

DETERMINANTS AFFECTING CUSTOMERS' SATISFACTION AND LOYALTY: A CASE STUDY OF LOGISTICS COMPANIES IN DONG NAI PROVINCE

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ABSTRACT

Nowadays, the company is to evaluate an advanced field of competition, such as logistics services. Every day, companies improve the quality and reliability of customers for their services. A few economists have already said: You cannot improve it if you don't have metrics of the service you are doing, which means that companies have to measure and get the quality of our logistics services objectively before our service improvements and perfection taken to new heights. Therefore, the authors surveyed 650 customers related to logistics service from January 2020 to July 2020. The research results showed that six factors affect customer satisfaction based on logistics services at logistics companies in Dong Nai province. Research results are crucial scientific evidence for logistics service managers to improve logistics services.

Keywords: Customers, satisfaction, ATM, payment services, and LHU.

INTRODUCTION

Logistics is an essential service sector in the overall structure of the national economy, playing the role of supporting, connecting, and promoting the country's socio-economic development and each locality, contributing to the economy's competitiveness. This study discusses the development prospects of this industry and offers some solutions to promote the development of logistics services in Vietnam. Logistics is an essential service sector in the overall structure of the national economy, playing the role of supporting, connecting, and promoting the country's socio-economic development and each locality, contributing to the competitiveness of the economy. Logistics is the operation of a chain of services from the pre-production stage until the goods reach the end consumer. This field is directly related to transportation, forwarding, warehousing, administrative services, consulting (customs, tax, insurance), import-export - commerce, distribution channels, and retail by Abdullah, R. B. (2012).

Developing logistics services into a service industry will bring added value, linking logistics services with the development of goods production, import and export and domestic trade, and transport and public infrastructure development. Information technology developed a healthy logistics service market will create equal opportunities for businesses of all economic sectors, encourage to attract domestic and foreign investment capital following the law. Vietnamese law and international treaties to which Vietnam is a member. According to the Vietnam Association of Logistics Services (VLA), the growth rate of the logistics industry in Vietnam in Vietnam has been around 14% -16% in recent years, with a scale of about 40-42 USD billion/year. We are participating in the logistics market of about 3,000 domestic enterprises and about 25 leading logistics groups in the world doing business in many forms. Currently, 30 companies providing international logistics services are operating in Vietnam with

big names such as DHL, FedEx, Maersk Logistics, APL Logistics, C. J Logistics, KMTC Logistics.

According to the World Bank's ranking, Vietnam currently ranks 64 out of 160 countries in logistics development and 4th in ASEAN after Singapore, Malaysia, and Thailand. With an annual growth rate of 14-16%, this is one of the fastest-growing and most stable Vietnam service industries in recent years. By the end of 2020, it forecasted that Vietnam's import and export turnover estimated at 300 billion USD, container cargo through Vietnam's seaport system would reach 67.7 million TEU. Thus, the potential for developing Vietnamese logistics services is huge. Shortly, logistics services will become an essential economic sector that can contribute up to 15% of its GDP. In particular, there has been a boom in e-commerce and e-Logistics recently. According to the Department of E-Commerce and Digital Economy of the Ministry of Industry and Trade, e-commerce growth is 35%/year; Vietnam's retail e-commerce sales in the 2016-2020 period estimated to increase 20% per year, and Vietnam's total retail e-commerce sales expected to reach \$ 10 billion by 2020. Changes in E-commerce globally and Vietnam have pushed Vietnam's logistics industry to improve its service delivery model to be more professional and efficient. Besides, logistics services have opportunities to promote the development of the logistics industry. Currently, Vietnam is assessed to have many opportunities to encourage the development of the logistics service industry. Specifically, road traffic infrastructure, airports, seaports, warehouses, commercial infrastructure, and logistics centers continually expanded on a large and widespread scale.

Along with that, the accompanying services have been promptly responding to the diverse requirements of the market. Clearance procedures for exports have also improved significantly. Therefore, the author's research factors affecting customers' satisfaction with logistics services at logistics companies in Dong Nai province.

