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A Study on the Determinants of Third Party Logistics Service Suppliers in Dongdaemun Market

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Abstract

Purpose – This study was intended to find the selection attribution factors and service satisfaction determinants of third party logistics suppliers in Dongdaemun wholesale market.

Research design, data, and methodology – A questionnaire survey was performed, and the retailers and wholesalers in Dongdaemun wholesale market were asked to fill in it. Company employees using third party logistics service were selected by a random sampling method.

Results – It is easy for both retailers and wholesalers to use third party logistics service. The logistics companies in Dongdaemun wholesale market have paid more heed to the security of freight and the operability. That is, the freight safety and operating service are the most important factors in selecting third party logistics suppliers, and they both have a close relationship with user satisfaction. There is no relation between service level and recognition in selection factors of third party logistics suppliers. All the responsiveness, operability and informativeness of third-party logistics providers has a significant relationship with user satisfaction.

Conclusions – Third party logistics service is entirely different from the existing delivery or transport service. The most market vendors' wish for third party logistics suppliers is the stability of freight and robust operating service. They also demand the responsiveness for special or emergency situation with having information strength.

Keywords: Third-Party Logistics Supplier, Existing Delivery, Transport Service.

JEL Classifications: L91, O18, R42.

1. Introduction

1.1. Purpose and Background

Third party logistics has been an important modern organization form as an emerging industry since the late 20th century. The scale of the world logistics market was estimated to be about 3.3 trillion dollars as of 2013, and if

the trend continues, the scale will be 8.1 trillion dollars by the year 2020. The sales in third party logistics account for about 35% in Asia-Pacific regions. Therefore, it can be a meaningful research to investigate Korean third party logistics service that has been an important role in improving overall Korean logistics industries. The freight distribution and logistics businesses with branching global manufacturers have been spread rapidly in Korea, and Korea has been referred to as 'the world's factory of 21st century'.

Market brands center for Dongdaemun are regarded as small and mid-sized manufacturers with deprived area, however, a growing number of Chinese clothing importers are visiting there with 'Korean wave(Huageol, 2014)'. Nevertheless, Dongdaemun wholesale market is in the state of steady weakness owing to the reasons of geographical, systemic, and logistics distribution factors. It is necessary for

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all the enterprises to think highly of logistics service industry to gain a competitive edge in a rapid global age. Third party logistics suppliers have been trying to not only meet customers' needs and gain a competitive edge but also preserve common profit of customers and enterprises in the world of change.

Therefore, this study investigates the general theories on third party logistics, and then, analyzes the current third party logistics with developed countries and domestic situation. This analysis makes it possible to make a growth strategy using third party logistics suppliers in Dongdaemun wholesale market by surveying determination factors from a shipper company and service satisfaction in third party logistics.

1.2. Scope and Methods

Because there is little research on third-party logistics in Dongdaemun wholesale market, the review from the literature was focused on the papers, books, seminar materials, and the results of survey research institutions in the field of logistics and distribution. Researches on logistics have been conducted extensively, thus, this study investigates the state of third-party logistics service usage and employee satisfactory level including wholesalers, retailers, and entrepreneurs in Dongdaemun wholesale market. Further, this study makes a strategy for promoting performance in Dongdaemun wholesale market with third-party logistics supplier.

2. Situation Analysis in Third Party Logistics

2.1. Situation in Third Party Logistics

The beginning of Korean third party logistics goes back to the deregulation of 'Trucking Transport Business Act' and 'Goods Distribution Promotion Act' in 1998. Another starting point seems to be the struggle for existence between existing logistics and subsidiary company that had been separated from the large enterprises since the IMF financial crisis. However, it was difficult to promote third party logistics markets rapidly like advanced foreign countries because Korean enterprises have little understanding of third party logistics and professional manpower. They also lack of logistics infrastructure and stick to cultural exclusivity.

