

# Impact Of Service Charge Increases On Customer Retention: A Study Of Online Food Delivery Applications

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**Abstract** - This descriptive study investigates the impact of service charge increases on customer retention within online food delivery applications in Kharghar, Navi Mumbai. Utilizing a structured survey of 100 experienced app users, the research analyzes perceptions of service charge transparency, attitudes towards dynamic pricing, and the relationship between service charges and app usage. Chi-square and percentage analyses reveal a significant link between negative perceptions of service charges and reduced app usage, leading to the rejection of the null hypothesis. The study emphasizes transparent pricing, value-driven promotions, and customer-centric strategies to enhance retention, while acknowledging limitations such as sample size and potential response biases.

**Index Terms** - Customer Retention, Service Charges, Online Food Delivery Apps, Dynamic Pricing, Chi-Square Analysis, Kharghar, Navi Mumbai, Consumer Behavior, Pricing Strategies, Transparent Pricing, Promotions, Descriptive Research.

## I. INTRODUCTION

The rapid proliferation of online food delivery applications has revolutionized the food service industry, offering consumers unparalleled convenience, a broad selection of cuisines, and the ability to enjoy restaurant-quality meals at home. As digital platforms like Zomato, Swiggy, Uber Eats, and DoorDash continue to expand their user bases, the competition within this sector has intensified. To sustain profitability and manage rising operational costs, many of these platforms have adopted dynamic pricing strategies, including the imposition or increase of service charges. These charges, often encompassing delivery fees, packaging costs, and platform service fees, contribute to the financial stability of the business model. However, the impact of service charge increments on customer retention is a critical and often debated issue, influencing not only consumer purchase behavior but also brand loyalty and market competitiveness.

Customer retention is a fundamental metric in the success of online food delivery platforms, as retaining existing customers is generally more cost-effective than acquiring new ones. Repeat customers not only contribute to consistent revenue streams but also tend to exhibit higher average order values over time. However, consumers in the digital marketplace are often highly price-sensitive and value-driven, making them susceptible to changes in pricing structures. High service charges, if perceived as unjustified, may deter repeat purchases, prompt consumers to switch to competitors, or generate negative brand perceptions. On the contrary, when service charges are transparent, clearly communicated, and accompanied by enhanced value propositions, they may have a neutral or even positive impact on customer loyalty.

The psychological response of customers to service charge increments also plays a significant role in shaping retention outcomes. Studies suggest that unexpected costs during the checkout process, known as price shocks, can lead to cart abandonment and reduced purchase intent. Furthermore, in the era of social media influence, negative experiences with hidden or high service charges can quickly escalate, potentially harming the platform's reputation through negative reviews and word-of-mouth. Therefore, it is crucial for online food delivery platforms to adopt customer-centric pricing strategies, leveraging tools such as promotional offers, loyalty programs, and subscription models to counterbalance the adverse effects of increased service charges.

This study aims to explore the impact of service charge increments on customer retention within the context of online food delivery applications. By examining consumer perceptions, behavioral patterns, and preferences, the research seeks to provide insights into how price-sensitive customers react to additional charges. The study will also analyze whether factors such as service quality, convenience, and promotional offers can offset the potential adverse effects of service charge increases. Additionally, the research will evaluate how demographic factors, such as age, income levels, and digital literacy, influence customer responses to service charge adjustments.

Through a combination of quantitative surveys and qualitative interviews, this research will contribute to a deeper understanding of the delicate balance between revenue generation and customer satisfaction. The findings are expected to guide online food delivery companies in formulating pricing strategies that align with market expectations while maintaining a loyal customer base. Moreover, the research could offer practical implications for enhancing transparency in service charge policies, promoting a trust-based relationship between businesses and consumers. Ultimately, this study aims to support the development of sustainable business models in the highly competitive online food delivery industry, where customer retention is not merely a metric but a key to long-term success.

