
A Study on Changes in the Distribution Ecosystem through the Emergence of a New Distribution Channel

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Chapter 1. Introduction

1. Background and objectives of the study

This study aims to explore ways to facilitate the domestic distribution industry, which has been facing slow growth. Vitalization of the distribution industry could be possible through quantitative growth and improvement of internal effectiveness of the industry. Dissemination of mobile shopping can lead the quantitative growth of the industry and through omnichannels, it would be possible to improve the internal effectiveness of the distribution industry. In this sense, it is needed to recognize the importance of omnichannels in the distribution industry and make a basis to enhance the significance. Moreover, for continuous growth of the industry, it is required to improve soundness of the distribution industry in general by promoting new changes not only in some large distribution companies but also in various retail distribution

businesses, including small and medium sized retail distribution companies. Through this study, to enhance facilitation of the distribution industry and soundness of the ecosystem, I attempt to determine methods to utilize mobile shopping and omnichannels, including policy supports.

2. Scope and outline of the study

Though the spread of the mobile environment has wide and various impacts on the society and the economy, this study explored the effect of spread of mobile shopping on the distribution industry. This study specifically addressed the effect of the quantitative increase of mobile shopping, or in short electronic transactions using mobile platforms that have resulted from the spread of mobile devices and wireless internet, on not only vitalization of the distribution industry but also the effect of omnichannels on the distribution channel. This study comprehensively examined the impact on the perspective of ‘users,’ which are customers, as well as the perspective of ‘suppliers,’ which are distribution companies. The study’s scope of research was to look into the impact of mobile shopping on consumers’ consumption behaviors and distribution companies’ strategy to manage channels.

Chapter 2. Changes in the Distribution Industry and Current States of Mobile Shopping

1. Current state of markets in retail distribution industry in Korea and changes in the distribution industry

Due to the sluggish economy and contracted consumer sentiment, the growth of retail distribution companies in Korea has significantly slowed down. In 2014, retail sales (excluding retail stores related to cars and fuels) have increased by 1.4% year on year recording 267 trillion won. Sales of retail distribution industry that recorded YoY growth of 8.4% in 2011 and 4.4% in 2012 have grown only by 1.4% in both 2013 and 2014, thus continuing sluggish growth of sales in the retail distribution industry.

Other than quantitative changes of sales by retail distribution businesses in Korea, the domestic retail distribution industry has had important changes such as increase of overseas direct purchases, spread of mobile shopping channels and emergence of omnichannels. In particular, it can be said that mobile shopping has significant impacts on the distribution industry since the mobile shopping combines mobile with the existing retail distribution rather than adding a new type of distribution channel. Thus, it invites structure changes in the distribution industry as well as the changes in the daily lives of consumers.

2. Current state of mobile shopping

(1) Market status of mobile shopping

Mobile shopping is a service through which one can purchase products or services by using the wireless internet through mobile devices, and it is categorized as a type of online shopping that is included in retail business without stores under the retail distribution classification. While the growth of the PC-based online shopping market is slowing down, mobile shopping is leading the growth of the entire online shopping market. According to the survey of the Korea Online Shopping Association (KOLSA), transaction amount of online shopping using PCs in 2014 went down by 5.4% year on year to 31 trillion won but the transaction amount of mobile shopping increased by 122.3% to 13 trillion won. It is expected that the growth of mobile shopping will continue for some time in the future.

(2) Current state of technologies related to mobile shopping

ICT development has enabled transactions that are free from time and space and available while moving, and has caused distribution companies to change methods to manage distribution channels to cope with the development. In particular, the emergence of smartphones is inducing aggressive marketing techniques to attract customers by expanding consumption from the existing offline based single channel to various online- or mobile-based channels as well as leading to technologies to support the techniques., There

have been quality advancements under the direction of maximizing the convenience of customers by comprehensively managing various shopping channels instead of just improving the accessibility of customers by increasing the number of shopping channels. In particular, there have been ongoing efforts to realize Zero Effort Commerce (ZEC)¹⁾ while satisfying the needs of customers, and to this end NFC, beacon and convenient mobile payment tools are actively utilized.

(3) Current state of legal system dealing with mobile shopping

Aside from the existing shopping malls, telemarketing and electronic commerce markets have grown exponentially based on new mediums such as internet shopping and TV home shopping. The existing “Act on door to door sales” regulates electronic commerce and telemarketing, but after the legislation of “the Act on consumer protection in electronic commerce” the two were separated from door to door sales. After that, laws and polices related to mobile shopping have “a purpose of protecting consumer rights and improving credibility in the market by stipulating issues related to fair transaction of goods and services”.