2.2. Characteristics in Korean Third Party Logistics

The basic composition in Korean third party logistics market can be divided into a group of distribution business with the possession of assets, subsidiary companies that had built from their parent companies, and other newly small and mid-sized distribution enterprises. In particular, markets

has two divided parts, that is, second party logistics distribution as subsidiary companies of a manufacturing firm, and traditional distribution enterprises.

There are few distribution markets for specialized third party logistics suppliers to enlarge their scope due to most of the manufacturers have had distribution subsidiary companies in each industrial field. Most of the manufactures based on third party logistics suppliers should connect with a shipper for business relation, thus, it is inevitable for the manufactures to confront fierce competition with each other. In case of targeting on distribution companies with supporting professional third party logistics services, market competition can be summarized as follows. That is, the competition takes place between the large scale distribution companies with traditional logistics hardware infrastructure and the small or mid-sized business with software or enterprise connection.

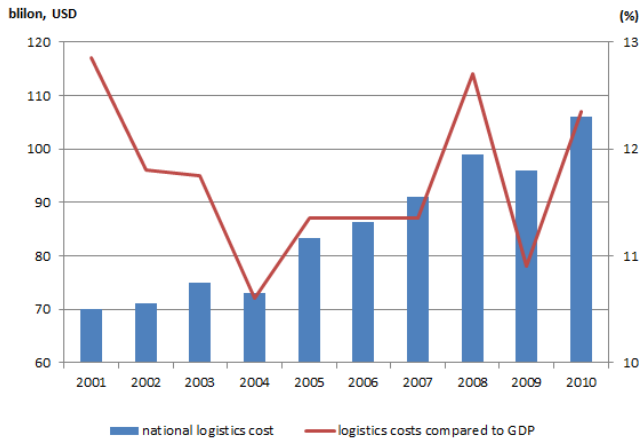
2.3. Issues in Korean Third Party Logistics

Korean logistics industry context has experienced vicious circle because specialized logistics companies are low value-added industries, thus, the level of reliability and work efficiency also fall down. Therefore, the specialized logistics companies are insufficient in Korea with those reasons.

According to 'The Issues in Domestic logistics industry and Logistics Efficiency Plan' in VIP Report(2012), Hyundai Research Institute(HRI), a small-scale enterprise with fewer than 10 employees occupied 96% in national logistics enterprises, thus, it was an inevitable limitation for providing specialized service delivery. In addition, the total number of companies with more than 300 employees were 80, and it means the large logistics suppliers have occupied no more than 1% of the total logistics suppliers.

Korea Transport Institute(2014) pointed out the inefficiencies on Korean logistics cost as another issue in Korean logistics. As you can see in <Figure 1>, the scale of domestic logistics market has increased, and it can be a positive factor because the increase of freight volume can activate added value steadily. According to the data in Korea Transport Institute(2010), national logistics cost shows 11.1% of Korean GDP. This shows the high degree of the national logistics cost in Korea compared to the developed logistics countries such as 8.03% in US and 8.95% in Japan.

Moreover, the value added in national logistics cost decreased steadily while logistical cost increased steadily from the data of Korea Transport Institute during the period from 2001 to 2010. This shows the uneconomical state of Korean logistics cost. That is, Korean logistics cost is higher as a proportion of developed nations in GDP, thus, the value added proportion has decreased steadily.



Source: Korea Transport Institute(2010, 2013).

<Figure 1> Process of Korean national logistics cost & logistical cost proportion of GDP

3. Situation Analysis in Dongdaemun Market

3.1. Arrangement and Situation in Dongdaemun Market

As displayed in <Figure 2>, Dongdaemun clothing wholesale market, a biggest fashion center, was built in 1955 with 1,500 stores. Now it generates approximately ten trillion won in annual sales with organizing about 30 arcades and 28,000 stores. Everyday more than 400,000 people visit there, and most of them are composed of Chinese and tourists.