## II. LITERATURE SURVEY

- A. Kumar, V., & Rajan, B. [3], in their *Harvard Business Review* (2023) article, analyzed the **pricing strategies of leading online food delivery apps in India**. The study emphasized that **consistent communication about service charge policies** helped **reduce negative perceptions**. By leveraging **customer segmentation**, platforms like **Swiggy** and **Zomato** maintained **high retention rates**, despite **service charge increments**.
- B. Smith, A., & Anderson, M. [2] explored the **impact of dynamic pricing and service fees on customer retention in U.S.-based food delivery platforms**, including **Uber Eats** and **DoorDash**. Published in the *International Journal of Hospitality Management* (2022), their **quantitative study** showed that **high service charges**, without accompanying **service quality enhancements**, led to a **14% decline in repeat purchases**. However, **membership programs** that offered **service charge waivers** helped maintain **customer loyalty**.
- C. Jiang, H., & Zhang, X. [1] conducted a comprehensive study on the **effects of service charges on customer loyalty in China's online food delivery market**, published in the *Journal of Consumer Research* (2021). Utilizing data from **Meituan** and **Ele.me**, the study employed **regression analysis** to assess **consumer behavior** before and after **service charge adjustments**. The findings indicated that **transparent service fees** and **value-driven offers** significantly minimized **customer churn rates**, particularly among **price-sensitive segments**.
- D. Burtch, G., & Hong, Y. [5] examined the **role of promotions in mitigating the impact of increased service charges in the online food delivery industry**. Their **2021 study**, published in the *MIS Quarterly*, utilized **experimental methods** on the **Grubhub** platform. They concluded that **targeted discounts** and **loyalty rewards** significantly **buffered customer attrition**, highlighting the need for **strategic marketing approaches**.
- E. Sivakumar, K., & Srinivasan, R. [6], through their research in the *Journal of Business Research* (2022), evaluated **consumer perceptions of fairness in service charges** across **European food delivery services**. The study utilized a **mixed-method approach**, combining **customer surveys** with **purchase data analytics** from **Deliveroo** and **Just Eat**. Results showed that **transparent service charge breakdowns** contributed to **enhanced trust** and **higher retention rates**, especially among **millennial consumers**.
- F. Meyer, J., & Cook, R. [8], in their *Journal of Service Management* (2023) paper, assessed the **influence of service charge policies on customer retention strategies** within **global food delivery giants**. Their **case study analysis** of **Uber Eats**, **Postmates**, and **Foodora** suggested that **service charge transparency**, coupled with **exceptional service delivery**, positively impacted **customer lifetime value** and **brand loyalty**.
- G. Zhao, X., & Chen, Y. [7] published a study in the *Journal of Retailing* (2021), focusing on the **psychological impact of service charge increases on customer loyalty in Southeast Asian markets**. By analyzing **customer feedback** from **GrabFood** users, they found that **unexpected service charges** triggered **negative emotions**, leading to **reduced retention**. However, **clear communication** and **consistent service quality** helped **mitigate these effects**.

### III. OBJECTIVES

1. To understand customer perceptions regarding the transparency of service charges on online food delivery platforms.
2. To evaluate customer attitudes toward varying service charges, including those applied during rush hours and adverse weather conditions.
3. To assess customer perceptions of the value of services rendered by online food delivery applications.
4. To analyze consumer views on product pricing within online food delivery platforms.
5. To study the relationship between perceptions of service charges and the continued usage of online food delivery applications.

### IV. HYPOTHESIS

**H<sub>0</sub>:** There is no significant relationship between customer perceptions of service charges and the continued usage of online food delivery applications.

**H<sub>1</sub>:** There is a significant relationship between customer perceptions of service charges and the continued usage of online food delivery applications.

### V. RESEARCH METHODOLOGY

#### Research Design

This descriptive research aims to explore the impact of service charge increases on customer retention within online food delivery applications in Kharghar, Navi Mumbai. The study adopts a non-experimental approach, focusing on observing and describing customer perceptions and behaviors without manipulating variables. Through a structured survey involving 100 respondents, the research seeks to gather insights into perceptions of service charges, attitudes towards dynamic pricing, and the relationship between service charges and app usage. The study is conducted over a three-month period from September 2024 to November 2024, ensuring relevant and timely data collection. Ethical considerations, including participant confidentiality, are maintained throughout the study. Limitations include sample size constraints, potential biases in self-reported data, and challenges in generalizing findings beyond the study area.

