IMPACT OF CUSTOMER SATISFACTION ON E-LOGISTICS SERVICE PROVIDERS
(A STUDY WITH REFERENCE TO CHENNAI CITY)

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ABSTRACT
Every firm must prioritize customer satisfaction. As we have stepped into globalization, E-Logistics Companies have been forced to adopt cutting-edge technology to satisfy customers due to the increased competition among all e-Logistics industries. This study primarily investigates how logistics services might affect E-logistics users' levels of satisfaction. This paper's specific goal is to identify the key aspects of logistics services that impact online shoppers' satisfaction. Data has been collected through a structured questionnaire from 150 respondents in two parts. Part I consists of Demographic variables and Part II consists of customer satisfaction with e-logistic service providers. Simple percentage analysis is used to know the demographic variables. One-way ANOVA was used to analyse the factors that influence customer satisfaction with e-logistics service providers.
Keywords: E-Logistics, Customer Satisfaction, and Service of E-logistics service providers.

Introduction
Due to globalization, E-commerce is regarded as one of the most vital and dynamic economic sectors today and one of the primary drivers of increased competitiveness. With a strong network of computerized worldwide businesses and e-commerce, e-logistics is a burgeoning industry. Technology for logistics management has become essential for effective logistics management. Moving the organization forward and performing the inverse logistic function are the effects of e-logistics design and operation. In the very competitive commercial world of today, where science is developing quickly and effective communication is crucial for overall success and, occasionally, the stability of individual acts of Logistics. Business-to-consumer (B2C) transactions are where the product is ordered by individual customers and sold by businesses that make up most of e-commerce. It is much more complicated and requires special procedures to serve customers. The customer may only repurchase the product or services if it arrives on time, without damage, or if the provider's service is adequate. Companies are developing new management strategies to satisfy and retain customers. Thus, logistics is crucial in e-commerce. The e-logistics industry is expanding quickly with new models and participants due to digitalization, information technology, and supply chains which are gradually moving towards modern approaches. E-Logistics customer service is a critical issue for service providers. As a result, they are paying increased attention to it. A successful business strategy includes utilizing digital technologies and developing new distribution channels.

Review of Literature
Logistics Service Quality
Saura (2008), the study conducted to know the connection between logistics services and customer satisfaction, customer satisfaction is positively and significantly influenced by the quality of customer service representatives, the quality of the information, the quality of the orders, and the reliability of the logistics service.

Tontini (2010), the study found that logistics service quality was measured by the following factors, dependability of delivery deadline, nimbleness in delivery, delivery of the right quantity and right product, and damage-free goods, the flexibility of the service provided, problem-solving abilities, trackability, communication, trust in and expertise of the customer contact team, availability of goods and services, post-delivery support, and price.

Customer Satisfaction
Tao (2014), in the research found that a higher level of customer satisfaction can benefit the business in several ways, including increased customer loyalty, an extension of the customer's life cycle, a longer shelf life for the products they buy, and an increase in the amount of positive word-of-mouth advertising from satisfied

customers. When a customer is happy with the company's product or service, they are more likely to make repeat purchases and refer other people to the company's goods and services.

Omoneye (2019), found that customer satisfaction is strongly correlated with all costs, convenience, product quality, and risk factors of online purchasing, and customer satisfaction can affect how long customers stay to continue to use particular online retailers.

Syed (2010), the study was conducted to examine the relationships between the factors that affect online shoppers' satisfaction and their satisfaction with their purchases. They found that more specifically, there is a strong correlation between online shopping satisfaction and website design, dependability, product variety, and delivery performance.

Objective of the study
1. To understand the demographic variables that influence customer satisfaction
2. To know the satisfaction level of customers using E-Logistics
3. To understand the factors influencing consumer satisfaction with e- logistics

Research Methodology
The study was conducted to understand the factors influencing consumer satisfaction with e-logistics service providers. The primary data was collected using a structured questionnaire from 150 respondents in Chennai. Secondary data were collected from articles, journals, and websites. Simple percentage analysis, and ANOVA tools are used in this research. The study used a descriptive research design. A random sampling method was used to find a total of 150 respondents from Chennai city.

Data Analysis
Percentage Analysis

Demographic factor	Dominant Group	%	Demographic factor	Dominant Group	%
Gender	Female	86	Marital Status	Married & Unmarried	50
Age(in Years)	20-30	51	Type of Family	Nuclear Family	75
Educational Qualification	PG	35	Size of Family	2-3 Members	31
Occupation	Private Employee	45	Usage of E-logistics service providers	1-2 years	27

Family month income (Rs.)	20,000-40,000	29	The average expenditure for online purchases (Rs.)	Rs.500 -1,000	45

Table .1 Demographic Profiles

The table reveals that 86% of the respondents are women. 51% of the respondents are between 20 -30 years, 35% of the respondent's PG graduates.45% of the respondent family income is between 20,000-40,000.75% of the respondents belong to a Nuclear family.31% of the respondents consist of 2-3 members in their family.27% of the respondents use respondent use E-Logistics Service for 1- 2 years and 45% of respondents spend Rs.500 to Rs.1000 for online purchases.