Source: Dongdaemun Fashion Town(<http://www.dft.co.kr>)

<Figure 2> Current situation in Dongdaemun Market

- 1. Goodmorning City 2. Hello APM 3. Migliore
- 4. Doosan Tower 5. Pyeonghwa Market 6. DD Freya
- 7. Dongil Arcade A, B, C 8. Donghwa Donghwa
- 9. Bell post 10. Gwanghui Fashion Mall
- 11. Shinpyunghwa Fashion Town 12. Nampyeonghwa Market

- 13. Dioteu 14. Yours 15. Jeil Pyeonghwa Market
- 16. Nuzzon 7. APM Lux 18. APM
- 19. Golden Town 20. Designer Club 21. Team 204
- 22. Hyeyang Elisium 23. W Fashion Mall 24. Art Plaza
- 25. Techno Arcade 26. Dongpyeonghwa Market
- 27. Chungpyunghwa Market 28. Dongdaemun Shopping Mall
- 29. Dongdaemun Shoes Market
- 30. Dongdaemun clothes wholesale market(Sincheonggye shopping mall)
- 31. Silk Road 32. Ramodo
- 33. Lotte Fitin 34. Hotel Acacia
- 35. Maxtyle 36. National Medical Center
- 37. Dongdaemun Design Plaza & Park(DDP)
- 39. Cheonggye 6-ga Basement Shopping Center

3.2. Process of Development and Commercial Traits

3.2.1. Commercial Traits in Dongdaemun Market

Dongdaemun Market has changed the system from wholesale into intermediate form targeting retails and young age customers with using both of traditional market and department store. It is one of the new market positioning. In particular, the new arcades such as 'Migliore', 'DD Freya', 'Hello APM', and 'Doosan Tower' have a good interior like department store, and also have the merits of fashion design and cheap goods. (Kim, 2000)

Dongdaemun Market can be subdivided with a traditional market, modern wholesale area, and newly retail area. It handles all the items related with textile, clothes, and fashion, and also handles different items or business conditions by each shopping arcade. A Traditional market like Pyeonghwa Market deals with fashion subsidiary materials such as accessories, bags, and shoes as well as clothes. Dongdaemun Market shows the three traits in market distribution as shown in <Table 1>. The market distribution is composed of a traditional market, modern wholesale area, and newly retail area.

<Table 1> Market Distribution in Dongdaemun market

Category	Arcade No.	Store No.	Major item
Traditional market (center)	9	4200	raw/subsidiary materials, clothes, wedding gifts, leather, shoes, bags, etc.
Modern wholesale (eastern)	8	5500	casual, women's clothes
Newly retail (western)	4	7300	casual, clothes, wedding gifts etc.

Source: Jin (2006).

3.2.2. Issues in Dongdaemun market

Dongdaemun Market have made a qualitative growth and strengthened the competitiveness in clothing wholesale with

facility modernization and securing human resources. Nevertheless, there are lots of problems to disturb the steady growth of Dongdaemun Market. One of the problems is chaotic environment in existing markets because it prevents productive and creative activities. However, the most critical problem is that there is no proper paradigm to solve the chaotic environmental problem in Dongdaemun Market.

In addition, there is a matter of distrust between wholesalers and retailers. The retailers often distrust the quality, service, and return of products. In case of wholesalers, they have difficulty in charging account and turning back goods. In addition, they distrust the price settlement with retailers.

3.2.3. Systematic Issues in Dongdaemun Market

Local retailers who make use of local line interface buses have time constraints to visit shops. Therefore, they tend to look around only their favorite stores and then shop their goods because of insufficient time to purchase. For this reason, the local retailers cannot have the opportunity to visit other new stores easily and identify new products exactly.

