A STUDY ON "PERCEPTION OF LOGISTICS SERVICE QUALITY IN NYKAA AMONG COLLEGE STUDENTS IN CHENNAI REGION"

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Abstract

Logistics is the movement of goods from the point of origin to the point of consumption. It ensures the movement of goods from suppliers to manufacturers, sellers or distributors, and ultimately buyers, logistics is a crucial link in the supply chain. Logistics and supply chain management is becoming vital in day to day lives of every human. Most of the e portals are trending currently such as Amazon, Flip-kart and etc. The recent player Nykaa is also competing equally in the market and having good numbers of customers and growth since 2012. To understand and delve deeper into finding the quality of the services done in Logistics operation of the brand Nykaa, the researchers aimed to conduct the study with following objectives. A)To find the customer perception of logistics service quality of Nykaa among college students, B) Identify the key dimensions of logistics service quality of Nykaa that influence customer perception, C) Determine the level of satisfaction of college students with the logistics services provided by Nykaa, D) Examine the relationship between customer satisfaction and the likelihood of college students recommending Nykaa to others. The required data was collected from the college students in Chennai region who did shopping with Nykaa and the data base was fetched from Nykaa Customer care. The questionnaire was shared to 110 college students and was analysed empirically. The findings shows that the key dimensions of the logistics service quality are found to be: a) Easy reverse logistics, b) Timely delivery and c) Product quality & safety. It is also found that there is a significant relationship between the customer's satisfaction and the likelihood to recommending Nykaa to others and they are positively correlated with each other. The customers are found to be highly satisfied with the quality of delivery service and least satisfied with the reverse logistics services.

Key words: Nykaa, Logistics Service Quality, Perception, Customer Satisfaction

Introduction

Logistics is the moving of products from one point to the other destination of consumption. It ensures the movement of goods from suppliers to manufacturers, sellers or distributors, and ultimately buyers, logistics is a crucial link in the supply chain. Service Quality is one of the important factors in Logistics business which improves the efficiency of

revenue generation and customer satisfaction. The discernible growth in E- commerce paved way for online shopping and more e- portals which solve the time spent on physical buying. The Online shopping business is successful in current arena and it is depending on the efficient logistics services rendered by them to the customers. An efficient Logistics service involves on time delivery to the customers, accurateness of order fulfilment, and effective & active relationship with customers through better communication. Nykaa is one of the emerging brands in the stream of beauty and wellness products in India and its logistics services are managed to better customer satisfaction and improve the revenue generation. In spite of these much efforts rendered by the Nykaa there have been instances where customers faced dissatisfaction in the timeliness and in the logistics operations of Nykaa. Therefore, it is important to understand the factors that influence the perception of logistics service quality of Nykaa among customers which will embrace the Nykaa team to understand where do they lack in achieving better logistics services. In this context, the present study aims to investigate the perception of logistics service quality of Nykaa among college students in the Chennai region.

OBJECTIVES OF THE STUDY

- To find the customer perception of logistics service quality of Nykaa among college students.
- Identify the key dimensions of logistics service quality of Nykaa that influence customer perception.
- Determine the level of satisfaction of college students with the logistics services provided by Nykaa.
- Examine the relationship between customer satisfaction and the likelihood of college students recommending Nykaa to others

REVIEW OF LITERATURE

[1]Choi, D., Chung, C. Y., & Young, J. studied the level of consumer satisfaction and subsequent repeat buying behaviour by asking 150 Chinese shoppers with online buying experience to participate in the survey in Chins and found that the quality of logistics services, particularly the efficiency of delivery, has a statistically significant effect on customer satisfaction, which in turn has a statistically significant effect on consumers' propensity to make additional purchases.

[2]Wei Hua and Zhou Jin empirically researched the effects of logistics service quality on customer satisfaction from the perspective of the consumer in order to identify the crucial logistical elements influencing consumers' satisfaction. The findings show that customer satisfaction is positively impacted by delivery service quality, after-sales service quality, and personnel service quality; communication service quality has a negligible impact on customer happiness.

