

UNDERSTANDING THE CUSTOMER SATISFACTION ON DTDC WITH REFERENCE TO COIMBATORE CITY

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Abstract

Logistics is an important aspect that drives every business and other activities in a specific order to meet the needs and wants of every individual and businesses in a controlled and orderly manner. The main goal of any logistics institution is to ensure that the goods and services reach the customers in a timely manner, in a cost efficient and safe method. Logistics management is that element that holds the supply chain together. As per different studies conducted by Indian Brand Equity Foundation the global logistics market size reached a value of almost USD 9.96 trillion in the year 2022. The logistics market is further expected to grow at a CAGR of 6.3% between 2023 and 2028 to reach a value of almost USD 14.37 trillion by 2028.

This study aims to understand the customer satisfaction level of DTDC's logistics management and their services provided the factors that influence the customers to choose DTDC and assess the impact of customer satisfaction on customer loyalty and brand reputation.

This study is a triangulative study, where both primary and secondary data has been used to come to a conclusion. Primary data was collected through questionnaire and secondary data through different articles, journals and research papers. 120 samples were collected for the purpose of this study. Simple percentage, Chi-Square and Ranking methods are utilised in this study.

From the study it can be understood that the customers are satisfied with the services provided by DTDC, fast delivery and prompt services are the factors that influence their choice towards DTDC and brand reputation and customer loyalty play a major role in the functioning of DTDC.

Keywords: Customer satisfaction, Simple Percentage, Chi-Square, Ranking method.

Introduction

Logistics is the process of planning and executing the efficient transportation and storage of goods from the point of origin to the point of consumption. Logistics is a part of supply chain management that deals with the efficient forward and reverse flow of goods, services, and related information from the point of origin to the point of consumption according to the needs of customers. The goal of logistics is to meet customer requirements in a timely, cost-effective manner. Logistics played the vital role of moving military personnel, equipment and goods. While logistics is as important as ever in the military, the term today is more commonly used in the context of moving commercial goods within the supply chain. Logistics management is a component that holds the supply chain together. The resources managed in logistics may include tangible goods such as materials, equipment, and supplies, as well as food and other consumable items.

The global logistics market is driven by the significant growth in the online retail sector globally. The Asia Pacific is the leading regional market for logistics across the globe. The advancements in technology constituting automated material handling equipment, GPS, and biometrics are helping organisations and businesses to work competently, thereby stimulating the growth of the logistics market in the region. The global logistics market size reached a value of almost USD 9.96 trillion in the year 2022. The logistics market is further expected to grow at a CAGR of 6.3% between 2023 and 2028 to reach a value of almost USD 14.37 trillion by 2028.

The Indian logistics sector is valued at USD\$ 150 billion, contributing 14.4 % of the country's GDP. The logistics industry in India is growing rapidly, with the country's economy expanding at a rapid pace. The sector is expected to grow at a compound annual growth rate (CAGR) of 15.5% between FY2019 and FY2024, according to various market research. The Department of Commerce's logistics division for India was established on 7th July 2017 and was given the responsibility of the Integrated Development of Logistics Sector. The sector employs around 22 million people and is expected to create another 1.2 million jobs by 2025. The government's focus on infrastructure development, FDI reform, and the implementation of the Goods and Services Tax (GST) are some of the key drivers of growth in the sector. The government's initiatives such as Make in India and Digital India are also expected to boost the growth of the logistics industry in the country.

DTDC has been a leading player in this sector and this study aims to understand the customer satisfaction of DTDC and its services provided. This study also focuses on understanding the factors that influences the customers to choose DTDC and the role of brand reputation in leading a logistics business.

