

Development of the Anymarket System for Regional Retail Store

Hong Joo Lee

*Dept. of Industrial Management Engineering, Kyonggi University, Suwon, Korea
blue1024@kgu.ac.kr*

Abstract

As the affiliated discount stores of major companies and SSM increase rapidly, regional conventional market and small supermarket that are the dominant merchants in the existing marketing area of regional retail stores have faced the risk of survival. The competitive penetration of those distributors of major companies into marketing area of regional retail stores provides the consumers with the convenience of shopping and pleasure of various selections at the same time from the viewpoint of competition and efficiency. On the contrary, local governments and political community insist that such trends cause the collapse of regional marketing area and impose limitations on that such as restriction of distance and business hours. In this paper, to solve this problem I studied solution through virtual store. The store is established in the environment where consumers are crowded and exposed to easy purchasing of product as shown by using QR code. When it comes to virtual store, it has the merit that can secure the channel that is capable of connecting with consumers at low fixed cost and the purchasing class who is not familiar with internet purchasing can place the order and buy the products easily

Keywords: *Anymarket System, Regional Retail Store, Critical Success Factor, Failure Factor, QR Code*

1. Introduction

Today, changes in the large supermarket-oriented distribution environment have been diversifying customers' consumption patterns, and the advancement of SSM into the community markets has become great threats to regional retail stores lagging behind in terms of economies of scale and price competitiveness. The competitive penetration of those distributors of major companies into marketing area of regional retail stores provides the consumers with the convenience of shopping and pleasure of various selections at the same time from the viewpoint of competition and efficiency. On the contrary, local governments and political community insist that such trends cause the collapse of regional marketing area and impose limitations on that such as restriction of distance and business hours. Thus, in order to resolve the crisis of regional retail store in the regional markets that are confronted with SSM, this research analyzes the advantages and disadvantages of SSM through analyzing preceding researches and explores the solutions to the problems. First, it is considerably true that the growth of distributors of major companies is advantageous both for the companies and consumers in aspect of economic efficiency. In enormous business area ranging from large-scale mart to SSM, major companies can afford to get the supplies and sell them at cheaper prices as the large-scale purchasers. But, the problem is that the increasing efficiency for the companies and consumers due to expansion of SSM does not match to the efficiency of whole national economy definitely. If the regional retail stores who defeated from the competition with large-scale distributors cannot secure the enough time and opportunities for comeback, that connects directly to the burden of national economy. In the

situation there is no proper retreat, the government should arrange the opportunities for comeback and secure social safety net additionally for the regional retail stores by inputting the finance.

2. Literature Review

2.1. Cooperation and Competition as the Principle of Social Integration

Adam Smith defined the principle of social integration as ‘creation of order in harmony that becomes mutual benefits’ in *The Theory of Moral Sentiments* and emphasized ‘the role of sympathy’ as the means of integration.[13] And, he emphasized the principle of competition and division of labor of ‘Invisible hand’ as the principle of economic integration for more production in *The Wealth of Nations*.[14] Such research results of Adam Smith explains the importance of cooperation for the society in harmony. That is, it suggested the beginning of the advanced researches that the cooperation between major companies and regional retail stores can be connected to ‘mutual benefits and creation of order in harmony’. And, this theory explains why win-win cooperation should be the essence of corporate activity clearly and suggests the explanation to the question, why the company that does not have win-win cooperation as the core sense of value is ‘not possible to carry out company activity’.

2.2. New Viewpoint of Cooperation, win-win Cooperation

Theoretical background of win-win cooperation that is being currently researched to improve national competitiveness of our country includes the dual change that is generated in the ‘relation between cooperation and philosophy’. That is, ‘philosophy of cooperation’ aims to switch the sense of value of Montaigne (it said that the benefit of one person is the loss of another, and it explained the philosophy of social disorganization and separation along pillage of the strong from the weak.) that enmity and conflict are inherent in to that of social integration for drawing social harmony and to switch the cooperative relationship of Montaigne that was the cooperation method type such as existing ‘you must die for my survival’ between major companies and regional retail stores to socially-integrative symbiotic cooperation relationship such as ‘you must live for my survival’. That is, the regional retail stores may face the crisis due to the collapse of survival platform in case of pursuit of profit maximization by major companies and regional retail stores, but win-win cooperation can be explained with mutual business cooperation that enables win-win growth to be accomplished by preserving corporate ecosystem in terms of mid-to-long term and gets evolved. After all, ‘what win-win cooperation is’ is the mutually complementary means that can save business ecosystem between major companies and regional retail stores.