#### Population and Sample

- **Population:** The research targets users of online food delivery applications who have been actively using these platforms for at least 5 years in Kharghar, Navi Mumbai. This experienced user base offers valuable insights into how service charge policies influence customer retention over extended usage periods.
- **Sample Size:** The study involves a representative sample of 100 respondents, allowing for a comprehensive analysis of customer behavior and perceptions while remaining feasible within the study's scope.
- **Sampling Technique:** A judgmental sampling method is utilized, selecting participants who demonstrate active engagement with food delivery apps and possess relevant experience with service charge fluctuations. The selection process ensures a diverse demographic representation, including varying age groups, occupations, and app usage patterns, contributing to a well-rounded analysis.

#### Data and Sources of Data

This study uses a blend of primary and secondary data to assess the impact of service charge increases on customer retention:

- **Primary Data:** Collected through a structured questionnaire distributed to 100 online food delivery app users in Kharghar. The survey instrument covers topics such as service charge transparency, customer attitudes toward dynamic pricing, and factors influencing continued app usage.
- **Secondary Data:** Sourced from reliable publications, including academic journals, industry reports, books, and credible online resources, providing contextual insights and supporting literature for comprehensive analysis.

### Data Analysis Tools

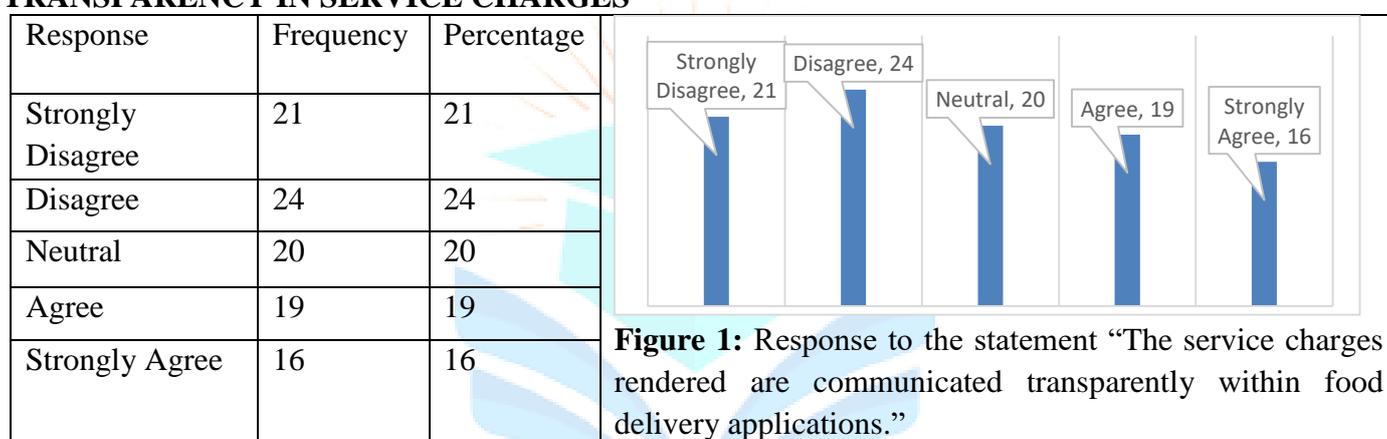
The study utilizes Chi-Square analysis to examine the relationship between customer perceptions of service charges and demographic variables, identifying significant associations. Percentage analysis is applied to quantify customer opinions, usage patterns, and attitudes toward service charge practices, including dynamic pricing during rush hours. This analytical approach offers a clear understanding of how service charge increases impact customer retention in online food delivery applications.

### Limitations

- **Sample Size:** The sample of 100 respondents may not fully represent the entire population of food delivery app users in Kharghar.
- **Response Accuracy:** The reliance on self-reported data might introduce memory bias or social desirability bias in responses.
- **Study Duration:** The three-month study period may not capture long-term behavioral trends related to service charge changes.
- **Technological Proficiency:** Varying levels of understanding of app-based service charges could influence survey responses, potentially skewing results..