Problem Statement

Logistics is a fast-growing industry in India, where DTDC is a major player in the sector. DTDC Logistics is one of the leading logistics service providers in India which has been originated from India, offering a wide range of services including domestic and international courier delivery, freight forwarding, warehousing, and supply chain solutions. There is a growing customer base for the company. The company aims to provide high-quality services that meet the needs and expectations of its customers. The problem for which the study is conducted is to understand how well the company is meeting the needs and expectations of its customers and identify areas where it could improve its services to enhance customer satisfaction levels. Thereby contributing to the knowledge for the future entrepreneurs

Purpose Statement

The purpose of the study is to measure the customer satisfaction of DTDC Logistics

Objectives of the Study

- To measure overall customer satisfaction with DTDC Logistics services.
- To understand the factors that influence the customers to choose DTDC.
- To assess the impact of customer satisfaction on customer loyalty and brand reputation.

Research Methodology

➤ Research Type

Types of research refer to the different methodologies used to conduct research. Different types may be better suited for certain studies based on your goals, timelines and purposes. The research used in this study is Triangulative research.

➤ Tools

The tools used in this study are:

- **Simple percentage method** - Percentage analysis is the method to represent raw streams of data as a percentage.
- **Chi Square Test** - Chi-square is a statistical test commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis.
- **Ranking method** - Ranking is a question response format used when a researcher is interested in establishing some type of priority among a set of objects, whether they be policies, attributes, organizations, individuals, or some other topic or property of interest.

➤ Data

The data used for the study is primary data that is collected through questionnaires from the customers of DTDC Logistics.

➤ Sampling Technique

Sampling technique refers to the way or the methodology that is used by the researcher in order to carry out the research using a sample from the available large population, it depends completely on the type analysis that is to be performed. In this research, the data collection method that has been taken up is Convenience Sampling.

➤ Sample Size

The sample size taken for the purpose of this study is 120 respondents.

Limitation

The study is based on a limited sample size of 120 respondents and restricted to Coimbatore city in Tamil Nadu. The present study only covers the customer satisfaction aspect for the company and does not cover the financial aspects and administrative aspects of the company.

Literature Review

- Rudresh Pandey et.al (2021) seeks to analyze the impact on DHL courier service as well as its customer satisfaction of global trends. This study concludes that logistics is one of the most important and integral parts of any organisation's strategy and functions. If the logistics process is properly carried out, it can not only reduce production costs but also increase efficiency and customer satisfaction.
- Hasan Uvet (2020) has conducted an empirical study that was made to measure logistic service quality factors; personnel quality contact, order condition, timeliness, order discrepancy handling, and operational information sharing in logistics services. The results indicate that there are significant relationships between the Timeliness, Order Condition, Personnel Contact Quality, Operational Information Sharing and perception of Customer Satisfaction in logistics services.

