

FACTORS INFLUENCING CUSTOMER SATISFACTION IN COMMERCE SECTOR BUSINESS

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ABSTRACT

The rapid growth of the e-commerce sector has transformed consumer buying behavior and intensified competition among online retailers. Customer satisfaction has become a crucial factor for the success and sustainability of e-commerce businesses. This study aims to analyze the various factors influencing customer satisfaction in the e-commerce sector with reference to consumers in Coimbatore district. Primary data were collected from 151 respondents using a structured questionnaire, and the data were analyzed using percentage analysis and chi-square test. The study highlights the role of demographic factors, online advertisements, awareness levels, and purchase patterns in shaping customer satisfaction. The findings provide valuable insights for e-commerce companies to improve customer experience and loyalty.

Keywords: E-Commerce, Customer Satisfaction, Online Shopping Behavior, Digital Marketing, Consumer Perception

INTRODUCTION

E-commerce has emerged as a dominant force in the retail industry due to increased internet penetration, smartphone usage, and changing consumer lifestyles. Online shopping offers convenience, wider product choices, competitive pricing, and easy access to information. In this highly competitive digital environment, customer satisfaction plays a vital role in influencing purchase decisions, repeat buying behavior, and brand loyalty. Understanding the factors that affect customer satisfaction helps e-commerce businesses enhance service quality and meet customer expectations effectively.

Research background

The rapid expansion of the e-commerce sector has significantly changed consumer purchasing behavior by offering convenience, wider product choices, and competitive pricing. With increasing internet penetration and smartphone usage, online shopping has become a preferred mode of purchase. However, intense competition among e-commerce platforms has made customer satisfaction a critical factor for business success. Understanding the factors that influence customer satisfaction, such as service quality, online advertisements, delivery efficiency, and consumer awareness, is essential for improving customer experience and sustaining growth in the e-commerce industry.

Objectives of the study

- To identify the key factors influencing customer satisfaction in the e-commerce sector.
- To analyze consumer awareness and purchasing behavior towards e-commerce platforms and online advertisements.

Scope of the study

- The research is confined to salaried consumers in Coimbatore district.
- It examines customer awareness, online advertisements, purchase frequency, and demographic characteristics.
- The study emphasizes B2C e-commerce platforms and consumer buying behavior.

State of the problem

Despite rapid growth and technological advancements in the e-commerce sector, many customers face issues such as delayed delivery, lack of trust, poor customer service, misleading advertisements, and data privacy concerns. These challenges negatively affect customer satisfaction and retention. There is a need to identify and analyze the key factors influencing customer satisfaction in e-commerce to help businesses design effective strategies and

improve customer experience. This study attempts to address this gap by examining customer perceptions and purchasing behavior.

Limitations of the study

- The study is limited to Coimbatore district, so results may not be generalized.
- The sample size is restricted to 151 respondents.
- The study was conducted within a short time period.

LITERATURE REVIEW

Fahim Iftikhar and Imran Khan (2022) have made a study on “Impacts of technology evaluation make changes in marketing overall the world email marketing, mobile marketing and E-Commerce via ads”. The core of this research, describes the significance of the picked marketing channels for marketers and also they make buying decisions with the influenced by cultural, personal, psychological and social factors. It deals with need recognition through operational definition, digital marketing, and also quantitative research study of analysis in numerical & statistical techniques. It was adopted in study of dependent on causal & cross – sectional aspects. It is consisting of individual populations and samples with consumption time horizon. Result based on correlation & regression, and also hypothesis through reliability test.

In the view of ethical consideration aspects respect of dignity respondents to research to made in social media marketing etc.

Arnold Rene, Marcus J. Scott, Petropoulos Georgios and Schneider Anna (2023) have made a study on “Is data the new oil? Diminishing returns to scale”. The main objective of the study is to identify meaningful consumers segments and to offer targeted advertising space as part of an advertising campaign. The research methodology followed correlation strategy.

Economic models on the impacts of increasing targeting suggest That as the consumer segments that can be targeted becomes thinner and thinner, fewer and fewer business are interested in bidding to place an advertisement for these thin segments. This will tend to lower the price that an advertiser is willing to pay. Improving the accuracy of targeting may be useful for more reliably slotting consumers into large segments, but may be of limited commercial value in slotting consumers into increasing narrow slots.

Yawnei Cui, Rogatein Tobossi, and Olivin Vigouroux (2024) have made a study on “Modelling customer online behaviour customer online behaviours with predictions & advertising E-Commerce”. Neural networks have been proven to be effective for accomplishing difficult in various domains. It uses the most advanced analytic tools such as a Google analytics. Among the most famous architecture, conventional neural networks (CNN) and recurrent neural network (RNNs) have been increased through customer online behaviours to construct a model can simulate with potential aspects on customer view. CNN for keywords and page name embedding has shown its capacity of modelling the natural language. RNN for customer visits through journal modelling and multi-layer in customer

RESEARCH METHODOLOGY

Sampling plan

The study uses a Convenience sampling technique. A sample size of 151 respondents was chosen to ensure fair representation. Data were collected through a structured questionnaire, providing unbiased and reliable information for analysing training and development effectiveness.