One way -ANOVA
H0 there is no significant difference between demographic variables concerning the availabilityH1 there is a significant difference between Gender, Age, Occupation, Marital status, Type of family, Usage of E-logistics, and Money spent with Availability.

Demographic Variables	Classification	Mean	Standard Deviation	F-Value
Gender	Male	4.2453	0.77612	11.564 P=0.001
	Female	3.9878	0.67244	
Age	Below 20	3.8965	.70920	5.832 P=0.000
	20-30	4.0819	.59143	
	30-40	.1279	.53833	
	40-50	4.1818	.79855	
	Above 50 37	4.4122	.97042	
Occupation	Student	3.9384	.67286	6.194 P= .000
	Self-employed	3.9991	.67187	
	Private employee	.1792	.78197	
	Professional	4.1736	.93316	
Marital Status	Married	4.2062	.73827	12.469

	Un Married	3.9703	.67477	P =.000
Family Type	Nuclear Family	3.9653	.65801	14.095 P=.000
	Joint Family	4.2147	.76856	
Usage of E-Logistics	Less than a year	.8678	.72859	8.648 P = .000
	1-2 year	3.9651	.66493	
	2-3 year	4.1167	.71108	
	3-4 year	4.1375	.65767	
	More than 4 years	4.3495	.60041	
Money spent on E-Logistics	Below 500	3.8413	.75339	10.172 P=.000
	500-1000	3.9913	.66209	
	1000-2000	4.1250	.64940	
	Above 2000	4.3448	.66717	

Table .2 Influence of demographic Variables on Availability

H0 there is no significant difference between demographic variables concerning Delivery Time H1 there is a significant difference between Gender, Age, Occupation, Marital status, Type of family, Usage of E-logistics, and Money spent within a   short span of placing the order and delivery, Products are delivered within the time limit.

Demographic Variables	Classification	Mean	Standard Deviation	F-Value
Gender	Male	4.1651	0.899	13.507 P = 0.000
	Female	3.8701	0.68875	
Age	Below 20	3.8140	.69983	3.449 P= 0.009
	20-30	3.9901	.60909	
	30-40	3.8779	.68438	

	40-50	4.0795	.96414	
	Above 50	4.2095	1.16594	
Occupation	Student	3.8562	.75452	8.073 P= .000
	Self-employed	3.9182	.65669	
	Private employee	4.0566	.93238	
	Professional	3.8681	1.10273	
Family Type	Nuclear Family	3.8806	.68151	5.438 P= .020
	Joint Family	4.0465	.86687	
Usage of E-Logistics	Less than a year	3.7816	.75820	4.291 P = .002
	1-2 year	3.9109	.62014	
	2-3 year	3.9700	.81680	
	3-4 year	4.0188	.77084	
	More than 4 years	4.1556	.75771	
Money spent on E-Logistics	Below 500	3.7083	.78022	9.056 P=.000
	500-1000	3.8968	67099	
	1000-2000	4.0319	.67823	
	Above 2000	4.2126	.82962	

Table .3 Influence of Demographic Variables on Delivery Time

H0 there is no significant difference between demographic variables concerning Shipping Cost H1 there is a significant difference between Gender, Age, Occupation, Type of family, Income, and Family Size with Low or Free delivery cost, No hidden cost for Change of drop place.

Demographic Variables	Classification	Mean	Standard Deviation	F-Value
Gender	Male	4.0189	1.04485	9.549 P=0.002
	Female	3.7244	0.82522	
Age	Below 20	3.7318	.81452	5.623 P= 0.000
	20-30	3.8588	.71564	
	30-40	3.3101	1.06258	
	40-50	3.9015	1.06283	
	Above 50	4.1532	1.24125	
Occupation	Student	3.8539	.81078	5.958 P= .000
	Self-employed	3.8255	.78474	
	Private employee	3.8616	.99450	
	Professional	3.7315	1.25438	
Family Type	Nuclear Family	3.7167	.83485	7.212 P= .007
	Joint Family	3.9423	.96621	
Income	Less than 20,000	3.8253	.78967	2.972 P=.012
	20,000-40,000	3.6123	.81671	
	40,000-60,000	3.8311	.82612	
	60,000-80,000	4.1429	.73336	
	80,000-1,00,000	3.6358	1.05661	
	Above 1,00,000	3.9144	1.06852	

	2-3	3.7333	.86433	
	3-4	3.7645	.81161	4.166
Family Size	4-5	3.6132	.81538	P= .006
	Above 5	4.0112	1.02044	

Table .4 Influences of Demographic Variables on Shipping Cost

Demographic Variables	Classification	Mean	Standard Deviation	F-Value
Gender	Male	4.1557	0.84547	17.171 P = 0.000
	Female	3.8146	0.73035	
Age	Below 20	3.8070	.71201	
	20-30	3.8898	.67515	
	30-40	3.6105	.88523	6.354
	40-50	4.1591	.82668	P= 0.000
	Above 50	4.3041	1.02255	
Occupation	Student	3.9075	.71747	
	Self-employed	3.8327	.70950	4.167
	Private employee	4.0708	.83548	P= .000
	Professional	4.0903	.95833	
Marital Status	Married	4.0234	.83076	3.991
	Un Married	3.8823	.68878	P= .046
Family Type	Nuclear Family	3.7979	.71101	15.673 P= .000