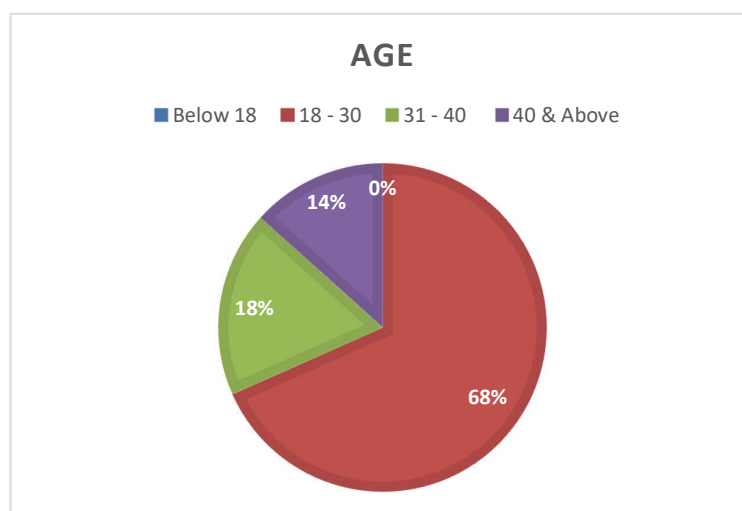
Analysis and Interpretation

➤ Simple Percentage Method

a. Distribution of Responses based on Age

Age	Number of respondents
Below 18	0
18 - 30	82
31 – 40	22

40 & Above	16
Total	120

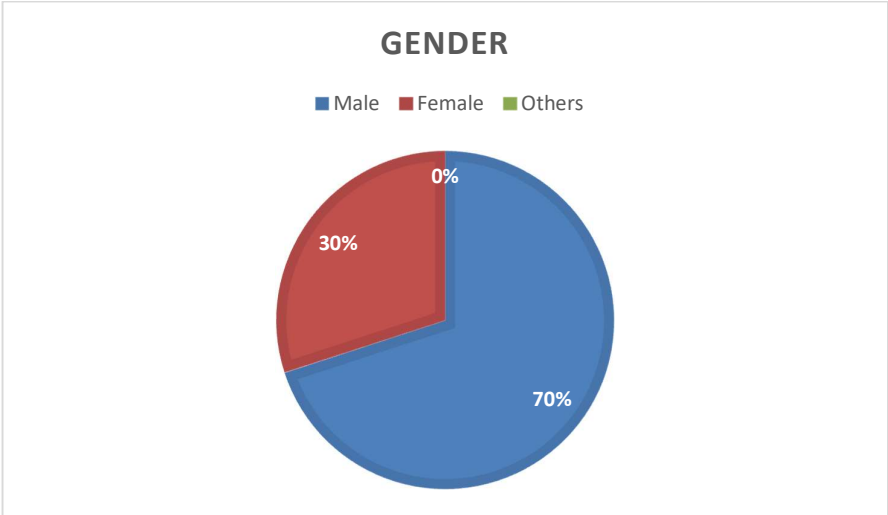


Interpretation:

From the above table and chart it can be observed that majority of the total sample size that is about 82 respondents belongs to the age category between 18-24, followed by 22 respondents from the 31-40 category and 16 respondents in the 40 & above category.

b. Distribution of Responses based on gender

Gender	Number of respondents
Male	84
Female	36
Others	0
Total	120

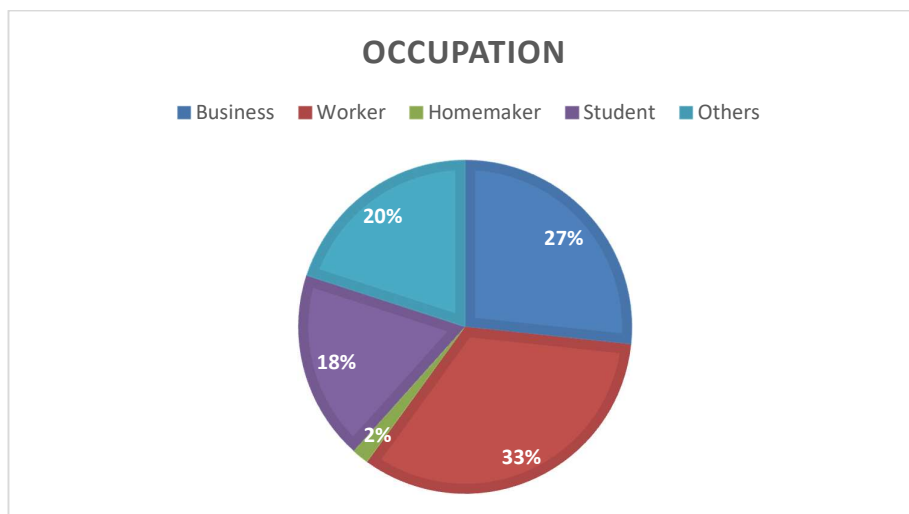


Interpretation:

From the above table and chart it can be observed that majority of the respondents are male that is 71% and the 29% of the respondents are females. There are no respondents from other gender categories.

c. Distribution of Responses based on occupation

Occupation	Number of respondents
Business	32
Worker	40
Homemaker	2
Student	22
Others	24
Total	120