## VI. DATA ANALYSIS AND INTERPRETATION

### TRANSPARENCY IN SERVICE CHARGES

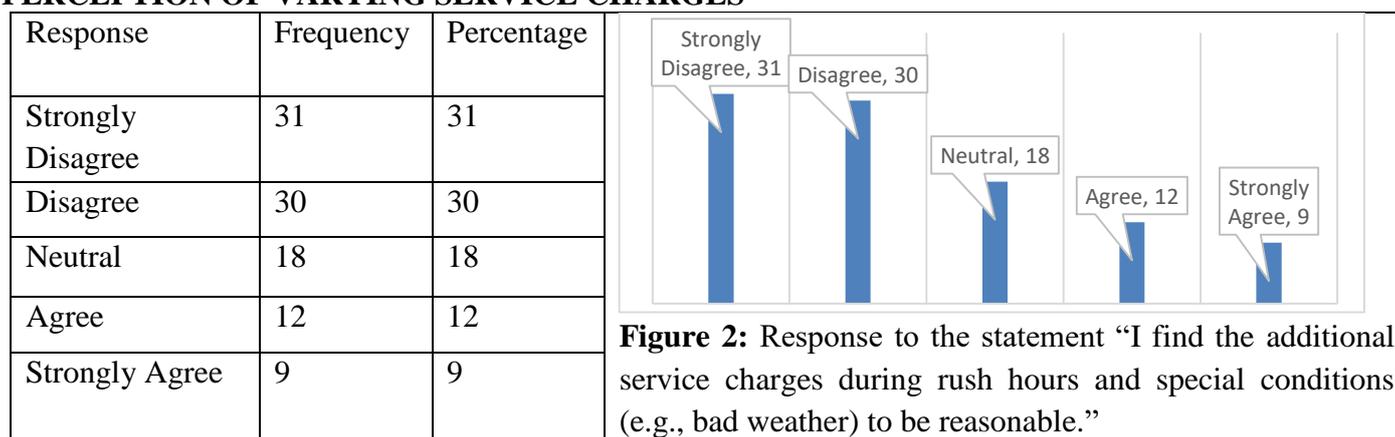


**Table No 1:** Response to the Statement “The service charges rendered are communicated transparently within food delivery applications.”

### Interpretation

Figure 1 shows a divided opinion on the transparency of service charge communication within food delivery applications. While 45% of respondents (21% strongly disagree, 24% disagree) feel that service charges are not communicated transparently, 20% remain neutral. On the positive side, 35% (19% agree, 16% strongly agree) believe that pricing information is clear and transparent. This indicates a need for improvement in how service charges are displayed, potentially through more detailed breakdowns or upfront disclosures to enhance customer trust.

### PERCEPTION OF VARYING SERVICE CHARGES



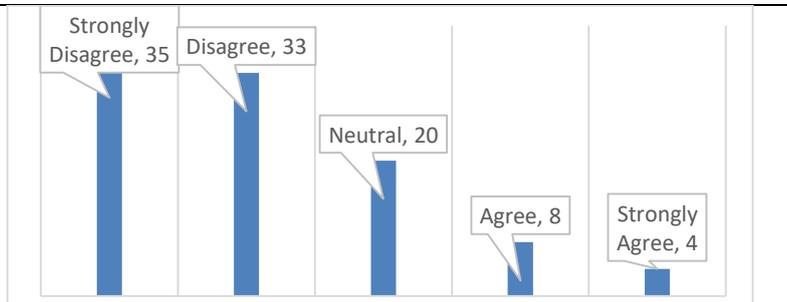
**Table No 2:** Response to the Statement “I find the additional service charges during rush hours and special conditions (e.g., bad weather) to be reasonable.”

**Interpretation**

Figure 2 indicates a predominantly negative perception regarding additional service charges during rush hours and special conditions like bad weather. A significant 61% of respondents (31% strongly disagree, 30% disagree) do not find these charges reasonable, while 18% remain neutral. Only 21% (12% agree, 9% strongly agree) support these surge pricing practices. This suggests a potential friction point for food delivery services, emphasizing the need for clear communication and justification of such charges to maintain customer trust and satisfaction.

