

A Study on Evaluating Gratification of Customers in Logistics Services

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Abstract: *This study explores the critical role of logistics in marketing and customer satisfaction. Logistics, encompassing the movement, storage, and delivery of goods from origin to consumption, is essential for efficient product distribution. The research focuses on evaluating customer gratification in logistics services, examining the challenges faced by the industry, such as increased transportation costs and limited visibility of shipments. It also investigates the impact of logistics on customer satisfaction through empirical studies and literature review, considering factors like service quality, reliability, assurance, empathy, and responsiveness. The findings underscore the importance of effective logistics management in maintaining a competitive edge, improving customer satisfaction, and driving sustainable growth. The study reveals a strong positive correlation between customer satisfaction and logistics service quality, indicating that logistics significantly influences customer gratification and loyalty.*

Keywords: Logistics Management, Customer Satisfaction, Service Quality, Transportation Costs, Supply Chain Efficiency

1. Introduction

The movement and storage of goods and services from the point of origin to the site of consumption is planned, carried out, and controlled by logistics. It involves the coordination of multiple activities, such as transportation, warehousing, inventory management, and information flow, to ensure that products are delivered to customers efficiently and cost-effectively. The goal of logistics is to create value for customers by providing them with the right products, in the right quantity, at the right time, and at the right place, while minimizing costs and maximizing profitability for the business. Effective logistics management is critical for businesses to maintain a competitive edge in the market, improve customer satisfaction, and achieve sustainable growth.

1.1 About the study

Evaluating gratification of customers in logistics services

Problem statement:

A product's logistics play a crucial role in its marketing, ensuring that the product is delivered to the intended clients at the proper time and place while maintaining its quality. This project is being undertaken to research the value of logistics, identify the services of Logistic and problem in the Logistic, where High Transportation cost, Poor inventory management, Lack of Visibility and Transparency Poor communication and Collaboration. Lack of skilled workers

Scope of the study

The scope of study for logistics includes the planning, implementation, and control of the movement and storage of goods and services from the point of origin to the point of consumption. It involves managing activities such as transportation, warehousing, inventory management, and information flow. The scope of logistics also encompasses

the use of technology and managing logistics risks to ensure the efficient and cost-effective delivery of products. The ultimate goal of logistics is to provide customers with the right products, at the right time and place, while minimizing costs and maximizing profitability for the business.

1.2 Limitation of the Study

- Due to a shortage of time, the survey is conducted online using Google Forms.
- Through the lens of the buyer, the region can be further investigated and integrated.
- The study is not exempt from accuracy or temporal restrictions.
- To verify the validity of the current research, a larger sample size may be gathered.
- The respondents' responses are current as of this writing.

2. Challenges Faced by the Industry

Although the pandemic had a significant impact on the logistics industry, many of the problems that emerged were already there. These ongoing problems include:

Increasing Transpiration cost

Ukraine is to blame for the current fuel price volatility has caused recent increases in transportation costs. Additionally, Europe has a lack of about 400,000 drivers for heavy-duty trucks across the entire continent. Road transportation costs in the US have increased by 23%, mirroring increases in air transportation costs, because of rising freight costs and rising input costs for logistics companies. In conclusion, transportation prices around the world are steadily growing.

Limited visibility of shipment

Customers in the modern day expect delivery to be visible. However, a lack of late delivery might produce complications that can substantially impair your items' flow.

Volume 12 Issue 11, November 2023

www.ijsr.net

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Ineffective warehouse operations and needless delays become the norm in the absence of end - to - end transparency.

Fragmented communication

Manufacturing and delivery of the finished product to the consumer are the two steps in a logistics supply chain. Sadly, OEMs frequently have communication channel integration problems. Fragmented communication caused by this deficit has a negative influence on efficiency and delivery timeframes.

Empty Miles

The logistics sector has been plagued with empty miles, also known as non - revenue miles, for many years. They create unnecessary costs, harm the environment, and lessen the efficiency of both shippers and carriers.

Delivery days

The pandemic Days shutdown resulted a huge loss for delivering the product which cause Lot of delivery stock in stable position which has lot of labour shortage problem. customer has to wait for more than months.

3. Literature Review

KARA K (2022) For emerging nations that are not operating at their maximum efficiency level to become so, identified which nation concentrate on which input variable. The actions to be made to boost the effectiveness of the DLO will boost that of the ILO., according to empirical research.19 nations are not operating maximum efficiency.31 emerging countries' ILO effectiveness nations has been established at the full efficiency level using the DEA Model - 2. Only 14 nations operate at maximum efficiency. The results of the basic regression analysis show that DLO efficiency has a considerable favourable impact on ILO.