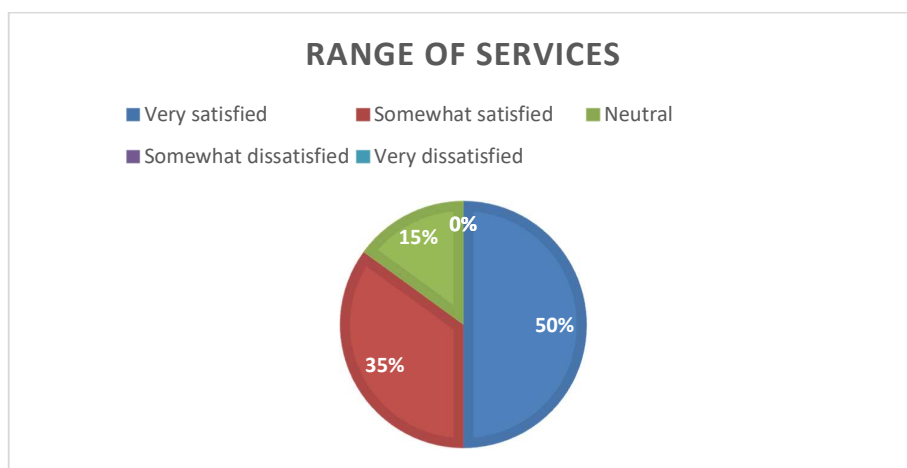


Interpretation:

The above chart describes that 34% of the respondents are workers, while 27% are indulged in business activities. The 19% of the respondents are students and 20% are occupied in other activities. The percentages of respondents who are homemakers are NIL.

d. Distribution of responses showing the customer opinion towards the satisfaction level on the range of services provided by DTDC Logistics.

Opinion	Number of respondents
Very satisfied	60
Somewhat satisfied	42
Neutral	18
Somewhat dissatisfied	0
Very dissatisfied	0
Total	120

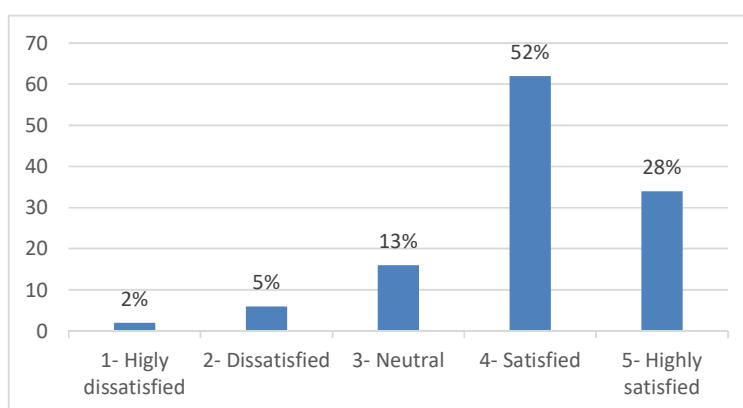


Interpretation:

From the above chart it can be observed that 50% of the total sample size are very satisfied with the range of services provided by DTDC Logistics, while 35% are somewhat satisfied. The 15% of the respondents are neutral about the services provided by DTDC and the respondents dissatisfied with the range of services are NIL.

e. Distribution of responses showing their opinion towards the rating of speed of DTDC Logistics by the respondents.

Rating	Number of respondents
1 – Highly dissatisfied	2
2 - Dissatisfied	6
3 – Neutral	16
4 - Satisfied	62
5 – Highly satisfied	34
Total	120