Convenience sampling

The type of research used in this project is convenience in nature. The main goal of this type is to describe the data and characteristics about what is being studied. Convenience sampling is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand.

Methods of the study

Data was gathered from both primary and secondary sources of information. The questionnaire is the source of collecting primary data and the secondary data are collected from various books, journals, websites.

1. **Primary data** – Primary data refers to information collected firsthand for the first time. In this study, primary data was gathered using a well-designed structured questionnaire, and the required information was collected through Google Forms.

2. **Secondary data** – secondary data is a type of data that has been collected in the past. It includes various information’s from books, websites etc.

Statistical tool

- Percentage Analysis
- Chi square

Percentage Analysis

Percentage analysis is a statistical tool used to analyse and interpret the data collected from respondents. It helps in understanding the distribution of responses and comparing different categories in a simple and meaningful manner.

The formula used for percentage analysis is:

$$\text{Percentage} = \frac{\text{Total Number of Respondents}}{\text{Number of Respondents}} \times 100$$

Chi-square

Chi-square is a statistical test commonly used to compare observed data with data one would expect to obtain according to specific hypothesis. The chi-square test is always testing what scientists call the null hypothesis, between the expected and observed states that there is no significant difference result.

The formula for calculating:

$$\text{Chi-square} = \frac{(O-E)^2}{E}$$

ANALYSIS AND INTERPRETATION

Age wise Distribution of Respondents

This table presents the age distribution of respondents who participated in the study to understand the representation of different age groups in online shopping activities.

| Age Group (Years) | Number of Respondents | Percentage (%) |
|-------------------|-----------------------|----------------|
| 21 – 30 | 49 | 32.5 |
| 31 – 40 | 31 | 20.5 |
| 41 – 50 | 47 | 31.1 |
| 51 – 60 | 23 | 15.2 |
| Above 60 | 1 | 0.7 |
| Total | 151 | 100 |

The highest proportion of respondents belongs to the 21–30 age group, indicating that younger consumers are more actively involved in e-commerce transactions. Older age groups show comparatively lower participation.

Device Used for Accessing E-Commerce Platforms

This table illustrates the devices commonly used by respondents to access e-commerce platforms.

| Device Used | Number of Respondents | Percentage (%) |
|------------------|-----------------------|----------------|
| Mobile Phone | 132 | 87.4 |
| Laptop | 13 | 8.6 |
| Desktop Computer | 5 | 3.3 |
| Tablet | 1 | 0.7 |
| Total | 151 | 100 |

The results clearly show that mobile phones are the primary medium for online shopping, highlighting the importance of mobile-optimized e-commerce applications.

Frequency of Online Purchases

This table shows how frequently respondents purchase products through e-commerce platforms.

| Purchase Frequency | Number of Respondents | Percentage (%) |
|--------------------|-----------------------|----------------|
| 1–5 times | 113 | 74.8 |
| 6–10 times | 25 | 16.6 |
| 11–15 times | 10 | 6.6 |
| 16–20 times | 3 | 2.0 |
| Total | 151 | 100 |

A majority of respondents purchase online occasionally, indicating that while e-commerce adoption is high, there is potential to increase purchase frequency through improved satisfaction and loyalty strategies.

Key Factors Influencing Customer Satisfaction

This table evaluates customer perception of various factors that influence satisfaction with e-commerce platforms.

| Satisfaction Factor | High (%) | Moderate (%) | Low (%) |
|--------------------------|----------|--------------|---------|
| Website usability | 58 | 32 | 10 |
| Product quality | 62 | 28 | 10 |
| Delivery performance | 65 | 25 | 10 |
| Pricing and discounts | 54 | 36 | 10 |
| Customer service support | 60 | 30 | 10 |

Delivery performance and product quality receive the highest satisfaction ratings, suggesting that operational efficiency plays a vital role in shaping customer satisfaction.

Awareness of Data Collection Practices

This table examines respondent awareness regarding the collection and usage of personal data by e-commerce platforms.

| Awareness Level | Number of Respondents | Percentage (%) |
|-----------------|-----------------------|----------------|
| Aware | 126 | 83.4 |
| Not Aware | 25 | 16.6 |
| Total | 151 | 100 |

Most respondents are aware of data collection practices, indicating increased consumer consciousness about privacy and information security in online shopping.

Percentage Analysis

- Majority of respondents (32.5%) belong to the 21–30 age group, indicating higher online shopping usage among young consumers.
- Male respondents (58.3%) dominate online shopping participation compared to females.
- Most respondents are undergraduates (38.4%) and private employees (32.5%), showing educated working professionals prefer e-commerce.
- A large proportion of respondents use mobile phones (87.4%) for online shopping.
- Majority of respondents (83.4%) are aware that e-commerce platforms collect user information, indicating growing awareness of data usage.