Online transactions and establishment of related policies are led by the government, so the Financial Services Commission has made and managed security policies related to internet and mobile

1) This refers to shopping that can cut down on time spent and efforts made made by consumers during the process of shopping from finding of a product to shipping.

banking. In April 2013 by making “comprehensive measures to strengthen security of online payment”, the government has come up with policies to strengthen the authorization of mobile payment services and the issuance process of certificates. Along with the rapid growth of the mobile payment market, policies to ease various regulations which have become growth limiting factors are being implemented. In the mobile payment system in Korea, the mandatory use of certificates and the use of Active-X have become growth limiting factors. Therefore, the government abolished the mandatory use of certificates when making payment using online credit cards (in Apr 2014), imposed limitations on the use of Active-X and decided to develop and distribute non-Active-X certificate technologies (Sep 2014).

3. Growth of mobile shopping and changes of the distribution industry

After 2010, as the wireless Internet advanced and the distribution of smartphones was facilitated, the distribution industry faced a new turning point, the growth of the mobile shopping market. Through the mobile environment, as unlimited shopping regardless of time and space has become possible, consumers' consumption behaviors have radically changed. Mobile shopping has brought about drastic growth of the retail distribution industry. However, the spread of mobile shopping has brought about qualitative growth of transactions using the mobile platform and is also changing the ecosystem of the distribution industry. Due to mobile shopping, consumers tend to use multi channels more in a way

that utilizes various channels altogether when buying a product. Customers search items by using smartphones when buying products at offline stores or they purchase a product right after seeing the product at an offline store. In short, although consumers use different distribution channels of offline stores and mobile stores, they are able to go shopping effortlessly while at the same time and place due to mobile shopping.

Distributors that have figured out such consumption behaviors are trying to combine mobile and offline stores in a way that provides mobile coupons to customers visiting their stores by using information providing technologies such as beacon technology. Omnichannel strategy is a strategy that provides consistent shopping experiences and smooth services to customers through such convergence of various online and offline distribution channels. Customers are now able to easily get information through mobile devices and change purchasing stores if they find better trade conditions. The more it gets easier for customers to acquire information on trade conditions, the lower the loyalty to certain distribution companies. Distributors need to make measures to drive up the lowered customer loyalty. To improve the consumer satisfaction level of distribution channels and customer loyalty in a way that enhances the quality of shopping, companies have introduced omnichannels through which they approach customers by connecting various distribution channels.

4. Sub-conclusion and the implications

As the mobile shopping market grew, the domestic distribution

companies started to implement mobile shopping channels. Although the distribution companies expected that their profit would increase due to the introduction of mobile shopping channels, the entire sales did not go up due to fierce competition between distribution companies. Moreover, as it gets easier for customers to move between distribution channels, securing customer loyalty has become more difficult. As an alternative for such changes caused by the spread of mobile shopping, the omnichannel emerged. It is needed to make policy measures so that the changes in the new distribution industry due to the emergence of the omnichannel are recognized and omnichannel can become a new growth engine to vitalize the distribution industry.

Chapter 3. Impact of Mobile Shopping and Omnichannel on Consumption Behaviors

1. Growth of mobile shopping and changes in consumption behavior

With the spread of smartphones and development of the wireless internet, now consumers can purchase products and services more easily regardless of time and space compared with the past. As with mobile devices, shopping has become more convenient and also customers are getting product information in real time as well as product advertisement and coupons; consumers are always exposed to shopping as if they carry movable shopping centers. Therefore, it turned out that the ratio of impulse buying of mobile shopping is 2.5 times higher than that of online shopping using

PCs (McKenzie & Company, 'analysis of Korean consumers doing mobile shopping', May 2014, the Korea Chamber of Commerce & Industry (2014), quoted from '2015 distribution industry white paper').

Spread of smartphone and wireless internet invited not only quantitative increase of mobile shopping but also considerable changes of consumers' shopping behaviors. First, the role of digital channels has been expanded in the process of purchasing products by customers. In addition, as smartphones are used more widely, consumers are now able to get real time information on shopping and buy products. Since the emergence of the internet, the tendency of consumers to buy products using online and offline channels together has increased. Along with the emergence of omnichannels, the division of online and offline stores has diminished as seen in the example in which a customer orders products at an online shopping mall and then gets the product from an offline store or check the product information at an offline store and then makes order through mobile shopping on the spot, offline stores have the opportunity to be in the spotlight again.