BALMER J, LIN Z, CHEN W (2020) To date, relatively of organizations, with the majority of brand image research focusing on the image of products and services Additionally, dearth of study theBusiness - to - business (B2B) sector corporate image, refer to as industrial corporate brand image in the article. Additionally, there is no empirical study usefulness the operating logistics firms' industrial corporate brand in areas with quickly developing or transitioning economies. To examines company purchasers in Dalian, Which use express parcel/postal delivery services, keeping in mind these research limitations. This empirical study focuses more specifically on B2B logistic brands of global, local, and operating in and outside of mainland, applied in industrial marketing/B2B contexts. The study connects industrial marketing and the idea of corporate brand image. Consequently, applying the dual process theory industrial corporate brand image of logistics brands that is favorable is also examined in this empirical study considering existing brand image research to determine whether it has a beneficial effect on premium pricing and customer retention.

SUTRISNO A, ANDAJANI E, WIDJAJA F (2019) service quality has a significant impact The following five criteria were used to gauge the level of service provided:

information quality, ordering processes, timeliness, order condition, and handling. The standardisation of Courier and Logistics aims to increase client satisfaction and, as a result, cultivate repeat business. In the logistics industry, AMOS - Structural Equation Modelling was used for data processing (SEM). The study's convenience sample method involved 150 respondents from courier service firms. Utilizing questionnaires delivered to the appropriate group, the data was gathered. The study's findings supported the impact of courier service providers' service quality on patronage and satisfaction. Additionally, the study supported the link between customer loyalty and satisfaction.

RAFELE C (2004) The scope and strategic significance of logistics in market potential business have grown over the past 50 years. Additionally, the organized systems created the supply chain, of which logistics is one of the key components, have received a tremendous boost from logistics

UVET H (2020) To satisfy consumer expectations and keep up market competition, it is crucial now more than ever to offer value to logistics services. Given the paucity of study about the quality of logistic services, our goal in this work was to find out how these services affect customer satisfaction. To investigate customer satisfaction utilizing the five constructs of logistics service quality, confirmatory factor analysis and structural equation modelling have been utilized. This study makes a first - time contribution by examining the impact of information of customer sharing the satisfaction.

LEE S YOU Y (2016) It has become essential to improve service, customer satisfaction, and customer loyalty in order to increase the company's competitiveness. The study has been updated to include the B2B business environment in addition to the B2C market. The Interaction Model was therefore suggested by the Group to analyze the relationship between suppliers and buyers, This indicated that establishing a long - term buyer - supplier relationship depended heavily on personal touch. Cooperation, according to Cannon and, could be described by elements like cooperatively solving technical challenges.

Research Gap

The main research gap

- Last - mile delivery
- Human factors in logistics
- Technology Adoption
- Collaboration and Coordination
- Logistics Outsourcing

4. Objective of the study

To assess customer satisfaction with the logistics company's equipment, staff appearance, and organization layout.

- To determine whether customers feel that the logistics company provides enough IT services.
- To evaluate customer satisfaction with the logistics company's payment scheme, transparency around costs, and credit period.

- To measure the logistics company's reliability in delivering services on time and without errors, as well as its responsiveness to customer needs and concerns.
- To gauge customer perceptions of the logistics company's staff behaviour and knowledge, as well as the level of individual attention and empathy they receive.

5. Research Methodology

5.1 Research Design

A research plan is a combination of criteria collection and analysis. For my research, I employed a descriptive research design. Surveys and many finding queries are included in descriptive research. It essentially provides a description of the situation as it is right now. A researcher can only report what has occurred and what is occurring because they have no control over the variables. The term "ex - post Facto research" is also used. For this, we can use the survey method.

5.2 Sampling Design

A Research design is one that makes the study overall structure and strategy simpler and speed up the collection and processing of data. Its is a blank blueprint that has been filled in after the study is finished

Data Source

- Primary Data
- Secondray Data

Primary Data

Primary data are from scratch and are therefore it is unique in nature in other words the data are generated in a wide number of surveys many of which are undertaken by institution research to fulfill the data are original in aspect.

Secondary Data

The secondary data are those that have already been gathered and processed using statistics for a Different problem from the one at hand.
Secondary are gathered by various source.
Newspaper, website Magazine

5.3 Sampling Technique

The Method or process used to choose the items for sample is referred to as the sample technique. For my research I have employed a practical sampling method convenience sampling is used to select the population segment that needs to be studied based on the research presence.

5.4 Sampling Unit

Area of the study which 100 customers of logistics company.

5.5 Sample Size

Sample size refers to the total number of respondents to get view conducted research 100 people.