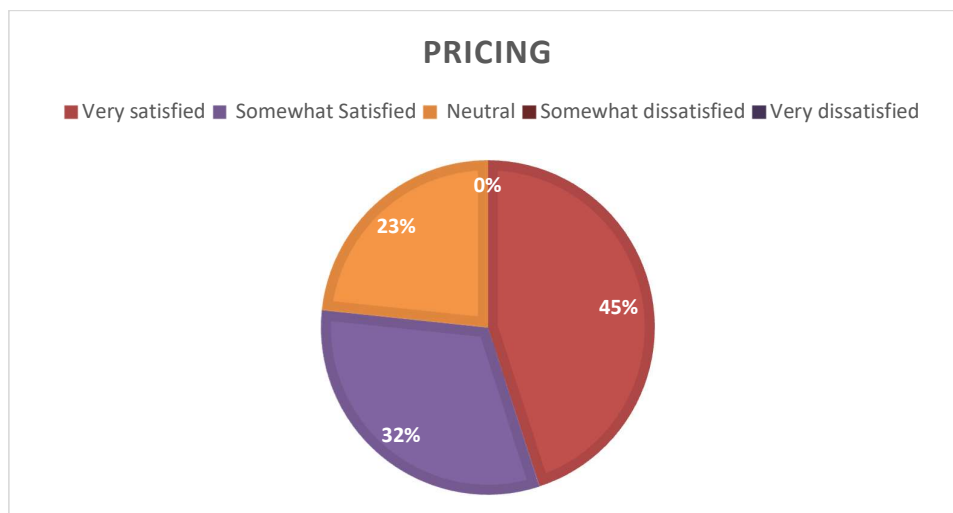


Interpretation:

It can be understood that 2% of respondents rated 1-Highly dissatisfied, about 5% of respondents rated 2- Dissatisfied and 13% of respondents rated 3- Neutral, while 52% of the total respondents rated 4- Satisfied and 28% of respondents rated 5 and are highly satisfied.

f. Distribution of responses showing their opinion towards the satisfaction level on pricing of DTDC Logistic services.

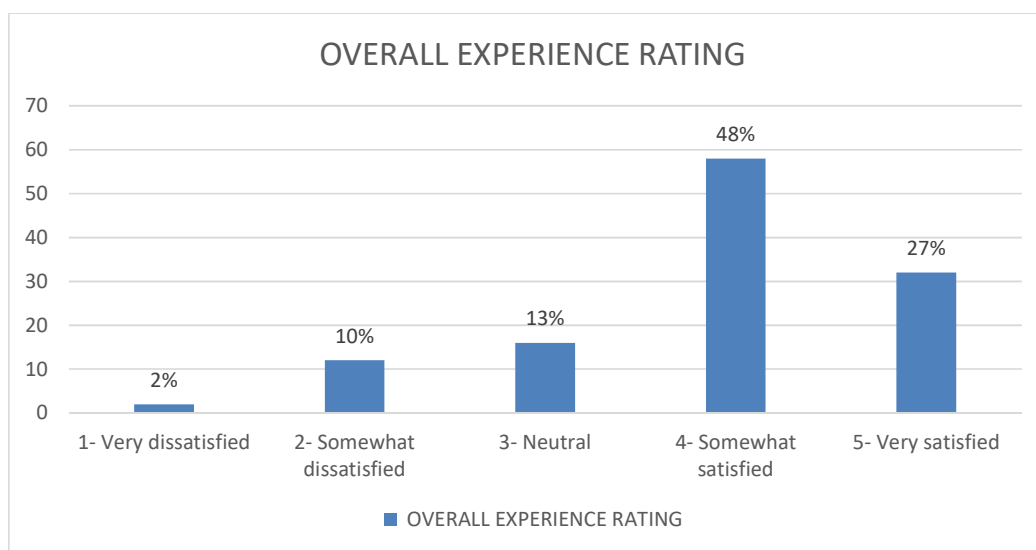
Opinion	Number of respondents
Very satisfied	54
Somewhat satisfied	38
Neutral	28
Somewhat dissatisfied	0
Very dissatisfied	0
Total	120

**Interpretation:**

The above chart describes that 45% of the respondents are very satisfied with the pricing of DTDC, while 32% of the respondents are somewhat satisfied and 23% of the respondents are neutral about the pricing of DTDC Logistics. The percentage of respondents who are dissatisfied with the pricing is NIL.

g. Distribution of responses showing their opinion towards the overall experience of using DTDC Logistic services.