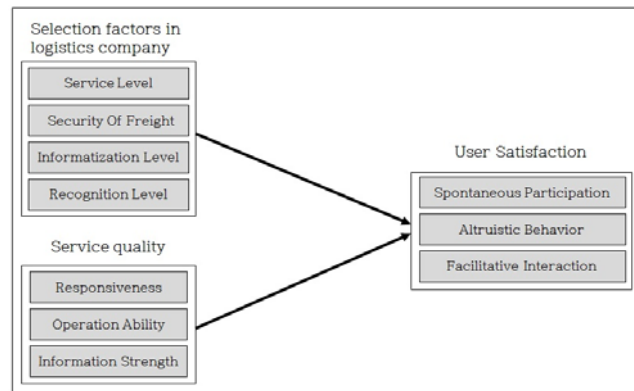
As mentioned above, those problems in Dongdaemun Market have been the causes of declining service satisfaction, sales, and market distribution. Thus, it is essential to search an effective alternative for the steady growth in Dongdaemun market. This study investigates the strategic alternative for the expansion of market distribution and the improvement of service satisfaction through analyzing the current state of third party logistics in Dongdaemun market.

4. Empirical Analysis

4.1. Methodology

4.1.1. Research Model

This study aims to reveal the effect of third party logistics selection factors on the service qualification satisfaction. Independent variables are composed of service level, security of freight, informatization level, and recognition level as the third party logistics factors. Satisfaction was influenced by service quality, and it was composed of responsiveness, operation ability, and information strength as displayed in <Figure 3>.



<Figure 3> Research Model

4.1.2. Setting-up Hypotheses

The hypotheses to test the research model are as follows.

<Hypothesis 1> The selection factors in third party logistics suppliers will have a significant relationship with user satisfaction.

<Hypothesis 1-1> Service quality in third party logistics will have a significant relationship with user satisfaction.

<Hypothesis 1-2> Security of freight in third party logistics will have a significant relationship with user satisfaction.

<Hypothesis 1-3> Informatization level in third party logistics will have a significant relationship with user satisfaction.

<Hypothesis 1-4> Recognition level in third party logistics will have a significant relationship with user satisfaction.

<Hypothesis 2> Service quality in third party logistics will have a positive effect on user satisfaction.

<Hypothesis 2-1> Service responsiveness in third party logistics will have a positive effect on user satisfaction.

<Hypothesis 2-2> Service operation ability in third party logistics will have a positive effect on user satisfaction.

<Hypothesis 2-3> Service information strength in third party logistics will have a positive effect on user satisfaction.

<Hypothesis 3> The selection factors, service quality, and user satisfaction in third party logistics companies will have interrelationship.

4.2. Results of Empirical Analysis

To test the hypothesis, SPSS 20.0 with Windows program was used for statistical data through the study, and 119 samples were analyzed after excluding incomplete or unfaithful 6 questionnaires. Here are the details of the analysis.

First, a descriptive statistic analysis was performed to figure out the subjects' socio-demographic characteristics and each level or degree of the variable. Then, t-test and ANOVA variance analysis were used to analyze the socio-demographic characteristics and the difference along with each variable. This study performed a correlation analysis to prove the relationship between each variable, and conducted multiple regression analysis to find the relationship in the selection factors, service quality, and user satisfaction in third party logistics suppliers.

4.2.1. Situation Analysis on Third Logistics Suppliers in Dongdaemun

Through the results of data analysis, this research found the general average and standard deviation in selection factors and service quality of the third party logistic users. The results from the analysis on the average and standard deviation are in <Table 2>. When it comes to select third party logistics suppliers, security of freight(3.9034) was regarded as the most important factor. Next came service factor(3.6975), Informatization factor(3.5840), and recognition factor(3.2416). In case of the service quality for third party logistics suppliers, the results appeared by the sequence of

operation ability(3.7752), information strength(3.6345), and responsiveness(3.4258). Overall satisfaction showed 3.6588 in average.

Therefore, the security of freight was considered as the most important thing in using third party logistics suppliers. Next were service factor, Informatization factor, and recognition factor. Moreover, the security of freight factor showed the lowest standard deviation(.47065). It means that most of the merchants in Dongdaemun market think highly of the security of freight in using third party logistics suppliers. On the other hand, in case of recognition factor, the average level of importance shoed the lowest point (3.2416), but the standard deviation was the highest point (.56555). These results show that people tend to recognize situations differently, thus, each of their recognition may be different to different individuals.

