also helps the parent company know which offline store brings in this customer and how to record the sales. An additional benefit is that the offline stores can help customers in the near-by area with after-sale services, which further increases customer satisfaction and promotes brand loyalty.

The success of COMAGIC’s transformation from a traditional furniture manufacturing and retailing business into a successful offline and online integrated furniture manufacturing and retailing business demonstrates that there are multiple paths to strategic renewal. In circumstances where there are not adequate resources to support both offline and online operations, traditional firms can consider the resource-substitute disruptive renewal approach to move into the ecommerce marketplace. These analyses and discussions lead us to propose:
Proposition 3: Resource-substitute disruptive renewal is a way to reconstitute strategic structures and operational processes to reorient an offline firm toward the new online market.

Discussion

In this study we propose two transformational paths for traditional offline firms to successfully enter the ecommerce market based on a comparative case study of two firms. The first is the resource-complement sustaining renewal which takes advantage of the abundant offline resources to complement and support the operation of the online business. The second is the resource-substitute disruptive renewal which reconstitutes strategic structures and operational processes to reorient an offline firm toward the new online market. We also find that the initial failures of the two firms can be attributed to the operational inertia, strategic inertia, and cognitive inertia, which cause firms to focus on building a website to sell products online without appropriate or substantial strategic adjustments in internal and external resources and processes. Based on the case evidence, we propose a framework with two transformation strategies for traditional offline firms to explore online ecommerce opportunities: the incremental strategic renewal and the discontinuous strategic transformation, as shown in Figures 3.

Our case evidence suggests that the selection of the two strategies will depend on the resource endowments, organizational inertia, and entrepreneurship of the firms, as we have shown above, as well as on the internal synergistic elements which include IT capabilities, organizational learning, and dynamic capability (supporting case evidence is shown in Table B and Table C in Appendix).

Entrepreneurship, as characterized by the adventurous spirit, opportunity discernment, and leaning capability of an individual, plays an important role in the success of transformation in both case firms. Scholars have divided entrepreneurship into incremental entrepreneurship and radical entrepreneurship (Jiang and Zhao, 2006). Incremental entrepreneurship enhances and updates current products and operational processes for market expansion, as it is in the case of JEANSWEST; while radical entrepreneurship reconstitutes strategic structures and creates new competitive advantages that may undermine the original organizational routines, as it is in the case of COMAGIC. On the other hand, large firms with abundant resource endowment will have more inertia when facing with changes, while small or middle size firms will have relatively less resistance to radical changes. It follows that larger firms will have to bear much higher switching costs in abandoning core business or other resources if they choose a disruptive strategic renewal, which may even cause them to fail. Thus, a better strategy for large firms is to maximize the utility of the old offline resources, like strategy used by JEANSWEST. For small or medium size firms like COMAGIC, it has relatively lower switching cost in transformation and dares to give up the old routines, core business, and offline resources that mismatch the new ecommerce environment.

IT capabilities, organizational learning, and dynamic capability are three key organizational attributes both in sustaining renewal path and disruptive renewal path. IT capabilities are essential for organizational learning and subsequently the dynamic capability for managing change (Nwankpa and Roumani, 2014; Yu et al., 2013). In the case of JEANSWEST, it used its IT infrastructure and applications exploitably to coordinate online and offline stores and monitor operational processes. In the case of COMAGIC, IT was used in exploratory ways to capture and analyze information from online customers and then to predict product trends. In both cases, the firms’ IT capabilities enabled the implementation and execution of the chosen transformation strategy. Exploitation and exploration are two main forms of organizational learning (March, 1991). Exploitation oriented organizational learning is usually realized through exploitative activities such as refinement, selection, implementation, and execution, which is suitable for transformations based on previous knowledge and systems. Exploration oriented organizational learning, in contrast, is realized through exploratory activities, such as search, risk taking, experimentation, discovery, and innovation, which often breaks the routines and gains first-mover advantage (Kalita & Ahuja, 2002; Cepeda & Vera, 2007). We find that JEANSWEST preferred to utilize the abundant offline resources to support the ecommerce operation and used its existing technical capabilities to overcome uncertainties in the new environment, which puts it in the exploitation learning camp. On the other hand, COMAGIC conducted more exploratory activities such as reconstituting its operational processes, product redesign, and new business development, which puts it clearly in the exploratory learning camp. These ideas are captured in the strategic transformation framework depicted in Figure 3.
Figure 3: Two transformational strategies and paths for traditional offline firms to explore online ecommerce market

The two cases have provided interesting and significant insights into managing the transformation of offline firms into online ecommerce environment, a dilemma faced by increasing number of traditional firms as the economy is becoming increasingly digital resource dependent. On the other hand, as an exploratory case study, this paper has many limitations. First, we could not present a more detailed account about the two transformation strategies used by the two case firms due to the limited space, making many of our statements not substantiated by rich cases evidence. Second, it would have been better if we had a third case in which the transformation from offline operation into the online ecommerce was a complete failure. Third, although we proposed two main transformation strategies and the associated paths, it is entirely possible that there are other transformation strategies and paths that also lead to the transformation success. However, the two cases do present the typical challenges that many firms face or have already suffered from in their transformation adventures. Finally, it would be even more interesting to contrast the strategic choices and successes and failures in the transformation from pure offline to offline/online hybrid model with the transformation from pure online to online/offline hybrid model. These limitations create many opportunities and offer directions for future research.