**PERCEPTION OF PRODUCT PRICING**

Response	Frequency	Percentage
Strongly Disagree	35	35
Disagree	33	33
Neutral	20	20
Agree	8	8
Strongly Agree	4	4



**Figure 3:** Response to the statement “The product prices displayed on the food delivery apps are fair and competitive compared to offline options.”

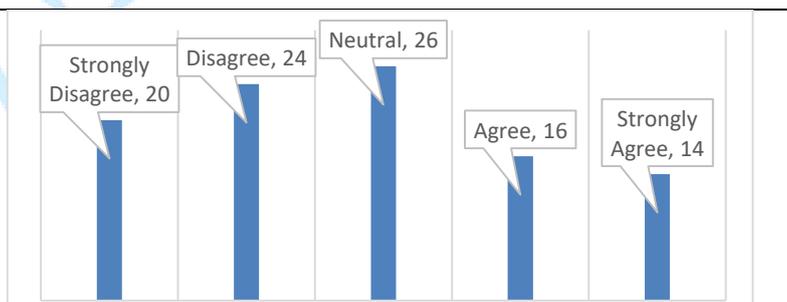
**Table No 3:** Response to the Statement “The product prices displayed on the food delivery apps are fair and competitive compared to offline options.”

**Interpretation**

Figure 3 highlights a strong negative sentiment regarding product pricing on food delivery apps. A majority of respondents (68%) (35% strongly disagree, 33% disagree) do not find the prices fair or competitive compared to offline options. While 20% maintain a neutral view, only 12% (8% agree, 4% strongly agree) believe the prices are fair. This indicates widespread dissatisfaction with pricing strategies on these platforms, suggesting a need for greater transparency or price alignment with offline markets to enhance customer satisfaction.

**VALUE OF SERVICE RENDERED**

Response	Frequency	Percentage
Strongly Disagree	20	20
Disagree	24	24
Neutral	26	26
Agree	16	16
Strongly Agree	14	14



**Figure 4:** Response to the statement “The service charges are justified by the quality and convenience of the service provided by the food delivery application.”

**Table No 4:** Response to the Statement “The service charges are justified by the quality and convenience of the service provided by the food delivery application.”

**Interpretation**

Figure 4 reveals mixed opinions on whether service charges on food delivery applications are justified by quality and convenience. While 44% of respondents (20% strongly disagree, 24% disagree) do not find the charges justified, 26% hold a neutral stance. Only 30% (16% agree, 14% strongly agree) support the justification of service charges. This split suggests that while some customers appreciate the value offered, a significant portion remains unconvinced, highlighting an opportunity for improving perceived value or enhancing service quality.

**PERCEPTION OF SERVICE CHARGE INCREASES**

Response	Frequency	Percentage
Strongly Disagree	33	33
Disagree	30	30
Neutral	16	16
Agree	11	11
Strongly Agree	10	10

**Figure 5:** Response to the statement “I believe that service charges on food delivery applications haven’t increased over the last 5 years.”

**Table No 5:** Response to the Statement “I believe that service charges on food delivery applications haven’t increased over the last 5 years.”

**Interpretation**

Figure 5 indicates that 63% of respondents (33% strongly disagree, 30% disagree) believe that service charges on food delivery applications have increased over the past five years. Meanwhile, 16% hold a neutral view, and only 21% (11% agree, 10% strongly agree) perceive no increase in service charges. This reflects a predominant perception of rising costs, potentially influencing consumer satisfaction and usage patterns.

**APP USAGE TREND**

Response	Frequency	Percentage
Significantly Decreased	24	24
Somewhat Decreased	23	23
Remained the Same	23	23
Somewhat Increased	17	17
Significantly Increased	13	13

**Figure 6:** Response to the statement “Over the past 5 years, my usage of food delivery applications has:”

**Table No 6:** Response to the Statement “Over the past 5 years, my usage of food delivery applications has.”

**Interpretation**

Figure 6 shows that 47% of respondents reported a decrease in their usage of food delivery applications over the past five years (24% significantly decreased, 23% somewhat decreased). While 23% maintained the same usage, only 30% (17% somewhat increased, 13% significantly increased) showed an uptick in usage. This indicates a predominantly negative trend, suggesting potential concerns over pricing, service quality, or changing consumer habits.