<Table 2> Results of descriptive statistic analysis

Item		Average	Standard deviation
Importance Level in selection for third party logistics supply	service factor	3.6975	.50409
	security of freight factor	3.9034	.47065
	Informatization factor	3.5840	.49497
	recognition factor	3.2416	.56555
Service quality	responsiveness	3.4258	.51881
	operation ability	3.7752	.48537
	information strength	3.6345	.64341
Overall satisfaction		3.6588	.49837

4.2.2. Difference Analysis on Business Characteristics

4.2.2.1. Difference Analysis on Wholesale and Retail

<Table 3> Difference Analysis on Wholesale and Retail

Category		N	Average	Standard deviation	t	p	Difference	
Selection factors in logistics Supply	Service factor	wholesaler	68	3.757	.492	1.504	.135	X
		retailer	51	3.617	.513			
	Security of freight factor	wholesaler	68	3.897	.477	-.168	.867	X
		retailer	51	3.911	.465			
	Informatization level factor	wholesaler	68	3.580	.485	-.080	.936	X
		retailer	51	3.588	.511			
Recognition factor	wholesaler	68	3.191	.522	-1.124	.263	X	
	retailer	51	3.308	.617				
Service quality	Responsiveness	wholesaler	68	3.421	.483	-.102	.919	X
		retailer	51	3.431	.566			
	Operation ability	wholesaler	68	3.823	.483	1.257	.211	X
		retailer	51	3.710	.485			
	Information strength	wholesaler	68	3.647	.717	.246	.806	X
		retailer	51	3.617	.534			
Overall satisfaction		wholesaler	68	3.647	.520	-.296	.768	X
		retailer	51	3.674	.471			

* :This test is significant at the level of 0.05.

This study performed t-test to find the difference between the wholesalers and retailers using third party logistics suppliers in Dongdaemun market. As shown in <Table 3>, there is little difference in average between wholesalers and retailers. All the significance probabilities(p) are larger than .05., thus, there are no items to show a significant difference statistically to the Importance level, service quality, overall satisfaction in selecting third party logistics suppliers (p>.05).

4.2.2.2. Difference Analysis on Business Scale

This study also performed t-test to the merchants using third party logistics suppliers by domestic or international

scale. The purpose of t-test was to find the differences in selection factors, service quality, and overall satisfaction for the merchants using third party logistics suppliers by the scale of domestic/international from Dongdaemun market. According to <Table 4>, by domestic or international scale, the freight security of selection factors in logistics suppliers and the operation ability in service quality showed a significant difference statistically(p<.05).

The results of the analysis suggested that the merchants, doing their business internationally, think freight security highly more than domestic business merchants, and they have taken better 'operation ability' of service quality from third party logistics suppliers.

<Table 4> Difference Analysis by the Scale of Business

Category		N	Average	Standard deviation	t	p	Difference	
Selection factors in logistics supply	Service factor	Domestic	52	3.601	.498	-1.859	.066	X
		International	67	3.772	.499			
	Security of freight factor	Domestic	52	3.798	.519	-2.184	*.031	O
		International	67	3.985	.414			
	Informatization level factor	Domestic	52	3.524	.429	-1.167	.246	X
		International	67	3.630	.538			
Recognition factor	Domestic	52	3.211	.578	-5.09	.612	X	
	International	67	3.264	.558				
Service quality	Responsiveness	Domestic	52	3.378	.502	-.880	.381	X
		International	67	3.462	.531			
	Operation ability	Domestic	52	3.644	.465	-2.659	*.009	O
		International	67	3.876	.479			
	Information strength	Domestic	52	3.586	.647	-.714	.477	X
		International	67	3.671	.642			
Overall satisfaction		Domestic	52	3.615	.483	-8.37	.405	X
		International	67	3.692	.510			

* :This test is significant at the level of 0.05.