Table 1. Viewpoint of win-win Cooperation

	Existing cooperation between major companies and regional retail stores	Win-win cooperation between major companies and regional retail stores
Philosophy	Sense of value of Montaigne	Socially-integrative sense of value
Cooperative relationship	Cooperation of Montaigne (Cooperation type such as ‘you must die for my survival’)	Win-win cooperation (Cooperation type such as ‘you must live for my survival’)

2.3. Current Status of Small & mid-sized Distribution Industry

According to “the Influence of the Entry of SSM on Small and Medium-sized Distributions” issued by Korean Federation of Small and Medium-sized Businesses in 2009 [13], 79.0 % of small- and medium-sized businesses responded that their overall business deteriorated with the entry of SSM. Particularly, 41.0 % responded that their business seriously deteriorated, indicating that the overall business of small and medium-sized businesses seriously worsened with the entry of SSM.

According to business data, average daily sales of small and medium-sized businesses decreased to 34.1 %. The average daily number of customers also decreased from 127.8 person/day to 80.8 person/day, a decrease of approximately 36.7 %. Meanwhile, as the survival strategy, the highest number of respondents cited “no countermeasures” (68.3 %), followed by delivery service (22.7 %), competitor-level price reduction (13.7 %), and mileage service (12.3 %). In other words, the analysis showed that currently, the regional retail stores had no particular business strategies against SSM (Figure 1). Accordingly, it can be said that it is urgent to explore the practical ways to vitalize the business of the regional retail stores.

2.4. Limitation of Existing Countermeasures

Each Korean local government enforced the compulsory holiday of large-scale marts from April, 2012 based on ‘The Retail Industry Development Act’, but they are criticized for that they increased the inconvenience of consumers after all as the customers who visit the conventional markets are restricted and the consumers experienced huge difficulties.

Large-scale marts such as e-mart, LotteMart & Home plus dismissed 300 the part-time workers and student workers after the enforcement of Distribution Industry Development Act [7]. LotteMart postponed the hire of senior employees who were planned to be hired, and Home plus suspended the hire of the elder employees whose target was 400 persons in the year [7]. And, each small & medium-sized business implemented layoff of production staffs as well as the orders of PB products they supply to each distributors decreased by more than 20% [7]. And, the plan that the government has suggested to save the regional retail stores so far is ‘restriction on business of SSM’ only. But, there exists the limitation to save the regional retail stores with such restriction only. According to ‘questionnaire survey of restriction on business of SSM (targeting 1017 adult males & females whose ages are above 20)’ Insight-Korea performed in April, 2012, it was surveyed that the response ‘there would be the effect after enforcement of compulsory holiday of large-scaled marts’ took 48% and the opinion ‘there would be no significant effect’ took 46% [6]. And, it was surveyed that 52.4% agreed on the restriction on business of large-scale marts for protection of regional retail stores and the reason for that called protection of regional retail stores and conventional market took 78.2%. On the contrary to that, it was surveyed that the reason for opposing the restriction on business of large-scale marts ‘causing inconvenience of consumers’ took 84.5%. That is, as the results of above survey, it was analyzed that the consumers desire large-scale mart and regional retail stores to live together, but in the way the inconvenience is not brought to them.

2.5. Critical Success Factors of SSM and Failure Factors for Regional Retail Stores

2.5.1. Critical Success and Failure Factors of SSM: Recently, many researchers show great interest in the business of regional retail stores, but researches on SSM have not been very active. Particularly, SSM is unfamiliar to the United States or Europe, so its definition or scope differs, depending on scholars [3]. So, this paper analyzed the research data of SSM

and derived its success factors and, based on this, attempted to present business ideas that enable the regional small businesses to be equipped with comparable competitiveness. To achieve this, I investigated the preceding researches as follows.

Table 2. Critical Success Factors for SSM

	Brand Value	Economy of Scale	Self Service	Product Quality	Inventory Management	Low Price	Variety of Product	Clear and Safe Store	Convenient Location	Customer Relationship	Good Service
Berman et al [2]										o	
Gomez [5]							o		o		o
Thanassoulis[15]	o			o		o	o	o			
Mroszczyk[9]				o				o			
Palmer [10]	o	o			o				o	o	
Peterson [11]						o	o				o
Rodríguez[12]		o	o	o		o	o				o
Mascarenhas[8]										o	

Table 3. Failure Factors for Regional Retail Stores

	Product Diversity	High Price	Poor Location	Poor Business Environment	Obsolete Facilities
Choi [4]		o			o
Spillan [16]	o			o	
Bailey [1]			o	o	
Rodríguez[12]		o			

That is, the plan of activating regional retail stores is willing to be studied by applying the factors drawn from <Table 2, 3> to business promotion framework developed in this paper, and Anymarket business system that utilizes smart technology is willing to be developed based on that.