Rating	Number of respondents
1 - Very dissatisfied	2
2 - Somewhat dissatisfied	12
3 - Neutral	16
4 - Somewhat satisfied	58
5 - Very satisfied	32
Total	120

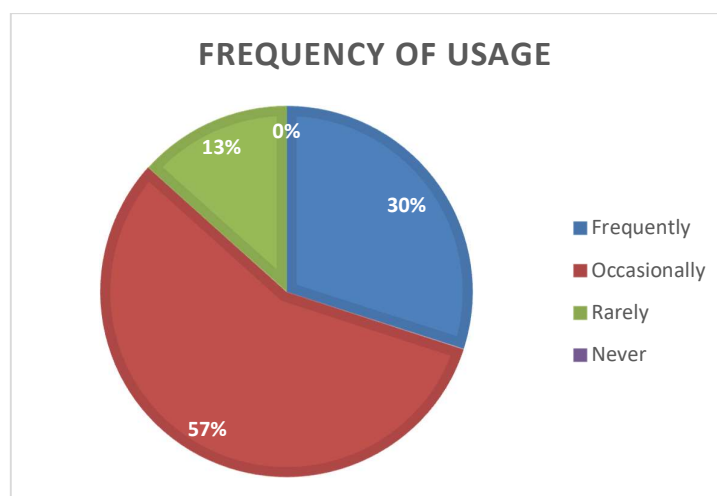


Interpretation:

The above graph depicts that 2% of respondents rated 1-Very dissatisfied, about 10% of respondents rated 2- Somewhat dissatisfied and 13% of respondents rated 3- Neutral, while 48% of the total respondents rated 4- Satisfied and 27% of respondents rated 5 and are Very satisfied.

h. Distribution of responses showing opinion towards the frequency of the usage of DTDC Logistic services.

Frequency	Number of respondents
Frequently	36
Occasionally	68
Rarely	16
Never	0
Total	120



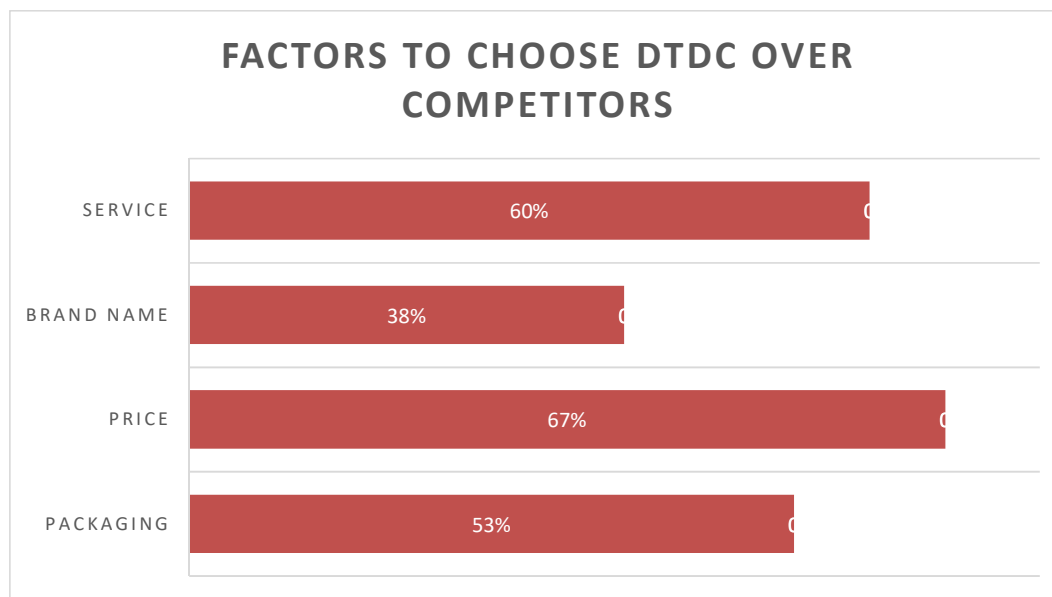
Interpretation:

From the above chart it can be observed that about 57% of the respondents are occasional users, while 30% of respondents are frequent users and 13% of respondents use DTDC services rarely. The percentage of users never used DTDC is NIL.

i. Distribution of responses showing opinion towards the factors influenced to choose DTDC over the competitors.