4.2.2.3. Difference Analysis by Performance Level

This study performed ANOVA variation analysis to identify the difference in selection factors, service quality, and overall satisfaction from Dongdaemun market merchants using third

party logistics company during the last 3 years to check the decrease, maintenance, and increase in performance. As shown in <Table 5>, there are no items to show the significant difference during the last 3 years(p>.05).

<Table 5> Difference Analysis on Performance Level

Category		Output	N	Average	Standard deviation	F	p	Difference
Selection factors in logistics company	Service factor	decrease	9	3.472	.422	1.194	.307	X
		maintenance	45	3.677	.478			
		increase	65	3.742	.528			
	Security of freight factor	decrease	9	3.777	.403	1.043	.356	X
		maintenance	45	3.850	.501			
		increase	65	3.957	.456			
	Informatization level factor	decrease	9	3.750	.450	.633	.533	X
		maintenance	45	3.594	.392			
		increase	65	3.553	.561			
	Recognition factor	decrease	9	3.416	.484	.465	.629	X
		maintenance	45	3.222	.586			
		increase	65	3.230	.564			

Category		Output	N	Average	Standard deviation	F	p	Difference
Service quality	Responsiveness	decrease	9	3.740	.364	2.343	.101	X
		maintenance	45	3.340	.474			
		increase	65	3.441	.553			
	Operation ability	decrease	9	3.611	.531	.956	.388	X
		maintenance	45	3.738	.464			
		increase	65	3.823	.493			
	Information strength	decrease	9	3.611	.600	.089	.914	X
		maintenance	45	3.666	.574			
		increase	65	3.615	.700			
Overall satisfaction		decrease	9	3.666	.500	.238	.788	X
		maintenance	45	3.697	.492			
		increase	65	3.630	.507			

* : This test is significant at the level of 0.05.

4.3. Correlation Analysis

This study performed correlation analysis to identify the correlation between the concepts of the variables. A Correlation means the level of change in another point that occurs when one point increases. If the correlation coefficient is near 1, there are some positive correlations, whereas, if the correlation coefficient is near -1, they have negative correlations. As you can see in <Table 6>, all of the results of correlation analysis showed positive correlation, and the significance level was .01 or less statistically. Therefore, <Hypothesis 3> was adopted. Looking at the

results in detail, the correlation coefficient between overall satisfaction and operation ability showed the highest(.659) from the results, then next came freight security and operation ability(.623). On the contrary, the correlation coefficient between responsiveness and informativeness was the lowest(.305) from the results of correlation analysis. At this moment, we can relate with the results of the previous descriptive statistic analysis. The freight security and the operation ability in service factors showed the highest level from the results, and it seems to have the relevance to the results of correlation analysis.

<Table 6> Results of Correlation Analysis

	Service factor	Security of freight factor	Informatization level factor	Recognition factor	Responsiveness	Operation ability	Information strength	Overall satisfaction
Service factor	1							
Security of freight factor	.537**	1						
Informatization level factor	.544**	.442**	1					
Recognition factor	.439**	.339**	.565**	1				
Responsiveness	.370**	.407**	.459**	.424**	1			
Operation ability	.547**	.623**	.503**	.441**	.498**	1		
Information strength	.450**	.411**	.357**	.341**	.305**	.433**	1	
Overall satisfaction	.503**	.574**	.487**	.348**	.473**	.659**	.562**	1

** . Correlation coefficient is significant at the level of 0.01

4.4. Multiple Regression Analysis

We formed hypotheses and performed multiple regression analysis to verify the effect of the selection factors and service quality on user satisfaction in third party logistics supply and service quality. Multiple Regression Analysis is a kind of a statistical analysis method that used for verifying a causal relationship between several independent variables and a dependent variable.

<Hypothesis 1> The selection factors in third party logistics suppliers will have a significant relationship with user satisfaction.