[3]The authors Yong Lin, Li Zhou,Jing Luo P. Ieromonachou, Lin Huang, Shuqin Cai and Shi-hua Ma looked into the upshot the quality of services upon customer satisfaction and constancy in the context of electronic commerce, mainly in the perspective of the customer-e-retailer-3PL (third party logistics) provider in this research. They gathered the response through

online questionnaire in China and their finding shows that both e-service and logistics service quality are strongly related to customer satisfaction

[4]The authors Yin Tang and Tae-In Kim investigated the relationship between the quality of C2C logistics services (convenience, responsiveness, reliability, information, and empathy), customer satisfaction, and customer loyalty by conducting a survey with two fifty two C2C platform users in China, then analysed the collected data empirically and found that logistics service quality (convenience, responsiveness, reliability, information, and empathy) had a positive effect on customer satisfaction and also the class of services in logistics (convenience, responsiveness, dependability, information, and empathy) has a positive bang on customer loyalty.

[5]A web-based survey was used to collect data from 1,562 Turkish e-commerce customers post COVID-19 pandemic by the authors and their findings showed the customer satisfaction was positively influenced by timeliness, order condition, order accuracy, and order discrepancy handling. Customer satisfaction and customer loyalty were also found to have a positive relationship.

[6]The authors Hafez, L., Elakkad, E. and Gamil, M. investigated the relationship between logistics service quality (LSQ) dimensions and customer satisfaction, followed by an examination of the impact of customer satisfaction on customer loyalty. For the study they collected 292 responses from Egyptian online shoppers and found that the most significant variables relating to customer satisfaction are information quality, product quality, product condition, and reverse logistics, and that customer satisfaction has a significant impact on customer loyalty.

[7]The authors K. Oh, So-young Kang, Yu-Gyeom Oh investigated whether customer status and repurchase intention were influenced by the quality of the service in the context of international e-commerce by collecting a total of 781 responses in Korea by segregating the service quality of logistics to delivery of quality services, reverse logistics service, delivery firmness, and delivery information service and found that in the context of international direct purchases, the quality of the logistics service favourably increases consumer satisfaction and intention to reuse. And the most important aspect of the logistics service quality parameters was delivery stability. Further in cross-border e-commerce, delivery of quality services, delivery stability, and delivery information service all favourably influence the desire to reuse. Finally, a cross-border e-commerce company's product and/or service satisfaction has a significant impact on repeat business.

[8]Ta Thi Hai Yen, Nguyen Thi Mai Trang, T. Anh in their study evaluated customer satisfaction as a moderator between service quality and customer loyalty across logistics service providers by collecting data from 410 Vietnamese consumers through a survey and found that that aspects of service quality, including customer service, product quality, information quality, delivery service, perceived pricing, and reverse logistics, all have a positive effect on consumer satisfaction, which in turn affects customer loyalty. And also found that customer satisfaction and client loyalty are closely associated.

[9]The authors Dezenia Zain Rachmawati & A. Agus examined the effects of logistics service quality and e-commerce service quality on consumer loyalty and satisfaction using a data from 546 respondents through online survey in Indonesia and found that consumer loyalty and happiness are directly and favourably impacted by the quality of both e-services and logistics services.

[10]Micu, A., Aivaz, K. and Capatina on 2013 published a research paper "Implications of logistic service quality on the satisfaction level and retention rate of an e-commerce retailer's customers" where they analysed the data collected from a representative sample of 100 consumers and found that both the degree of customer satisfaction and the rate of customer retention are most significantly predicted by the logistic service quality's relational dimension.

RESEARCH METHODOLOGY

Various statistics shows that younger age are the main source of online shopping Thus, this research was directed towards college students, investigating college going students and their perception of quality of logistics services provided by Nykaa in Chennai region. Primary data is used in this paper through survey. The survey used convenience sampling method, and randomly selected 110 college students from different colleges and levels from Chennai. The questionnaire was shared to the students personally by me and they were asked to fill them. And the data was analysed using factor analysis, correlation analysis and weighted average analysis.

DATA ANALYSIS AND CONSTRUE

This part of the research deals with the various statistical analysis to conduct various test to find the relationships/differences, Key factors of Logistics service quality.