	Joint Family	4.0849	.85218	
Usage of E-Logistics	Less than a year	3.7888	.78387	2.822 P=.025
	1-2 year	3.8236	.68137	
	2-3 year	3.9100	.75409	
	3-4 year	3.9375	.81207	
	More than 4 years	4.0944	.80552	
Money spent on E-Logistics	Below 500	3.7460	.79749	4.392 P=.005
	500-1000	3.8371	.68775	
	1000-2000	3.9657	.70714	
	Above 2000	4.1006	.90738	

Table .5 Influence of Demographic Variable on Customer Complaints Return policy

H0 there is no significant difference between demographic variables concerning Customer Complaints Return policy

H1 there is a significant difference between Gender, Age, Occupation, Marital status, Type of family, Usage of E-logistics, and Money spent with the packaging of the delivered products are without damage, products are by online specifications and functions of the product.

Demographic Variables	Classification	Mean	Standard Deviation	F-Value
Gender	Male	4.1491	0.82903	12.708 P = 0.000
	Female	3.8663	0.69949	
Age	Below 20	3.8316	.72918	3.729 P= 0.005
	20-30	3.9672	.59625	
	30-40	3.7814	.69256	
	40-50	4.0727	.85627	

	Above 50	4.2486	1.09383	
Occupation	Student	3.8932	.72807	5.301 P= .000
	Self-employed	3.8967	.70687	
	Private employee	4.0377	.84038	
	Professional	4.0167	.94097	
Marital Status	Married	4.0234	.83076	3.991 P= .046
	Un Married	3.8823	.68878	
Family Type	Nuclear Family	3.8533	.67559	11.329 P= .001
	Joint Family	4.0885	.83912	
Usage of E-Logistics	Less than a year	3.7966	.75860	5.912 .001
	1-2 year	3.9318	.62874	
	2-3 year	3.8960	.76643	
	3-4 year	3.9950	.76927	
	More than 4 years	4.1347	.75206	
Money spent on E-Logistics	Below 500	3.7698	.80996	5.912 P=.001
	500-1000	3.8935	.66363	
	1000-2000	3.9510	.66329	
	Above 2000	4.1885	.80079	

Table .6 Influence of Demographic Variables on Product Quality

H0 there is no significant difference between demographic variables concerning Customer Complaints Return policy
H1 there is a significant difference between Gender, Age, Occupation, Marital status, Type of family, Usage of E-logistics, and Money spent with simple and multiple return policies Damaged or faulty products are collected and replaced quickly.

Demographic Variables	Classification	Mean	Standard Deviation	F-Value
Gender	Male	4.1557	0.84547	17.171 P = 0.000
	Female	3.8146	0.73035	
Age	Below 20	3.8070	.71201	6.354 P= 0.000
	20-30	3.8898	.67515	
	30-40	3.6105	.88523	
	40-50	4.1591	.82668	
	Above 50	4.3041	1.02255	
Occupation	Student	3.9075	.71747	4.167 P= .000
	Self-employed	3.8327	.70950	
	Private employee	4.0708	.83548	
	Professional	4.0903	.95833	
Marital Status	Married	4.0234	.83076	3.991 P= .046
	Un Married	3.8823	.68878	
Family Type	Nuclear Family	3.7979	.71101	15.673 P= .000
	Joint Family	4.0849	.85218	
Usage of E-Logistics	Less than a year	3.7888	.78387	2.822 P=.025
	1-2 year	3.8236	.68137	

	2-3 year	3.9100	.75409	
	3-4 year	3.9375	.81207	
	More than 4 years	4.0944	.80552	
Money spent on E-Logistics	Below 500	3.7460	.79749	
	500-1000	3.8371	.68775	4.392 P=.005
	1000-2000	3.9657	.70714	
	Above 2000	4.1006	.90738	

Table .7 Influence of Demographic Variable on Customer Complaints & Return policy

Implications

Online shopping is expanding quickly. Providing excellent service is the only way to maintain a customer's satisfaction. Logistics Service Providers must make sure customers are happy with their services. This study indicates that logistics service providers concentrate more on customer satisfaction. Logistics service providers focus on enhancing the efficiency of the processes that increase customer satisfaction by providing Accurate information about the product and delivery time, delivering the product without any damage, and low or free delivery charges. Additionally, they have to concentrate on return policies. This would encourage new customers to avail of the services, and retain the existing consumers.

Conclusion

This study examines how logistics services affect consumers' satisfaction levels. The finding shows that the primary elements that are positively influencing consumer satisfaction were Availability, Delivery time, Product Quality, Shipping cost, and Customer return policy. Once the customers are satisfied with the service, they hesitate to switch over to the other logistic service providers.

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