<Hypothesis 1-1> Service quality in third party logistics will have a significant relationship with user satisfaction.

<Hypothesis 1-2> Security of freight factor in third party logistics will have a significant relationship with user satisfaction.

<Hypothesis 1-3> Informatization level in third party logistics will have a significant relationship with user satisfaction.

<Hypothesis 1-4> Recognition level in third party logistics will have a significant relationship with user satisfaction.

<Hypothesis 2> Service quality in third party logistics will have a positive effect on user satisfaction.

<Hypothesis 2-1> Service responsiveness in third party logistics will have a positive effect on user satisfaction.

<Hypothesis 2-2> Service operation ability in third party logistics will have a positive effect on user satisfaction.

<Hypothesis 2-3> Service information strength in third party logistics will have a positive effect on user satisfaction.

4.4.1. The Relationship between Selection Factors in Third Party Logistics Suppliers and User Satisfaction in Dongdaemun Market

The results of the multiple regression analysis expresses 'R square(the degree of explanation in cause and effect)' shows an appropriate level with .416. The results are described in <Table 7>. Only the two factors such as security of freight factor and informatization level of selection factors in third party logistics suppliers showed less than 0.05 in significance probability(p). It means that there was a significant effect on user satisfaction statistically. All the others were more than 0.05 in significance probability(p), thus, there was no significant effect on user satisfaction. as regression analysis.

In case of Standard deviation in the factors of fright security and informatization level, both security of freight factor(.379) and informatization level factor(.211) have a positive effect on user satisfaction.

<Table 7> Verification Results from the Effect on User Satisfaction in Selection Factors of Third Party Logistics suppliers

Regression model coefficient				For model	
	Standard coefficient	t	p	F	R square
Service factor	.175	1.865	.065	20.293	.416
Security of freight factor	.379	4.356	*.000		
Informatization level factor	.211	2.193	*.030		
Recognition factor	.023	.265	.792		

* :This test is significant at the level of 0.05.

4.4.2. The Relationship with Third Party Logistics Supplier Service Quality and User Satisfaction

From the results of the regression analysis in service quality and user satisfaction, explanation ability of regression model(R square: the degree of explanation) showed 54.6%, and it came to be an appropriate model with sufficient level. Service quality factors such as responsiveness, operation ability, and information strength showed less than 0.05 in

significance probability(p). Thus, they had significant effects on user satisfaction statistically.

As for standard coefficient, responsiveness(.147), operation ability(.455), and information strength(.250) had positive effects on user satisfaction. The operation ability showed the highest effect, and next information strength, and responsiveness came.

<Table 8> Results of Hypothesis Test in Service Quality from the Effects of Using Satisfaction

	Regression Model Coefficient			For model	
	Standard coefficient	t	p	F	R square
Responsiveness	.153	2.101	*.038	46.125	.546
Operation ability	.443	5.749	*.000		
Information strength	.323	4.604	*.000		

* :This test is significant at the level of 0.05.

4.5. Summary

The results of the hypotheses verification are as summarized in <Table 9>. In case of the selection factors from logistics suppliers, the factors for security of freight factor and informatization have significant effects on user satisfaction, whereas, the level of information strength and recognition have nothing to do with it. Therefore, <Hypothesis 1> was partially adopted. When it comes to the relationship between service quality and user satisfaction, all the factors were adopted such as responsiveness, operation ability, and information strength. Therefore, <Hypothesis 2> was also adopted. In addition, <Hypothesis 3>, considered as a significant relationship with this study, was also adopted.