LITERATURE REVIEW

Customer satisfaction (SAT)

Customer satisfaction: Customer satisfaction is vital in business activities so that many topics and scientific books are published on this topic. According to Belás J. & Gabčová, L. (2016), Customer satisfaction is considered as the foundation in the marketing concept of satisfying customer needs and desires. Customer satisfaction is their response to Cronin and Taylor's perceived difference between experience and expectations (1992). That is, the customer's known experience of using a service and the results after the service provided by Kotler, P., & Keller, K.L. (2006).

Customer loyalty (LOY)

Customer loyalty in researching a service means loyalty to a service provider and loyalty to its brand. Brand loyalty is the return of customers to a brand that is loyal to loyal customers are customers who will stay with the company even in times of trouble, towels by Coelho, P. S. & Henseler, J. (2012). Theoretically, customer loyalty stems from the satisfaction they get after buying and consuming by Zeithaml V., Berry L. & Parasuraman A., (1988). With the service, too, customers feel satisfied with what they experience. They will have a desire to return, experience the feeling again, and therefore, they have the act of buying back, attracting more customers. They can also communicate well about the service they experience by Thomas, B. & Tobe, J. (2016).

Reliability (REL)

Reliability: Zeithaml, V.A., and Bitner, M.J. (2000) defined as the ability to reliably and reliably deliver promised services. It is about keeping promises of service delivery, pricing, handling customer complaints and complaints, speaking out the ability to provide consistent and timely service the first time around by Brunner, T. A., Stöcklin, M. & Opwis, K. (2018). Based on the concept mentioned above and studies, authors give hypothesis H1 following:

Hypothesis H1: Reliability positively affects customer satisfaction with logistics services at logistics companies in Dong Nai province.

Responsibility (RES)

Responsiveness is the ability to serve manifestations when the employee contacts the customer, the employee directly performs the service, the ability to research to capture relevant information necessary for customer service, make customers trust the company by Cronin and Taylor (1992). This ability is reflected in its reputation and the service staff's personality to communicate directly with customers by Coyne K. (2018). Based on the concept as mentioned earlier and studies, authors give hypothesis H2 following:

Hypothesis H2: Responsibility positively affects customers' satisfaction with logistics services at logistics companies in Dong Nai province.

Competence (COM)

Competence: Gronroos, C, A. (1984) expresses the desire and willingness of employees to provide services to customers, related to the ability to ensure the safety of customers, through physical safety, finance, and information security. Based on the concept as mentioned above and studies, authors give hypothesis H3 following:

Hypothesis H3: Competence positively affects customer satisfaction with logistics services at logistics companies in Dong Nai province.

Empathy (EMP)

Empathy is related to creating all the comfortable conditions for the customer to access the service, such as shortening customer waiting times, service locations, and convenient opening hours for customers by Parasuraman, Valarie A. Zeithaml, and Leonard L. Berry (1985). Explain to customers easily understand and listen to the issues related to them, such as service explanation, cost, solving complaints and inquiries by Zeithaml V., Berry L. & Parasuraman A., (1988). Demonstrated through the ability to understand and grasp customers' needs by understanding the customer's requirements and paying attention to them personally by Deep, J. (2017). Based on the concept mentioned above and studies, authors give hypothesis H4 following:

Hypothesis H4: Empathy positively affects customer satisfaction with logistics services at logistics companies in Dong Nai province.

Tangible (TAN)

Tangible means: Focusing on the elements of the appearance of the service such as the appearance, the attire of the service staff, the support equipment for the use, facilities, how the staff dressed by Gronroos, C, A. (1984). For logistics enterprises, infrastructure is a significant factor that affects these enterprises' operation or inactivity. Infrastructure is the technical foundation to bring goods from production to consumer. The economic growth of Vietnam in

recent years has created a massive demand for infrastructure and transportation services. Based on the concept mentioned above and studies, authors give hypothesis H5 following:

Hypothesis H5: Tangible positively affects customer satisfaction with logistics services at logistics companies in Dong Nai province.