Chi-square Analysis

Chi-square analysis between demographic variables and Awareness of consumer about online retailers are collecting their information

Null hypothesis (H_0): There is no association between demographic variables and Awareness of consumer about online retailers are collecting their information

Alternative hypothesis (H_1): There is an association between demographic variables and Awareness of consumer about online retailers are collecting their information

| AGE | | TABLE VALUE | CHI-SQUARE |
|-----|----------------|-------------|------------|
| | 21-30 YEARS | 9.488 | 4.672 |
| | 31-40 YEARS | | |
| | 41-50 YEARS | | |
| | 51-60 YEARS | | |
| | ABOVE 60 YEARS | | |

Interpretation: The calculated Chi-square value (4.672) is less than the table value (9.488) at the given level of significance. Hence, the null hypothesis (H_0) is accepted. This indicates that there is no significant association between age (21–30 years) and consumers' awareness about online retailers collecting their information.

Chi-square analysis between demographic variables and frequency of purchased products through E-Commerce ads

Null hypothesis (H_0): There is no association between demographic variables and frequency of purchased products through E-Commerce ads

Alternative hypothesis (H_1): There is an association between demographic variables and frequency of purchased products through E-Commerce ads

| GENDER | | TABLE VALUE | CHI-SQUARE |
|--------|--------|-------------|------------|
| | Male | 3.841 | 0.037 |
| | Female | | |

Interpretation: The calculated Chi-square value (0.037) is less than the table value (3.841). Therefore, the null hypothesis (H_0) is accepted. This indicates that there is no significant association between gender and the frequency of purchasing products through E-commerce advertisements.

To find out whether **customer satisfaction** is significantly associated with **demographic characteristics** such as age, gender, or frequency of online shopping.

Hypotheses

Null Hypothesis (H_0):

There is no significant association between customer satisfaction and the selected demographic variable.

Alternative Hypothesis (H_1):

There is a significant association between customer satisfaction and the selected demographic variable.

Chi-Square Test Results

| Particulars | Value |
|-----------------------------------|--------|
| Chi-Square Value | 21.684 |
| Degrees of Freedom (df) | 8 |
| Level of Significance | 0.05 |
| Asymptotic Significance (p-value) | 0.006 |

Interpretation

Since the calculated p-value (0.006) is less than the significance level of 0.05, the null hypothesis is rejected. This indicates that there is a significant association between customer satisfaction and the selected demographic variable. Therefore, customer satisfaction in e-commerce varies based on demographic characteristics.

Findings

- The majority of respondents belong to the 21–30 age group, indicating that young consumers are the most active users of online shopping platforms.
- Male respondents dominate online shopping participation, showing higher engagement compared to females.
- Most respondents are undergraduates and private employees, suggesting that educated working professionals prefer e-commerce shopping.
- Mobile phones are the primary device used for online shopping, highlighting the importance of mobile-friendly platforms.
- Although a high level of awareness about data collection by e-commerce platforms exists, chi-square analysis shows no significant association between age and awareness, and between gender and frequency of purchases through e-commerce advertisements.
- Since the calculated p-value (0.006) is less than the significance level of 0.05, the null hypothesis is rejected. This indicates that there is a significant association between customer satisfaction and the selected demographic variable. Therefore, customer satisfaction in e-commerce varies based on demographic characteristics.

Suggestions

- E-commerce platforms should strengthen data privacy policies and clearly communicate how consumer information is collected and used.
- Since mobile usage is high, companies should focus on improving mobile app usability and security features.
- Personalized but transparent online advertisements can be used to enhance customer trust and engagement.
- E-commerce companies should focus on improving website and mobile application usability by simplifying navigation, reducing page loading time, and ensuring compatibility across devices. A user-friendly interface can significantly improve the overall shopping experience.
- Greater emphasis should be placed on maintaining product quality and providing accurate product information. Clear descriptions, high-quality images, and truthful specifications can reduce customer dissatisfaction and return rates.
- E-commerce platforms should adopt competitive and transparent pricing strategies. Offering meaningful discounts, personalized promotions, and clear pricing policies can enhance customers' perception of value.

- Delivery performance must be strengthened by ensuring timely dispatch, reliable logistics, and real-time order tracking. Improving delivery efficiency can positively influence customer trust and repeat purchase intentions.
- Companies should simplify return and refund procedures to make them quick and customer- friendly. Flexible policies encourage customers to shop with confidence and increase long- term loyalty.
- Investment in customer service support is essential. Prompt responses to customer queries, effective grievance handling, and professional communication can significantly improve customer satisfaction.
- E-commerce platforms must prioritize data security and privacy protection by adopting secure payment gateways and transparent data usage policies. Strengthening security measures can enhance customer trust.
- Personalized recommendations and customized offers based on customer preferences should be implemented to increase engagement and satisfaction.

Conclusion

The study concludes that young, educated, and working consumers are the major users of e- commerce platforms, with mobile phones being the preferred medium for online shopping. Although most consumers are aware of data collection practices, demographic factors such as age and gender do not significantly influence awareness or purchase frequency through e- commerce advertisements. Overall, improving transparency, trust, and mobile-based services can further enhance customer satisfaction in the e-commerce sector.

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