5.6 Method of data collection

Collecting data through online Google forms

Research Hypothesis

H0: There is no significant correlation Between usage behavior and (Tangible cost, assurance, empathy)

H1: There is significant correlation between usage behavior and (Tangible cost, assurance, empathy)

5.7 Research instrument

The Goal of data analysis and interpretation is turn the gathered information into solid proof of the statistical data perspective that has been generated based on the investigation that has been done. Online data are collected through Microsoft excel and Google form are used to collect and analyze the data.

5.8 Analysis part

Reliability

S. No	Factors	No. of. Variables	Croanbachs Alpha
1	Tangible	4	.923
2	Costs	4	.853
3	Reliability	5	.890
4	Assurance	4	.830
5	Empathy	5	.881
6	Responsiveness	5	.882

Interpretation

Cronbach's alpha is a measure of the internal consistency or reliability of a scale or questionnaire, with values ranging from 0 to 1. The higher the alpha value, the greater the reliability of the scale or questionnaire.

The results show that all six factors have relatively high Cronbach's alpha values, ranging from.830 to.923, indicating good internal consistency and reliability of the questionnaire.

Interpreting the factors themselves would require more information about the questionnaire and the context in which it was used. However, based on their names, it appears that the factors relate to various aspects of customer satisfaction or perception of a service or product, such as tangible features, costs, reliability, assurance, empathy, and responsiveness.

Descriptive

	Mean	Std. Deviation
Tangible	2.4643	1.41881
Cost	2.5051	1.18639
Reliability	2.5184	1.21718
Assurance	2.5102	1.15803
Empthy	2.5429	1.16261
Responsiveness	2.5347	1.15354

Interpretation

The table shows that the mean scores for all six service quality factors range from 2.4643 to 2.5429 on a scale of 1 to 5. The standard deviation values for each service quality

factor indicate that there is some variation in the responses received for each factor.

These results suggest that the respondents have relatively neutral perceptions regarding the quality of the services provided across all six service quality factors. The logistics provider may consider taking measures to improve these factors to provide a better customer experience and improve customer satisfaction.

		Tangible	costs	Reliability	Assurance	Empathy
Responsiveness	Pearson Correlation	.969**	.978**	.978**	.981**	.981**

Correlation is significant at the 0.01 level (2 - tailed)

Interpretation

The table shows the correlation coefficients between Responsiveness and four dimensions of service quality: Tangible costs, Reliability, Assurance, and Empathy.

The Pearson Correlation coefficients indicate a very strong positive correlation between Responsiveness and all four dimensions of service quality. Tangible costs have a correlation coefficient of .969, Reliability has a correlation coefficient of .978, Assurance has a correlation coefficient of .978, and Empathy has a correlation coefficient of .981. The ** symbol indicates that the correlations are significant at the 0.01 level (2 - tailed). This suggests that there is a very strong relationship between Responsiveness and each of the four dimensions of service quality, indicating that organizations that are highly responsive to their customers are likely to have higher levels of Tangible costs, Reliability, Assurance, and Empathy.

Linear Regression:

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.985 ^a	0.971	0.968	0.20686		
a. Predictors: (Constant), Empathy, costs, Tangible, Reliability, Assurance						
ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	62.031	5	12.406	289.926	<.001 ^b
	Residual	1.840	43	0.043		
	Total	63.871	48			
a. Dependent Variable: Responsiveness						
b. Predictors: (Constant), Empathy, costs, Tangible, Reliability, Assurance						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	- 0.021	0.107		- 0.196	0.846
	Tangible	- 0.184	0.146	- 0.227	- 1.260	0.215
	costs	0.162	0.276	0.166	0.585	0.562
	Reliability	0.230	0.199	0.243	1.157	0.254
	Assurance	0.378	0.295	0.380	1.285	0.206
	Empathy	0.423	0.199	0.426	2.126	0.039
a. Dependent Variable: Responsiveness						

Correlations

Hypothesis

H0: There is no significant correlation Between usage behavior and (Tangible cost, assurance, empathy)

H1: There is significant correlation between usage behavior and (Tangible cost, assurance, empathy)

Interpretation

The linear regression model shows a strong positive relationship between the independent variables (Tangible, costs, Reliability, Assurance, and Empathy) and the dependent variable (Responsiveness), as indicated by an R - square value of 0.971. The adjusted R - square value of 0.968 suggests that the model is a good fit for the data.

The ANOVA table indicates that the regression model is statistically significant (p < 0.001), as the F - value of 289.926 is much larger than the critical value at the 0.05 significance level.