2. Effect of omnichannel on the level of consumer satisfaction and their intention to use the channel

Distribution companies expected that the introduction of the omnichannel would enhance the level of consumer satisfaction while shopping and increase loyalty to the companies. To verify this, a survey was conducted by asking those who used more than two kinds of distribution channels to buy a product (or a service)

within recent six months and then analyzed the consumer level of satisfaction while using the distribution company and the impact on the consumers' willingness to use it again.

Based on the results of analyzing factors, it was found that characteristics of omnichannels are 'consistent marketing execution', 'integrated management of customer information', 'integrated management of product orders', 'consistent shopping experiences' and 'perceived risks'. Based on this, the impact of omnichannel factors on consumers' willingness to use a distribution company again and the level of their satisfaction can be verified. As a result of regression analysis, 'consistent marketing execution', 'integrated management of customer information', 'integrated management of product orders' and 'consistent shopping experiences' are found to have significant impact on the level of satisfaction while using distribution channels. 'Perceived risks' coming from integrated management of customer information were found to have negative impacts on the level of satisfaction while using channels, but it was not significant. As a result of analyzing the impact of major characteristics of omnichannels on consumers' willingness to use a distribution channel again, 'integrated management of customer information', 'integrated management of product orders' and 'consistent shopping experiences' turned out to have no significant effect on consumers' willingness to use a distribution channel again.

3. Sub-conclusion and the implications

This chapter is theoretically significant in that it assessed characteristics of omnichannels that have existed only conceptually

and then derived assessable indicators from the characteristics, and it conducted an objective verification of the effect of omnichannels while there is no other objective verification of the effect of both online and offline omnichannels in the perspective of consumers.

Moreover, it was found that the omnichannel can be an alternative to vitalize distribution markets on the part of consumers. This result shows that the emergence of new distribution channels such as mobile shopping channels can create substantive consumer values not only by adding new distribution channels but also by increasing organic connectivity with the existing distribution channels. In addition, concerning the enhancement of consumers' loyalty, we objectively figured out that factors of omnichannels such as 'consistent marketing execution', 'integrated management of customer information', 'integrated management of product orders' and 'consistent shopping experiences' raise the level of consumer satisfaction and consumers' willingness to use a channel again.

Chapter 4. Changes in Distributors' Strategies to Manage Distribution

1. Fact finding investigation on the operation of mobile shopping by distribution companies

(1) Summary of research

As this fact finding investigation aimed to figure out the current state of operation of mobile shopping channels on the part of distributors, a survey was conducted targeting the domestic distribu-

tion companies. For companies operating mobile shopping within their distribution channel, there was a survey on the current state of operation of mobile shopping, obstacles in operating the mobile shopping, policy demands and outlook for mobile shopping markets. For distribution companies that do not operate mobile shopping, a survey was conducted concerning awareness on mobile shopping, willingness to implement mobile channels, hurdles in the introduction and policy demands for the introduction of mobile shopping. Targeting companies that did not implement mobile shopping despite the rapid growth of mobile shopping, this study examined whether the reason for the non-implementation of mobile shopping is the lack of the companies' awareness on mobile shopping, the result of strategic decision making, or practical obstacles by conducting a survey concerning their awareness toward mobile shopping and limiting factors. Along with this, this study figured out policy supports to vitalize mobile shopping. Targeting 120 distribution companies with various distribution channels, an online survey was conducted based on a structured questionnaire.

(2) Result of the fact-finding investigation on distributors' operation of mobile shopping

As a result of conducting a survey of companies that introduced mobile shopping channels and companies that did not implemented mobile shopping channels by asking them about demands for policies designed to support the introduction and operation of mobile shopping channels, it turned out that the companies which implemented them have the highest demands for policies to support

technologies such as mobile platform and technical advices. Next, they have the second highest demands for administrative supports such as streamlining of licensing process and administrative service for startups as well as support for human resources such as nurturing and training of experts and vocational training. On the other hand, companies that did not implement mobile shopping channel have high demands for policies for building up mobile shopping channels. It turned out that they have high demands for administrative supports such as financial supports including initial investment costs, business supports including marketing, legislative and accounting services, advancement to overseas countries, and technological support including establishment of mobile platform and technical advices.