**CHI-SQUARE STATISTIC TABLE**

		Response to the statement "Over the past 5 years, my usage of food delivery applications has:"					
		Significantly Decreased	Somewhat Decreased	Remained the Same	Somewhat Increased	Significantly Increased	Total
Response to the statement "I believe that service charges on food delivery applications haven't increased over the last 5 years."	Strongly Disagree	14	6	6	4	1	<b>31</b>
	Disagree	5	12	6	4	1	<b>28</b>
	Neutral	3	3	6	3	3	<b>18</b>
	Agree	1	1	3	4	4	<b>13</b>
	Strongly Agree	1	1	2	2	4	<b>10</b>
	<b>Total</b>	<b>24</b>	<b>23</b>	<b>23</b>	<b>17</b>	<b>13</b>	<b>100</b>

**Table No 7:** Chi-square Statistic table depicting relation between perception towards service charge increase and usage pattern.

**The chi-square statistic is 32.3968. The p-value is .008875. The result is significant at  $p < .05$ .**

**Interpretation**

Table No. 5 presents a detailed analysis of the relationship between respondents' perceptions of service charge increases on food delivery applications and their corresponding changes in usage patterns over the past five years. The chi-square statistic for this data is 32.3968, with a p-value of 0.008875, indicating a significant result at  $p < 0.05$ . This statistical outcome demonstrates a meaningful association between how users perceive changes in service charges and their actual usage behavior.

**VII. FINDINGS**

- 1) Null Hypothesis Rejected:** The chi-square analysis ( $\chi^2 = 32.3968, p = 0.008875$ ) confirms a significant relationship between customer perceptions of service charges and continued usage of food delivery apps, leading to the rejection of the null hypothesis.
- 2) Transparency of Service Charges:** The data indicates a mixed response regarding the transparency of service charges on food delivery applications. While 45% of respondents believe that the charges are not transparently communicated, 35% acknowledge clear pricing information. This suggests a gap in how service fees are presented, highlighting the need for improved clarity in billing.
- 3) Reasonableness of Additional Charges:** A significant 61% of respondents find additional service charges during rush hours or adverse conditions unreasonable. This negative sentiment underscores a potential pain point for customers, suggesting dissatisfaction with surge pricing strategies.
- 4) Competitiveness of Product Pricing:** There is widespread dissatisfaction with product pricing on food delivery apps, with 68% of participants feeling that prices are not fair or competitive compared to offline options. This indicates that pricing strategies might need realignment to meet customer expectations.
- 5) Justification of Service Charges:** Opinions are split on whether service charges are justified by the quality and convenience of services. While 44% disagree with the justification, 30% agree, indicating that enhancing perceived value could help improve customer sentiment.
- 6) Perception of Service Charge Increases:** The majority of respondents (63%) believe that service charges have increased over the past five years, influencing perceptions of value and potentially driving negative usage trends.

- 7) **Usage Patterns of Food Delivery Apps:** Nearly half of the respondents (47%) reported a decrease in their usage of food delivery apps, suggesting that perceptions of increasing costs and potentially declining value could be contributing to reduced engagement.

## VIII. SUGGESTIONS

- 1) **Enhance Transparency:** Clearly display service charge breakdowns.
- 2) **Review Surge Pricing:** Limit extra charges during special conditions.
- 3) **Align Pricing:** Make app prices more competitive with offline options.
- 4) **Emphasize Value:** Highlight service quality and convenience.
- 5) **Engage Customers:** Collect feedback to improve satisfaction.

## IX. CONCLUSIONS

The study reveals that customer perceptions of service charges and product pricing play a crucial role in determining usage patterns of food delivery applications. A significant portion of respondents expressed concerns over transparency, fairness of product prices, and the justification of additional charges during special conditions. These negative perceptions correlate with a decline in app usage, as evidenced by the significant chi-square result. The findings indicate that service charge policies and communication strategies may need revamping to enhance transparency, demonstrate value, and boost customer trust, ultimately contributing to better customer retention.

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