Conclusion

This study contributes to the extant ecommerce and strategy literature in at least three ways. First, from a theorizing perspective, we propose and explain the idea of “ecommerce should not be simply viewed as another channel; instead, firms should view it as a new strategy”. Resource-dependent channel innovation is an essential problem that has caused many traditional firms to face the transformational dilemma. Channel conflict is the main problem that cannot be resolved using channel separation alone or other partial changes in operational structures and processes. We present two effective strategic renewal paths for traditional firms that aim to enter the ecommerce market. Second, this research enriches and extends theories of strategic renewal and disruptive innovation. Prior research emphasizes firms as the subject of innovation. However, in the ecommerce
environment, the Internet and other CMC technologies decrease information asymmetry between customers and firms, and significantly increase the reach and frequency of interactions among customers. Online customers can quickly acquire knowledge and information about product quality, after-sales service, and other relevant information; thus, customers’ roles in ecommerce are even more important than that in the offline business model. Firms that want to succeed in ecommerce have to pay greater attention to the characteristics of online customers. Finally, this study enriches the literature of strategic renewal, e.g., incremental strategic renewal and discontinuous strategic transformation, by exploring specific organizational attributes that are essential for successful strategic renewals. Our case evidence suggests that traditional firms with abundant offline resources, established strategic and operational structures and processes, strong dynamic capability, and strong IT capability is more likely to succeed if the incremental strategic renewal strategy is used; in contrast, traditional firms with less entrenched offline infrastructure but unique products and brand should consider the discontinuous strategic transformation strategy when moving from pure offline business model into the online/offline model.

Acknowledgements

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Appendix

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<thead>
<tr>
<th>Strategy Mode</th>
<th>Issues</th>
<th>Main Research Questions</th>
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<tbody>
<tr>
<td></td>
<td>Transformation Determinants</td>
<td>(1) Why did the firm transfer from offline to online?</td>
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<td></td>
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<td>(2) What are the key influential factors?</td>
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<tr>
<td>Resource-Dependent</td>
<td>Operating Processes</td>
<td>(1) How did it build and develop ecommerce?</td>
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<td></td>
<td></td>
<td>(2) How did internal and external operating processes support ecommerce?</td>
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<td></td>
<td>Channel Issues</td>
<td>(1) What kind of conflicts or problems did it suffer in channel operating?</td>
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<td>(2) How did it manage to solve these problems?</td>
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<td></td>
<td>Failure Causes</td>
<td>(1) Why does it suffer a failure in its initial attempt?</td>
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<td></td>
<td></td>
<td>(2) What are the main failure causes?</td>
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<td></td>
<td>Resource Integration</td>
<td>(1) Which changes did it make in organizational resource?</td>
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<td></td>
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<td>And how to make these changes?</td>
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<td>(2) How and why could the new resource utilization satisfy online customers?</td>
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<td>Strength and Weakness</td>
<td>(1) What is the strength of this strategy mode? And why?</td>
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<td>(2) What is the weakness of this strategy mode? And why?</td>
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<td>Competence Maintaining</td>
<td>(1) How could it maintain the current competitive advantages?</td>
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<td>(2) What is the further development?</td>
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<tr>
<td>Resource-Substitution</td>
<td>Resource Integration</td>
<td>(1) Which changes did it make in organizational resource?</td>
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<th>Quotes</th>
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<tr>
<td>exploitative organizational learning</td>
<td>21</td>
<td>“We are skillful at the way to build and manage a new channel. Although we made some mistakes in our initial ecommerce attempts, we could recover soon or later. Previous experiences help us to learn new features of online market quickly, and what’s more important, it is a team work. We know how to communicate and cooperate with each other no matter we confront with what kind of business.” (Senior Manager of IT Department of JEANSWEST)</td>
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<tr>
<td>resource-complement dynamic capability</td>
<td>38</td>
<td>“We adjusted business processes to satisfy the online market. Actually, we recognized existing resources is a springboard. We know our strength. The only thing we should do is to update our knowledge of the new markets. We have the capability to coordinate online channel and offline channel with the aid of IT.” (CIO of JEANSWEST)</td>
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<td>IT exploitative use</td>
<td>31</td>
<td>“IS helps to solve the operating efficiency issues and information sharing problems. These integrated IS enable distributed inventory management. We now can handle the fluctuation of online market well.” (Deputy Manager of IT Department of JEANSWEST)</td>
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<tr>
<td>explorative organizational learning</td>
<td>13</td>
<td>“It is a new segmented market. We did not know how to do it. We are still updating to learn and understand what customers think when they purchase children furniture online. We hired a consulting company to help us analysis online customers’ behaviors.” (Vice-President of COMAGIC)</td>
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<td>resource-substitute dynamic capability</td>
<td>27</td>
<td>“We redesigned our products to meet the online needs. “Rubik’s Cube Series” is a typical one. Traditional products designs are difficult to store and delivery. Thus, our R&amp;D teams redesigned its assembling structure and make it easy for DIY.” (Furnishing Design Director of COMAGIC)</td>
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<td>IT exploitative use</td>
<td>16</td>
<td>“We use IT to capture and analyze information from online customers. The competition is even fiercer in online market. You have to know your customers well so that you can make an advance in product design and customer services. IT helps us a lot in predicting product popularity.” (Brand Director of COMAGIC)</td>
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References


Chen, L. 2013. "Dynamic Supply Chain Coordination Under Consignment and Vendor-managed