2. Analysis of precedence factors of distributors' introduction of the omnichannel

(1) Theoretical background

This study tried to find out precedence factors of building up the omnichannel from the viewpoint of companies' resources and trade costs. However, before figuring out the causal relationship between own available resources/trade costs and omnichannels, there should be criteria of determining whether to implement omnichannel from the perspective of distributors. While there exist no studies that identified and evaluated factors constituting omnichannels, this study derived indicators that assess omnichannels based on definition of the omnichannel and the mode of execution

suggested by the existing studies. As a result, based on definition and mode of execution suggested by the existing studies, use of 'the same brand name' in various distribution channels; 'services enabling the reception of a product from other distributions, refund and return of a product regardless of purchase made by any distribution channel'; 'integrated management of consumer information'; 'integrated logistics and shipping systems'; 'integrated inventory management'; 'use of digital channels' such as inducing customers to visit stores using mobile or online channels; and 'integrated result evaluations' that integrate and then manage sales performances of various distributors were derived as variables used to determine the level of introduction of the omnichannel.

(2) Analysis results

In terms of establishment of the omnichannel, it turned out that major resources held by companies have impact on the building up of omnichannels by distributors with more than two distribution channels. Meanwhile, it turned out that monitoring costs concerning distribution channels held by distributors did not have significant impacts on the introduction of omnichannels. This shows that, in terms of introduction of omnichannel by companies, inducement to introduce omnichannels was the response to changes in companies' internal resources or the markets mentioned earlier rather than concerns over opportunistic behaviors surrounding distribution channels they have or the costs of managing the channels.

Then specifically, companies' own resources that have impact on the establishment of omnichannels by distributors holding more

than two distribution channels turned out to be financial resources including capabilities to secure resources, relations with customers, and relationships with partners. In all models, these variables are found to have statistically significant impact on the level of establishment of omnichannels. In short, companies who have better capabilities to secure funds, better relations with customers, healthier partnerships with subcontractors have higher level of establishment of omnichannels. Meanwhile, the marketing capacity is a significant determinant, but it has a negative effect unlike other variables that have positive effects. It was found that companies with better marketing capabilities in terms of brand, advertisement, price, assortment of products and salespeople have a lower level of omnichannel establishment.

3. Analysis of examples of omnichannel introductions in overseas countries

Implementation of omnichannels by Korean distributors is at its initial level. Therefore, there are limits in deriving omnichannel strategies only with an analysis of omnichannels targeting the domestic distribution companies, and it is relatively early to verify the process in which omnichannels are leading to business success. Thereby, this chapter explored successful omnichannel implementation strategies and the effect of omnichannels on business performances. This chapter studied the relations between business performance and the introduction of omnichannels by Walmart, Amazon.com, Bestbuy and Macys.

Similar to Korea, in the US offline retailers faced a crisis due

to the growth of online shopping market. Regardless of business type, Walmart, the largest superstore chain, Bestbuy, an expertized retailer and a department store, Macys, experienced drops in their sales. In order to overcome such crisis, major offline distributors started to implement omnichannel strategies. As a result, sales of the companies increased right after the introduction of the omnichannel. Of course, it is insufficient to explain the sales growth with just one factor. However, at least the introduction of the omnichannel can be one of the important strategic factors enabling another leap forward for distribution companies and especially for offline distribution companies faced with a similar crisis.

4. Sub-conclusion and the implications

This chapter looked into hurdles in operation of mobile shopping, policy needs, resource basis and precedence factors in establishing omnichannels in terms of trade costs, and omnichannel operation strategies and business performance through the example from foreign countries. As a result, it was found that sales of companies appeared in the example increased after the introduction of the omnichannel.

A fact-finding survey targeting the domestic distributors figured out factors needed for the execution of omnichannels through examples of overseas countries. As a result, at the implementation stage of mobile shopping, it was found that companies have high demands for the initial investment cost and experts of mobile shopping especially marketing or sales person. In addition, for distribution companies at the introduction stage of the omnichannel,

it was analyzed that capacity to secure funds or networks between companies and customers are important factors, and above all it is needed to have both online and offline distribution channels, as synergies between online and offline channels are required rather than diversification within online distribution or offline distribution. At the execution stage of the omnichannel, it is all the more important to have an integrated internal system, and it is needed to develop customer services combining the expansion of online and offline networks and ICT.