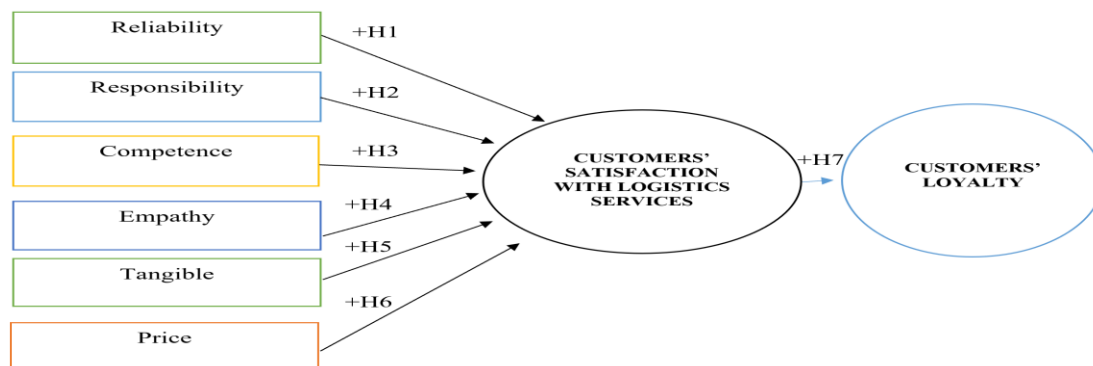
Price (PRI)

Price or logistics costs include Transportation costs - one-third to two-thirds of distribution circulation costs by Kumar, V. & Petersen A. J. (2018). Capital opportunity cost - the minimum rate of return a company can earn when capital is not investing in inventories but in another activity; and Storage costs - including the cost of renting a warehouse, storing the goods, bringing the goods in and out of the warehouse, damaged goods, insurance for the cargo by Parasuraman A., Zeithaml V. & Berry L. (1988). Based on the concept mentioned above and studies, authors give hypothesis H5 following:

Hypothesis H6: Price positively affects customer satisfaction with logistics services at logistics companies in Dong Nai province.

Customer satisfaction leads to customer loyalty; this factor is to survive in this hyper-competitive business environment. A loyal customer is a powerful asset, and every brand wants as much as possible by Rebekah, B. & Sharyn, R. (2014). Loyal customers are more likely to create repeat business. They will spend more money with your company. And they may even become advocates of your brand. So, the more satisfied your customers are, the higher their chances of becoming loyal to your brand. Satisfied customers also tend to become loyal customers, which means higher lifetime value for those customers by Stenbacka C. (2015). A customer spends more on a purchase than a new customer by Thomas, B. & Tobe J. (2016). Furthermore, the customer acquisition cost is about seven times higher than the customer retention cost, further improving your bottom line.

Hypothesis H7: Customer satisfaction positively affects customer loyalty with logistics services at logistics companies in Dong Nai province.