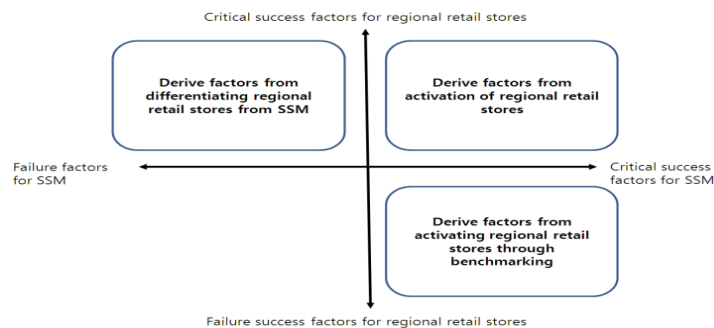


Figure 2. Business Promotion Framework for Promotion of Regional Retail Stores

3. Development of the Anymarket System for Regional Retail Store

In this paper, I studied business promotion strategy for regional retail store through previous research and business promotion framework. The business promotion strategies are convenient location, easy shopping and variety products. Thus, this paper, I studied about development of virtual store using smart technology through business promotion strategies.

3.1. Virtual Store

These days, some companies provided virtual store service to customer. 2 years ago, Kyobo Bookstore, Korea's largest bookseller, announced today it will open its virtual bookstore in subway stations in Seoul. Also, Homeplus, second largest discount chain in South Korea, announced that it will open what it calls a "fourth generation retail store," Homeplus smart virtual store.[17] The virtual stores have benefits. These are customers simply want to order items and customers have purchased a product in the past. Thus customers don't have to physically visit the virtual store. In other words, the virtual store provides convenience in most hardworking nations [18].

However, these virtual stores have the disadvantage. In fact, consumers don't have to be anywhere nears the virtual store. It is the place of purchase that is limited by subway or bus stop station. Besides, the virtual stores are just sales promotion in short term. Also, delivery service is delayed.

For this reason, in the paper, I suggested new virtual store that is 'Anymarket'. The Anymarket idea is that customers purchase goods anywhere in the desired location using beam projector or display screen. The Anymarket allow customers to shop in the any location (installation on street) by simply scanning QR codes with their smartphones. Customers scan the codes, confirm their order, and have products delivered directly to their homes.



Figure 3. Business Process of Anymarket

Thus, Anymarket will be providing marketing channel to connect customer and goods by low fixed cost. Figure 4 and 5 shows the location of Anymarket installation on street. This study is willing to the network system that can purchase and receive the product easily using the smart device after establishing the virtual store in the space where contact point with consumers can be maximized by utilizing QR code.

In this study, the Anymarket is established in the environment where consumers are crowded and exposed to easy purchasing of product using QR code. When it comes to 'Anymarket', it has the merit that can secure the channel that is capable of connecting with consumers at low fixed cost and the purchasing class who is not familiar with internet purchasing can place the order and buy the products easily.



Figure 4. Space of Installing Anymarket



Figure 5. Virtual Image of Anymarket

This paper, I suggested sequence diagram for making anymarket as Figure 6.

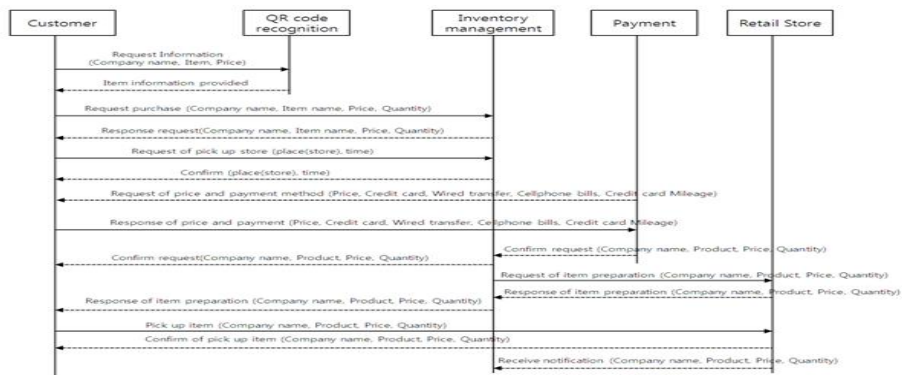


Figure 6. Sequence Diagram for Anymarket

Table 4. R&D for each Stage

Purchasing stage	Items of R&D
Recognition of QR code	-Input good code to QR code -Development of application for smart device that can recognize QR code
Inventory Management	-Research algorithm of transmitting & responding purchased good through smart device -Development of goods inventory control model to cope with EOQ & uncertain need after checking payment for the good -Research of algorithm of notifying current status of goods inventory
Payment for good	-Development of payment algorithm
Retails store	-Algorithm of notifying the receipt of good

Acknowledgments

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