Chapter 5. Strategies to Vitalize the Distribution Industry

1. Paradigm shift of the distribution industry and the need for response

With the implementation of mobile shopping, it is difficult to make a breakthrough for the growth of the distribution industry. In order for mobile shopping channels to contribute to the vitalization of the entire distribution industry, it is required to have organic convergence with the existing distribution channels while not encroaching on the companies themselves. Distribution management strategies for this are omnichannel strategies, and it is required to prepare for 'Retail 4.0' in which such boundaries between the distribution channels are disappearing. In short, it is needed to recognize new changes in the distribution market and then prepare for the changes.

In order to facilitate the distribution industry, it is needed to secure new growth engines that would lead the growth of the

industry and enhance soundness by recovering vitality of small businesses and traditional markets representing the majority of the number of companies in the industry. To this end, as verified in chapters 3 and 4, vitalization of mobile shopping and the introduction of omnichannels can be suggested as solutions. For this, it is required to make a basis for the implementation of omnichannels in its infancy and to implement omnichannels by small business owners and sellers at traditional markets so that they can respond to changes of the distribution market. To this end, this study suggested specific policy tasks based on results drawn in the study.

2. Implementation measures for the facilitation of distribution industry

(1) Creation of a basis for the implementation of the omnichannel

For establishing omnichannels, online and offline distributors should build up both online and offline distribution channels and strive for organic integration of the channels. In particular, as the center of online shopping shifted to mobile shopping, it is required to make strategies to implement mobile shopping and to integrate various distribution channels. As policy measures of the government to vitalize omnichannels, it is also needed to support the building up of infrastructures necessary to support the introduction of mobile shopping by companies and integrate online and offline distribution channels.

At the introduction stage of mobile shopping, there were high demands for initial investment costs, experts specialized in mobile

shopping, marketing based on understanding of mobile shopping, and salespeople. In addition, in terms of government policy demand for companies that did not implement mobile shopping, it turned out that needs for technological supports and business supports are high. Therefore, in order to expand the mobile shopping market, it is required to offer policy supports for companies that did not implement mobile shopping channels by providing financial support for initial investment costs, technological support and business support services. In addition, in order for mobile shopping to expand as one of the distribution channels, above all it is essential to solve the issues of payment and security so that users can use the channel safely. To this end, it is required to have supports from the government to develop technologies and nurture experts.

In addition, it is needed to build up infrastructures. At the government level, it is needed to provide support for development of technologies required for the integration of online and offline distribution channels. For instance, integrated tracking of shipping should be available regardless of the type of distribution channel by expanding RFID technologies applied to some of products in the distribution service. Also, it is required to narrow gaps of time between the orders made by customers and the receipt of the products by enabling faster delivery by establishing more shipment hubs integrating online and offline at the touchpoint of consumers. In addition, in order to provide integrated customer information management and tailor-made services, it is needed to use big data technologies. Furthermore, it is needed to put efforts to develop technologies to build up cross device environment using multi devices in omnichannels. To this end, government support is crucial.

(2) Measures to support the introduction of the omnichannel by small business owners and sellers at traditional markets

Given the current state in which the distribution market is rapidly changing based on the mobile platform, small business owners and sellers at traditional markets and small online shopping malls have a greater chance to fall behind in the distribution market if they fail to adapt to the changes. Therefore, small business owners and sellers at traditional markets need to acknowledge changes in the distribution industry and preemptively respond to the changes.

To this end, at the government level, it is required to improve awareness of omnichannels among small business owners and sellers at traditional markets by recognizing opportunities of omnichannels in the market. Also, when targeting small business owners and sellers at traditional markets it is needed to find out ways to respond to changes of the market by improving awareness by focusing on ideas and advantages of omnichannels and the applications.

In addition, small business owners and sellers at traditional markets, small and medium sized online shopping malls would be able to provide integrated distribution services such as omnichannel to customers through networks between small business owners. It is needed to expand cooperative projects centered on offline stores closely located to each other, and implement them among small business owners for mutual marketing between offline stores and online small and medium sized shopping malls, and expand the establishment scope of structure for mutual distribution for the introduction of omnichannels. The government should play a piv-

otal role so that online and offline small business owners would be able to form networks. In addition, in terms of infrastructure required to build up omnichannels, government support should be considered for cooperative projects between online and offline small business owners and sellers at traditional markets.