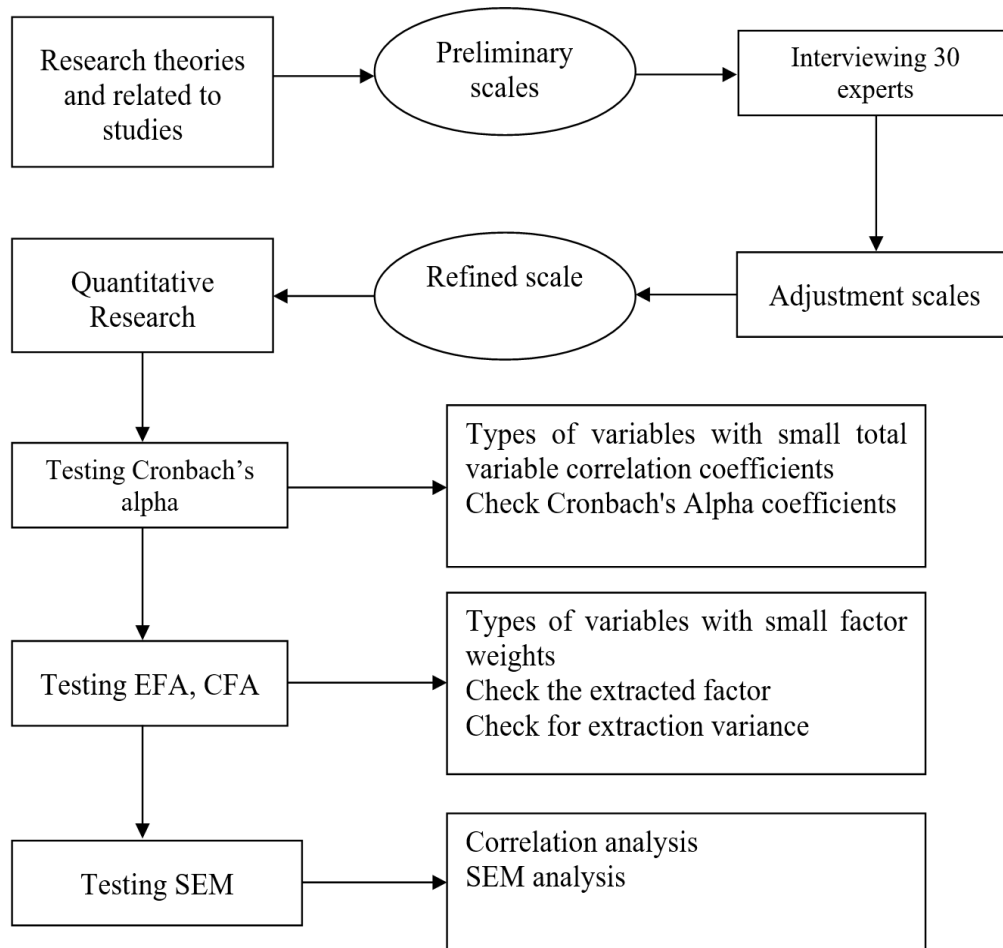


(Source: Researchers discovered)

Figure 1. A research model for factors affecting customers' satisfaction

METHODS OF RESEARCH

The authors applied qualitative and quantitative research methods in this study, based on experts' opinions to adjust observed variables.



(Source: Researchers discovered)

Figure 2. The research process for factors affecting customers' satisfaction and loyalty

Qualitative research Authors surveyed 30 experts in Dong Nai province. Thirty experts are managers who are working for the logistics companies in Dong Nai province.

Quantitative research conducted through questionnaires with observed variables measured using a 5-point Likert scale includes one strongly disagree and five strongly agree. The authors surveyed 650 consumers who used logistics services of logistics companies in Dong Nai province. The data collection time is from January 2020 to July 2020. According to the conventional method by Hair, J., Anderson, R., Tatham, R., & Black, W. (1998), samples selected.

Besides, the authors collecting data processed through SPSS 20.0 software with descriptive statistical tools, scale testing with Cronbach's Alpha, discovery factor analysis (EFA), testing Structural Equation Modeling (SEM). Finally. The authors had conclusions and managerial implications by Hair, J., Anderson, R., Tatham, R., & Black, W. (1998).

RESEARCH RESULTS

The authors tested the scale reliability of a model for factors affecting customer satisfaction and loyalty with logistics services at logistics companies in Dong Nai province, including six components.

Table 1. Testing of Cronbach's alpha for factors affecting customers' satisfaction and loyalty