Factors	Number of respondents
Service	72
Brand name	46

Price	80
Packaging	64



Interpretation:

The above graph depicts that about 67% of the respondents considered price as the major factor, 60% of the respondents preferred service as a factor also and 53% had considered packaging also. The percentage of respondents chose brand name as well is 38%.

➤ Chi-Square Test

H_0 : Female customers are unlikely or neutral to continue using DTDC compared to male customers.

H_1 : Female customers are very likely or likely to continue using DTDC compared to male customers.

Particulars	Likely/ Very likely	Neutral/ Unlikely	Total
Male	76	8	84
Female	28	8	36
	104	16	120

Observed Data(O)	Expected Data(E)	(O-E) ² /E
76	72.8	0.14
8	11.2	0.91
28	31.2	0.33
8	4.8	2.13

$X^2 = 2.79$ (Computed Chi-Square Value)

$X^2 = 3.841$ (Tabular Value of Chi-Square)

Degree of Freedom: (column-1) x (row-1)

$$= (2-1) \times (2-1) = 1$$

Significance level = 0.95

In the above case the computed value of Chi Square is less than the tabular value, that is $2.79 < 3.841$, hence **Fail to Reject Null Hypothesis**.

Conclusion: Female customers are unlikely or neutral to continue using DTDC compared to male customers.

H_0 : Male customers are somewhat satisfied or neutrally satisfied towards the pricing of DTDC Logistics services compared to female customers.

H_1 : Male customers are very satisfied towards the pricing of DTDC Logistics services compared to female customers.

Particulars	Somewhat satisfied/ Neutral	Very satisfied	Total
Male	36	48	84
Female	30	6	36
	66	54	120

Observed Data(O)	Expected Data(E)	(O-E) ² /E
36	46.2	2.25
48	37.8	0.27
30	19.8	5.25
6	16.2	6.42

$X^2 = 14.19$ (Computed Chi-Square Value)

$X^2 = 3.841$ (Tabular Value of Chi-Square)

Degree of Freedom: (column-1) x (row-1)

$$= (2-1) \times (2-1) = 1$$

Significance level = 0.95

In the above case the computed value of Chi Square is more than the tabular value, that is $14.19 > 3.841$, hence **Reject Null Hypothesis**.

Conclusion: Male customers are very satisfied towards the pricing of DTDC Logistics services compared to female customers.

H_0 : Male customers are satisfied or highly satisfied with overall experience of DTDC Logistics services compared to female customers.

H_1 : Male customers are neutral, dissatisfied or highly dissatisfied with the overall experience of DTDC Logistics services compared to female customers..

Particulars	Highly satisfied/ satisfied	Neutral/ Dissatisfied/ Highly dissatisfied	Total
Male	66	18	84
Female	24	12	36
	90	30	120

Observed Data(O)	Expected Data€	(O-E) ² /E
66	63	0.14
18	21	0.42
24	27	0.33
12	9	1

$X^2 = 1.89$ (Computed Chi-Square Value)

$X^2 = 3.841$ (Tabular Value of Chi-Square)

Degree of Freedom: (column-1) x (row-1)

$$= (2-1) \times (2-1) = 1$$

Significance level = 0.95

In the above case the computed value of Chi Square is less than the tabular value, that is $1.89 < 3.841$, hence **Fail to Reject Null Hypothesis**.