Looking at the coefficients table, the standardized coefficients (Beta values) indicate that Empathy has the strongest positive impact on Responsiveness, followed by Assurance, Reliability, costs, and Tangible, which has a negative impact but is not statistically significant. The t - values suggest that Empathy is the only variable that is statistically significant at the 0.05 level, as its value of 2.126 is larger than the critical value of 2.021.

Overall, the model suggests that improving customer service attributes such as Empathy, Assurance, and Reliability can have a positive impact on Responsiveness.

6. Findings

- Cronbach's alpha is a measure of the internal consistency or reliability of a scale or questionnaire, with values ranging from 0 to 1. The higher the alpha value, the greater the reliability of the scale or questionnaire. The results show that all six factors have relatively high Cronbach's alpha values, ranging from .830 to .923, indicating good internal consistency and reliability of the questionnaire. Interpreting the factors themselves would require more information about the questionnaire and the context in which it was used. However, based on their names, it appears that the factors relate to various aspects of customer satisfaction or perception of a service or product, such as tangible features, costs, reliability, assurance, empathy, and responsiveness.
- The table shows that the mean scores for all six service quality factors range from 2.4643 to 2.5429 on a scale of 1 to 5. The standard deviation values for each service quality factor indicate that there is some variation in the responses received for each factor.

- The correlation coefficients between Responsiveness and four dimensions of service quality: Tangible costs, Reliability, Assurance, and Empathy. The Pearson Correlation coefficients indicate a very strong positive correlation between Responsiveness and all four dimensions of service quality. Tangible costs have a correlation coefficient of.969, Reliability has a correlation coefficient of.978, Assurance has a correlation coefficient of.978, and Empathy has a correlation coefficient of.981. The ** symbol indicates that the correlations are significant at the 0.01 level (2 - tailed).
- The linear regression model shows a strong positive relationship between the independent variables (Tangible, costs, Reliability, Assurance, and Empathy) and the dependent variable (Responsiveness), as indicated by an R - square value of 0.971. The adjusted R - square value of 0.968 suggests that the model is a good fit for the data. The ANOVA table indicates that the regression model is statistically significant ($p < 0.001$), as the F - value of 289.926 is much larger than the critical value at the 0.05 significance level. Looking at the coefficients table, the standardized coefficients (Beta values) indicate that Empathy has the strongest positive impact on Responsiveness, followed by Assurance, Reliability, costs, and Tangible, which has a negative impact but is not statistically significant. The t - values suggest that Empathy is the only variable that is statistically significant at the 0.05 level, as its value of 2.126 is larger than the critical value of 2.021.

7. Conclusion

Overall, the organization needs to improve its performance in providing assurance to its customers. Customers expect the staff to have confidence, be consistently courteous, and respond satisfactorily to quality discrepancy reports. The organization needs to bridge the gap between customer expectations and perceptions to improve its service quality. This suggests that customers are particularly dissatisfied with the organization's ability to address their problems. For the delivery schedule and staff appearance, the quality gap scores are also negative, but not as large as the other two aspects. The survey suggests that the organization needs to improve its performance in all aspects in order to meet the expectations of its stakeholders. These results suggest that the participants rated Empathy and Responsiveness slightly higher than other measures of service quality. However, the mean ratings for all measures are above 2, indicating that, on average, the participants are satisfied with the service quality in all aspects. The standard deviations suggest that there is some variability in the ratings, indicating that some participants rated certain aspects of service quality higher or lower than others. The results that there may be room for improvement in the responsiveness factors of this logistic company, particularly in the area of providing clear and accurate information regarding service performance. However, the staff were perceived as responsive to requests. That there may be room for improvement in the empathy factors of this logistic company, particularly in the area of giving individual attention. However, the staffs were perceived to have a good understanding of specific needs. Overall, these results suggest that there may be room for

improvement in the assurance factors of this logistic company, particularly in the area of staff behavior and instilling confidence in customers. However, the company's services were perceived to be somewhat safe, that there may be room for improvement in the reliability factors of this logistic company, particularly in the areas of following through on promises and providing error - free service. However, the company's customer service was perceived to be somewhat responsive to addressing problems, that there may be room for improvement in the cost factors of this logistic company, particularly in the area of payment schemes. The mean quality gap scores for these aspects are negative, indicating that customers perceive the actual level of service provided to be lower than their expectations. To improve customer satisfaction and close these quality gaps, the organization may need to consider implementing strategies that prioritize prompt and responsive service, and that are able to handle urgent or unexpected orders more efficiently. By doing so, the organization may be able to better meet or exceed customer expectations, resulting in higher levels of satisfaction and loyalty. However, the company's tariff was perceived to be somewhat reasonable compared to other players in the market. It's important to note that the results may be influenced by the specific group of participants who were surveyed, and additional data may be needed to draw more definitive conclusions.

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