No.	Items	Cronbach's alpha
1. Reliability (REL)		0.888
Rel1	You feel secure when using the logistics services	0.880
Rel2	The company performs the transaction correctly and without errors	0.855
Rel3	The company secures customer information well	0.887
Rel4	The company delivers the service right at the time they commit it	0.838
Rel5	The company has a high reputation in the heart of customers	0.838
2. Empathy (EMP)		0.953
Emp1	The company employees always strive to build good relationships and pay attention to the needs of each customer	0.926
Emp2	The company staff are enthusiastic and friendly to customers	0.953
Emp3	The company staff serve all customers fairly	0.948
Emp4	The company always asks, congratulates, gives gifts to customers every Tet or personal event	0.925
3. Responsiveness (RES)		0.855
Res1	The company always satisfies all difficulties, questions, and complaints about customers	0.803
Res2	Time for customers to wait for their short transactions (2-3 minutes) at the company	0.817
Res3	Apply for publication permits for food, beverage, and cosmetics are simple	0.842
Res4	The company has a 24-hour hotline	0.800
4. Tangibles (TAN)		0.933
Tan1	The company has a spacious and convenient head office for customers	0.904
Tan2	The company has modern equipment and machinery	0.922
Tan3	The company staff has a very professional manner and dress neatly and politely when communicating with customers	0.922
Tan4	The company has a reasonable and import and export entrustment for customers	0.904
5. Competence (COM)		0.945
Com1	Employees handle their profession correctly, quickly and effectively	0.920
Com2	The company's staff has sufficient knowledge and professional capacity to advise and answer customer inquiries	0.945
Com3	The company staff are always courteous and considerate and warm to customers	0.932
Com4	Consulting import and export procedures are simple and clear	0.913
6. Price (PRI)		0.931
Pri1	The company has competitive fees	0.899
Pri2	Flexible withdrawal ability at the company	0.919
Pri3	Reasonable transaction fee at the company	0.920
Pri4	The company has a wide range of money transfer service products	0.899

(Source: Data processed by SPSS 20.0)

Table 1 showed that all of (1) Reliability, (2) Responsibility, (3) Competence, (4) Empathy, (5) Tangible, and (6) Price. Cronbach's alpha is higher than 6.0.

Table 2. Testing of Cronbach's alpha for customers' satisfaction and loyalty

No.	Items	Cronbach's alpha
7. Customers' satisfaction (SAT)		0.932
Sat1	In general, He/she is satisfied with the quality of logistics services at the company	0.917
Sat2	He/she will introduce to friends and relatives about logistics services at the company	0.860
Sat3	He/she will continue to use logistics services at the company	0.924
8. Customers' loyalty (LOY)		0.846
Loy1	Quality of logistics services affecting customer loyalty	0.823
Loy2	Price of logistics services affecting customer loyalty	0.770
Loy3	Customers' satisfaction affecting customer loyalty	0.834
Loy4	Customers are willing to use the logistics services in next times	0.787

(Source: Data processed by SPSS 20.0)

Table 2 showed that all Cronbach's Alpha values of the research components meet this technique's requirements, specifically, Cronbach's Alpha values of customer satisfaction and loyalty. Cronbach's coefficient is more than 0.6.

Table 3. Test CMIN/df for all of the components

Model	NPAR	CMIN	DF	P	CMIN/DF	GFI	TLI	CFI
Default model	105	1185.230	423	.000	2.802	.891	.946	.954
Saturated model	528	.000	0			1.000		1.000
Independence model	32	17147.312	496	.000	34.571	.311	.000	.000

(Source: Data processed by SPSS 20.0)

Table 3 showed that the assessment of the scale of customers' satisfaction and loyalty includes the following elements: CMIN/DF = 2.802 (<3.0), GFI = 0.891 (>0.850), TLI = 0.946 (>0.900) and CFI = 0.954 (> 0.9).

Table 4. Testing coefficients for factors affecting customers' satisfaction and loyalty

Relationships			Unstandardized Estimate	Standardized Estimate	S.E.	C.R.	P	Hypothesis
SAT	<---	TAN	.057	.029	.021	2.767	.006	Accepted
SAT	<---	RES	.151	.166	.042	3.612	***	Accepted
SAT	<---	COM	.415	.482	.036	11.655	***	Accepted
SAT	<---	PRI	.099	.101	.038	2.618	.009	Accepted
SAT	<---	EMP	.027	.050	.007	3.714	***	Accepted
SAT	<---	REL	.162	.094	.062	2.620	.009	Accepted
LOY	<---	SAT	.292	.545	.026	11.378	***	Accepted

(Source: Data processed by SPSS 20.0)

Table 4 showed that the column "P" < 0.01 with significance level 0.01. These results indicated that six factors affect customers' satisfaction and loyalty with logistics services at

logistics companies in Dong Nai province with a significance level of 0.01. These results are science evident for managerial implications to enhance customers' satisfaction and loyalty.

CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Conclusions

The authors surveyed 650 customers (645 samples processed) related to logistics service from January 2020 to July 2020. The research results showed that six factors affected customer satisfaction, and customers' satisfaction affected loyalty at logistics companies in Dong Nai province. According to the action plan to improve competitiveness and develop Vietnam's logistics services until 2025. Vietnam strives for the proportion of the contribution of the logistics service industry to GDP to reach 8%-10%, the growth rate of services gets 15%-20%, the quality of outsourcing logistics services comes 50%-60%, logistics costs decrease to 16%-20% of GDP. It ranked according to the national logistics capacity index (LPI) in the world reached 50th and above-mentioned things. Intending to make Vietnam a logistics hub of the region, in the coming time, it is necessary to focus on implementing some of the following tasks and managerial implications.

Managerial implications

1. The managerial implications for competence (COM): The Government continues to improve logistics services policies and laws. Accordingly, amending several regulations, supplementing logistics services in the Commercial Law, creating an excellent legal basis for logistics activities. To amend and promulgate new policies and laws governing logistics services, multimodal transport, and cross-border transportation. The Government has comprehensive coverage of logistics services, the domestic law of international commitments on logistics. It is also necessary to promote programs to support enterprises in application research, training, and technology transfer to build capacity in designing, integrating systems, installing, and maintaining automatic systems. Application chemistry in transport management, warehouse, distribution center, and support capital or initial working conditions for businesses with an idea of electronic logistics platform solutions and inter applications concerned. Research and apply available solutions developed by international/regional partners to utilize technology resources and rapidly establish links to the region.

2. The managerial implications for responsiveness (RES): The Government has supportive policies to promote the logistics service industry's development. Accordingly, building systems to support the development of local logistics services effectively, following each locality's socio-economic characteristics. Support logistics service enterprises, incredibly small and medium enterprises, with advantages in accessing domestic and foreign capital sources, market development, training, and information access.

Besides, Government has prioritized allocating budgets to support research, application, technology transfer, and technical progress for logistics service development, socializing resources for logistics service development, contributing to improving capacity and capacity. Competitiveness of companies providing logistics services. Support to build strong logistics groups, promote overseas investment and export logistics services, create orientations and driving forces for market development. Review international commitments on logistics services in WTO, ASEAN, and free trade agreements (FTAs), thereby supporting enterprises to improve

their capacity to negotiate, sign, execute contracts, and handle disputes. The acceptance is related to logistics activities.

3. The managerial implications for the price (PRI): The Government has complete logistics infrastructure by reviewing the plans, ensuring the integrity of transport infrastructure and transport services to develop the logistics service industry. Review and adjust the local production planning and structure associated with the development of logistics services and infrastructure and ensure that the transportation and transport plans align with production strategies and techniques. The Government has industrial export, agriculture, import and export, socio-economic development strategies of localities, linking planning of logistics centers, dry ports, bonded warehouses in a unified whole. Increase the volume of goods transported by sea, inland waterways, rail, and air. Develop a shipping system to meet the growing trend of e-commerce, with a focus on last-mile delivery.

4. The managerial implications for reliability (REL): The Government continues to develop the market for logistics services. Promote trade promotion for logistics services through the hosting and organization of international logistics seminars, fairs, and exhibitions. Organize research missions abroad and invite foreign business delegations to Vietnam to exchange investment opportunities and cooperate in logistics service development. Promote propaganda for manufacturing enterprises, import-export, and domestic trade on the use of outsourced logistics services towards specialization and a rational division of labor in the supply chain. In particular, focus on improving logistics infrastructure associated with e-commerce, combining logistics with e-commerce according to the world's development trend and the region. Concentrate on training human resources for both enterprises and management agencies to serve the rapid development of logistics services.