Descriptive Statistics

Descriptive statistics is conducted to find the mean

	Mean	Std. Deviation	Analysis N
Proper labelling	4.09	.819	110
Protective tertiary package	3.95	.913	110
Undamaged product with primary package	3.94	.891	110
Prior intimation of delivery	3.93	.843	110
Accurate description of products	3.93	.832	110
Easy returning of products	3.91	.852	110
Delivery on time	3.91	.808	110

Sufficient reasons to return	3.90	.845	110
Live tracking system	3.85	.956	110
Fast delivery for quickly perishable products	3.83	.876	110
Timely delivery of replacements	3.80	.876	110
Minimal calls in last mile delivery	3.78	.850	110
Quick collection for inspection	3.76	.928	110
Accurate time estimation	3.73	.845	110
Time period for returning	3.65	1.046	110

The table shows that the college students in Chennai are satisfied with certain logistics service quality aspects provided by Nykaa more than the other aspects, Where we can observe that the customers are highly satisfied with proper labelling, and it has the highest Mean value of **4.09**, followed by the protective tertiary package (Mean **3.95**), Undamaged product with primary package (Mean **3.94**), Prior intimation of delivery (Mean **3.93**) and Accurate description of product (Mean **3.93**).

KMO – BARTLETT'S TEST

Kaiser – Meyer – Olkin Measure of Sampling Adequacy		.845
Bartlett's Test of Sphericity	Approx Chi Square	822.412
	Df	105
	Sig.	<.001

The above table indicates that KMO value is 0.845, it proves the sampling adequacy required is present. The KMO value of 0.845 shows the competence of enough variations in the responses against the statements, which is a necessary condition to apply Exploratory Factor Analysis. The test of sphericity is based on chi-square transformation of determinant of correlation matrix. The results of Bartlett test indicate that p-value of chi-square statistic is <0.001, which is less than 5% level of significance. Hence, there exists a significant correlation between different pairs of statements.

Communalities

	Initial	Extraction
Accurate time estimation	1.000	.595
Delivery on time	1.000	.683
Minimal calls in last mile delivery	1.000	.504
Prior intimation of delivery	1.000	.555
Live tracking system	1.000	.489
Accurate description of products	1.000	.551
Protective tertiary package	1.000	.633
Undamaged product with primary package	1.000	.655
Fast delivery for quickly perishable products	1.000	.602
Proper labelling	1.000	.618
Easy returning of products	1.000	.587
Quick collection for inspection	1.000	.549
Time period for returning	1.000	.772
Sufficient reasons to return	1.000	.587
Timely delivery of replacements	1.000	.690

The above table shows that the extracted communalities of all variables are greater than 0.5. So the variables with the values of 0.5 can be included in the factor analysis. According to Kaiser's criterion, the factors having Eigen value more than 1 are retained for the study

Total Variance Explained

Compo nent	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Tota l	% of varia nce	Cummula tive %	Tota l	% of varia nce	Cummula tive %	Tota l	% of varia nce	Cummula tive %
1	6.6 37	44.2 47	44.247	6.6 37	44.2 47	44.247	3.1 07	20.7 14	20.714
2	1.3 46	8.97 5	53.223	1.3 46	8.97 5	53.223	3.0 99	20.6 62	41.376
3	1.0 87	7.24 6	60.468	1.0 87	7.24 6	60.468	2.8 64	19.0 92	60.468
4	.95 4	6.35 9	66.827						
5	.83 5	5.56 4	72.392						
6	.73 0	4.86 5	77.257						
7	.71 6	4.77 5	82.032						
8	.56 5	3.76 4	85.796						
9	.54 2	3.61 2	89.408						
10	.36 5	2.43 0	91.838						
11	.33 4	2.22 5	94.064						
12	.27 6	1.84 0	95.903						
13	.23 4	1.55 7	97.460						
14	.21 7	1.44 5	98.905						

15	.164	1.095	100.000					

Interpretation

The result shows that the 15 statements considered for the study can be reduced into 3 components such as Component 1 (**Easy reverse logistics**), Component 2 (**Timely delivery**) and Component 3 (**Product quality & safety**). These 3 factors explain that 60.468 percent of the variable of the included statements.

Rotated Component Matrix[a]

Statements	Component		
	1	2	3
Time period for returning	.772		
Timely delivery of replacements	.739		
Easy returning of products	.677		
Quick collection for inspection	.655		
Sufficient reasons to return	.560		
Delivery on time		.784	
Accurate time estimation		.719	
Minimal calls in last mile delivery		.648	
Prior intimation of delivery		.530	
Undamaged product with primary package			.727
Proper labelling			.726
Live tracking system			.596
Protective tertiary package			.581
Accurate description of products			.547
Fast delivery for quickly perishable products			.507

In this analysis, the orthogonal rotation (Varimax) is applied to modify the extracted components representing the 15 statements whose Eigen values were above 1.0. The above table shows the rotated component matrixes, where it shows **Easy reverse logistics** as the first factor, **Timely delivery** as the second factor and **Product quality and safety**as the third factor. All the factors have a loading value above 0.5 which proves that all the factors are highly consistent internally.