<Table 9 > Results of Hypothesis Test

Hypothesis		Results
1-1	Service quality in third party logistics will have a significant relationship with user satisfaction.	Reject
1-2	Security of freight factor in third party logistics will have a significant relationship with user satisfaction.	Accept
1-3	Informatization level in third party logistics will have a significant relationship with user satisfaction.	Accept
1-4	Recognition level in third party logistics will have a significant relationship with user satisfaction.	Reject
1	The selection factors in third party logistics companies will have a significant relationship with user satisfaction.	Partially Accept
2-1	Service responsiveness in third party logistics will have a positive effect on user satisfaction.	Accept
2-2	Service operation ability in third party logistics will have a positive effect on user satisfaction.	Accept
2-3	Service information strength in third party logistics will have a positive effect on user satisfaction.	Accept
2	Service quality in third party logistics will have a positive effect on user satisfaction.	Accept
3	The selection factors, service quality, and user satisfaction in the third party logistics companies will have interrelationship.	Accept

5. Conclusion

This paper performed selection factors and service satisfaction determinants of third party logistics suppliers in Dongdaemun wholesale market. The survey was conducted for the wholesalers and retailers in Dongdaemun market from March 2, 2016 through March 31, 2016. The subjects of the study were company employees making use of third party logistics in Dongdaemun market in Seoul. They were selected by the way of random sampling. After confirming if they are using third party logistics, we obtained their consent. A total of 125 questionnaires were distributed, but 6 questionnaires were discarded with the reasons for insincere answers or not recollected. Thus, 119 samples were analyzed for this paper. The summary of the results are as follows.

First, through the results of the frequency analysis, the wholesalers using third party logistics service counted for 68%, and the retailers using third party logistics service counted for 51% in Dongdaemun market. More than 98.3% were registered as a private enterprise. In case of industry experience, the enterprises which have less than 3 year industry experience take 44.5%, more than 3, less than 5 years take 52.1%. That is, the enterprises which have the experience of less than 5 years take 96.6%. As for clients, the enterprises which have less than 5 clients take 63%, from 5 to 10 take 36.1%. In business scale, the 9% of the analyzed enterprises were decreased in business performance in using the service of third party logistics for the last 3 years. The maintained state enterprises in business performance take 45%, the increased enterprises in business performance take 65%. All the respondents answered that third party logistics service assisted their company well.

Through the results, we found that retailers as well as wholesale dealers can make use of third party logistics service without difficulty, and the level of satisfaction showed high enough.

Second, as for the scale and scope, the analysis from recognition difference for the performance of the last 3 years, the difference in the scale of business by wholesale/retail had no significant relation statistically. But, in case of internationally, there was a significant difference in

recognition for operation ability in freight security and service quality from the course of selection in third party logistics service suppliers. Thus, we found that the logistics service suppliers that delivery or transport service had paid more attention to cargo safety and operation ability, and required the suppliers high service level.

Third, from the results of correlation analysis, there is a positive correlation in the selection factors, service quality, and user satisfaction of third party logistics suppliers in the Dongdaemun market. Particularly, there is a high level of positive correlation in operation ability, security of freight, and user satisfaction. Therefore, freight security and operation service quality showed close relationship each other as the most important factors in selecting third party logistics suppliers.

Forth, there is no relationship between service level and recognition level statistically in selecting third party logistics suppliers as the effect of user satisfaction. It means that third party logistics suppliers in Dongdaemun market are not dependent on only a few recognized companies, and the supply of the third logistics is enough. Moreover, it seems that the security of freight and operation are regarded as the more important ones than the other services.

Fifth, there is a significant relation with cause and effect in responsiveness, operation ability, information strength, and service quality of third party logistics suppliers in Dongdaemun market. The operation ability, information strength, and service quality showed higher than responsiveness and service quality. Through this, we can recognize the importance of operation ability and information strength in third party logistics suppliers.

The use of third party logistics suppliers in Dongdaemun market shows the different aspects from the existing general logistics or transportation service. Therefore, it suggests significant implications to third party logistics service and its improvement, and further research is needed considering these suggestions and new variables or components. In addition, the things that the merchants want for third party logistics suppliers in Dongdaemun market are the security of freight, operation ability, information strength, and responsiveness in emergency. It also provides third party logistics suppliers with strategic implications.

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