Conclusion: Male customers are satisfied or highly satisfied with overall experience of DTDC Logistics services compared to female customers.

H_0 : Accessibility of DTDC's branch from customer's location is not unsatisfactory or neutrally satisfactory.

H_1 : Accessibility of DTDC's branch from customer's location is neutrally satisfactory.

Particulars	Highly satisfied/ Satisfied	Dissatisfied/ Neutral	Total
Male	72	12	84
Female	28	8	36
	100	20	120

Observed Data(O)	Expected Data(E)	(O-E) ² /E
72	70	0.06
12	14	0.29
28	30	0.13
8	6	0.67

$$X^2 = 1.15 \text{ (Computed Chi-Square Value)}$$

$$X^2 = 3.841 \text{ (Tabular Value of Chi-Square)}$$

$$\text{Degree of Freedom: (column-1) x (row-1)}$$

$$= (2-1) \times (2-1) = 1$$

$$\text{Significance level} = 0.95$$

In the above case the computed value of Chi Square is less than the tabular value, that is $1.15 < 3.841$, hence **Fail to Reject Null Hypothesis**.

Conclusion: Accessibility of DTDC's branch from customer's location is not unsatisfactory or neutrally satisfactory.

H_0 : Customers are dissatisfied or neutrally satisfied with the user friendliness of DTDC's mobile app.

H_1 : Customers are highly satisfied or satisfied with the user friendliness of DTDC's mobile app.

Particulars	Highly satisfied/ Satisfied	Neutral/ Dissatisfied/ Highly dissatisfied	Total
Male	40	44	84
Female	10	26	36
	50	70	120

Observed Data(O)	Expected Data(E)	$(O-E)^2/E$
40	35	0.71
44	49	0.51
10	15	1.67
26	21	1.19

$$X^2 = 4.08 \text{ (Computed Chi-Square Value)}$$

$$X^2 = 3.841 \text{ (Tabular Value of Chi-Square)}$$

Degree of Freedom: (column-1) x (row-1)

$$= (2-1) \times (2-1) = 1$$

Significance level = 0.95

In the above case the computed value of Chi Square is less than the tabular value, that is $4.08 > 3.841$, hence **Reject Null Hypothesis**.

Conclusion: Customers are highly satisfied or satisfied with the user friendliness of DTDC's mobile app.

➤ Ranking Method

➤ Factors Influencing the consumers to choose DTDC

Particular	Highly Influenced (1)	Influenced (2)	Not Influenced (3)	Total
Brand Image	50	56	14	120
Fast Delivery	78	38	4	120
Prompt Services	62	50	8	120
Advertisement	22	76	22	120

Particular	Highly Influenced	Influenced	Not Influenced	Total	Weighted Average	Rank
Brand Image	150	112	14	276	2.3	3
Fast Delivery	234	76	4	314	2.616666667	1

Prompt Services	186	100	8	294	2.45	2
Advertisement	66	152	22	240	2	4

➤ Interpretation :

From the ranking in the above table, it can be observed that fast delivery, Prompt services, Brand image and Advertisements are ranked as 1,2,3 & 4 respectively. So it can be concluded that factor which influenced the most while choosing DTDC is fast delivery. The second most influenced factor is prompt services. Brand image and advertisements comes after these factors respectively.

Conclusion

Logistics is a growing industry in India and DTDC is one of the key players in the sector. It is one of the companies which have been originated from the country itself and has been in the top. The main aim of the study is to analyse the customer satisfaction of DTDC Logistics services and to evaluate the company's performance, thereby contributing towards the knowledge of future entrepreneurs from the country. For this purpose a sample of 120 was collected from the respondents and the respondents are those who used DTDC Logistics services in Coimbatore city. The data collected from the respondents is analysed by using the tools such as simple percentage method, chi-square test and ranking. From the analysis it can be concluded that with very few specific areas to be improved, overall the customers are satisfied with the services provided by DTDC.

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