Chi-Square test to examine the significant association between the Variables
H0: There is no significant relationship between Customer satisfaction and Likelihood of recommending Nykaa to others.

Chi-Square Tests

	Value	df	Asymptotic Significance(2 sided)
Pearson Chi-Square	91.364[a]	16	<.001
Likelihood Ratio	76.984	16	<.001
Linear- by- Linear Association	37.525	1	<.001
N of valid cases	110		

Inference:

The above table shows the significant relationship between the customer's satisfactions of the LSQ in Nykaa with the likelihood of them recommending Nykaa to others. It can be found that the p-value is lesser than 0.05. Thus, null hypothesis is rejected. Hence, it is concluded that there is significant relationship between customer's satisfaction and their likelihood of recommending Nykaa to others.

Correlation

The Correlation test is executed to find the level of association between the variables a) satisfied with the logistics service quality of Nykaa and b) would recommend Nykaa to my friends.

Correlations

		I am satisfied with the logistics Service Quality of Nykaa	Would recommend Nykaa to my friends
I am satisfied with the logistics Service Quality of Nykaa	Pearson Correlation	1	.587[**]
	Sig. (2-tailed)		<.001
	N	110	110
Would recommend Nykaa to my friends	Pearson Correlation	.587[**]	1
	Sig.(2 tailed)	<.001	
	N	110	110

Inference:

The above table shows the correlation between customer's satisfaction and the likelihood of them **recommending** Nykaa to others. It can be found from the above table that Pearson correlation value is 1. Hence, it is concluded that customer's satisfaction and the likelihood of them recommending Nykaa to others are significantly correlated. It also shows that, the coefficient of correlation among customer's satisfaction and the likelihood of them recommending Nykaa to others to be 0.587, which is interpreted as positive correlation.

Weighted Average

The weighted average test is implemented to find the ranks of important set of data by the customers of Nykaa

	Sticking on time	Safe Delivery without Damages	Reverse logistics (Returns, Replacements, etc…)	Quality of Delivery Service	$\sum$
Excellent	110	130	115	120	475
Very good	160	132	132	168	592
Good	132	135	117	120	504
Average	8	12	28	6	54
Poor	0	0	1	1	2
$\sum$	410	409	393	415	1627

Above table shows the weighted average of the variables of logistics service quality of Nykaa that influence customer perception, which are **Sticking on to time**, **Safe delivery without damage**, **Easy reverse logistics and Quality of delivery service**. From the above table it is found that the customers are satisfied with those key dimensions in this rank order – First rank is **Quality of delivery service** with 415, Second rank is **Sticking on to delivery time** with 410, Third rank is **Safe delivery without damage** with 409 and Fourth rank **is Easy reverse logistics services** with 393 which is least factor satisfied by the customers of Nykaa.

FINDINGS AND SUGGESTIONS

- The study used factor analysis and total 15 statements are reduced into 3 components such as Reverse logistics, Timely delivery and Product quality & safety, using data reduction process.
- Chi Square revealed that, the customer's satisfaction and the likelihood of them recommending Nykaa to others are significantly related and it is also found that there

is a positive correlation between them. So, the company should focus more on satisfying their present customers in order extend their market by attracting more customers to their company.

- The weighted average analysis shows that Nykaa's key strength in satisfying customer is their Quality of delivery service. Since, it is their key strength they have to retain it. The analysis also shows that Nykaa's Reverse logistics service is the customer's least satisfying key dimension among other 3 key dimensions. So Nykaa should pay more attention in improving their reverse logistics service to gain the customer satisfaction and to retain the customers to increase their growth in the market.

CONCLUSION

In conclusion, the study aims to contribute to the understanding of logistics service quality in the context of e-commerce businesses in India. The findings of the study will be beneficial for Nykaa to improve its logistics services and enhance customer satisfaction. Furthermore, the study will provide insights for other e-commerce companies operating in India to improve their logistics services and enhance customer experience

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