5. The managerial implications for empathy (EMP): The Government continues improving business capacity and service quality. There should be a way to support Vietnamese businesses to understand and adequately understand the process of providing logistics services, especially in the transport process; Systematic training of experienced human resources and fully equipped with professional knowledge, knowledge of domestic and international laws. Encourage businesses in several industries (textiles, footwear, wood products, agricultural products, mechanics - manufacturing) to apply advanced supply chain management models in the production and business process, focusing on implementing logistics activities based on using information technology and new technologies in logistics.

6. The managerial implications for tangibles (TAN): The Government continues promoting international cooperation in logistics. Continue to expand logistics infrastructure connections with countries in ASEAN, Northeast Asia, and other regions in the world to promote the effects of multimodal transport, cross-border transport, and transit. Construct traffic works, warehouses, logistics centers on routes and corridors connecting ports of Vietnam with Laos, Cambodia, Thailand, and South China. Promote the development of multimodal transport, cross-border transport, especially for goods in transit. To form overseas logistics centers as a bridgehead, to gather and distribute Vietnamese goods to international markets. Strengthen links with associations and logistics service enterprises in the ASEAN region and around the world. To mobilize investment attraction to build logistics centers to promote import and export

Vietnamese goods to the global market, form overseas logistics centers as the bridgehead, gather and distribute Vietnamese goods to international markets.

REFERENCES

1. Abdullah, R. B. (2012). The relationship between store brand and customer loyalty concerning Malaysia. *Asian Social Science*, 8(2), 117-185.
2. Belás, J. & Gabčová, L. (2016). The relationship between customer satisfaction and loyalty: A case of logistics companies. *E & M Economical and Management*, 2(1), 132-144.
3. Brunner, T. A., Stöcklin, M. & Opwis, K. (2018). Satisfaction, image, and loyalty: New versus experienced customers. *European Journal of Marketing*, 42(1), 1095-1105.
4. Coelho, P. S. & Henseler, J. (2012). Creating customer loyalty through service customization. *European Journal of Marketing*, 46(1), 331-356.
5. Cronin and Taylor (1992). Measuring service quality, a reexamination, and extension. *Journal of Marketing*, 56(3), 55-68.
6. Coyne, K. (2018). Factors Influencing Customer Satisfaction with logistics services: A case study of logistics companies in Malaysia. *Journal of the Academy of Marketing Science*, 13(12), 115-124.
7. Deep, J. (2017). Factors affecting customer satisfaction on logistics service: The case of private companies in Sri Lanka. *International Journal of Marketing and Technology*, 18(11), 111-138.
8. Gronroos, C, A. (1984). Service Quality Model and Its Marketing Implications. *European Journal of Marketing*, 18(4), 36 - 44.
9. Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate Data Analysis with Readings*. US: Prentice-Hall: Upper Saddle River, NJ, USA.
10. Kumar, V. & Petersen A. J. (2018). Customer satisfaction and loyalty: assessing some of the critical antecedents of customer satisfaction in logistics services. *International Journal of Marketing*, 120(4), 46-60.
11. Kotler, P., & Keller, K.L. (2006). *Marketing Management*, Pearson Prentice Hall, USA.
12. Parasuraman, Valarie A. Zeithaml, and Leonard L. Berry (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(1), 41-50.
13. Parasuraman A., Zeithaml V. & Berry L. (1988). SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1), 12-40.
14. Rebekah, B. & Sharyn, R. (2014). Customer satisfaction should not be the only goal. *Journal of Services Marketing*, 18(7), 14-23.
15. Stenbacka, C. (2015). A Reexamination of the Determinants of Consumer Satisfaction and loyalty. *Journal of Marketing*, 4(1), 115-132.
16. Thomas, B. & Tobe, J. (2016). Factors affecting customers' satisfaction and loyalty. A case in the logistics companies of Ethiopia, Chiro town. *African Journal of Business Management*, 3(13), 38-48.
17. Zeithaml, V.A., and Bitner, M.J. (2000). *Services Marketing: Integrating Customer Focus across the Firm*. 2nd Edition, McGraw-Hill, Boston.
18. Zeithaml V., Berry L. & Parasuraman A., (1988). Communication and control processes in the delivery of service quality. *Journal of Marketing*, 52(1), 35-48.