

Determinants Affecting Customer Satisfaction Towards Online Grocery Shopping

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Abstract—There is a multitude of digital tools and Internet usage that have impacted consumer behaviour in general and retail consumer behaviour in particular. Online shopping for products has become a dominant consumer behaviour mode compared to face-to-face shopping, especially in cities. This research attempts to determine the critical components that determine customer satisfaction in online grocery shopping. The current research explores five experience-related dimensions, namely customer service experience, website experience, product experience, delivery experience, and brand experience, which are mediated by the general shopping experience. The quantitative approach was used in the current research; the data collection process involved a survey completed by 179 participants. The statistical data processing was conducted with the help of SPSS and included descriptive statistics, reliability analysis, correlation analysis, and multiple regression. It has been revealed that customer service experience and product experience positively influence the overall experience of online grocery shopping, while website experience, delivery experience, and brand experience positively but insignificantly influence it. Besides, the overall shopping experience has a considerable positive influence on customer satisfaction. According to the research, the most significant factors leading to satisfaction in online grocery platforms are operational efficacy and quality of the product.

Index Terms—Customer satisfaction, Online grocery shopping, customer experience, service quality, regression analysis

I. INTRODUCTION

Rapid changes in digital commerce have changed how the retail industry operates worldwide. Changes in internet technology, smartphone adoption, and the integration of digital payment systems have changed the way consumers make purchases (Kumar et al.,

2021; Statista, 2023). Due to digital platforming, consumers have no boundaries, either geographically or temporally. They can shop for a product or service at any time, from any place. As a result of this change, e-commerce has taken the leading position in retail channels, which introduces and provides value to customers in new forms (UNCTAD, 2022).

E-commerce has numerous streams, with online grocery shopping being one of the fastest-growing, particularly in developing economies such as India. In the past, grocery shopping would entail a physical visit to stores where the quality, freshness, and prices of the products were evaluated. With changing lifestyles and urbanisation, the increasing involvement of dual-income families has considerably lessened the time that can be devoted to shopping as a habitual activity (Deloitte, 2022). Consequently, shoppers are utilising online grocery solutions that are easy to use, sustainable, and save them time. Mobile and web-based grocery ordering, in addition to scheduled delivery, real-time tracking, and the option of digital payment, is one such innovative online grocery system that has enhanced the shopping experience (PwC, 2023; McKinsey & Company, 2022).

The online grocery stores have grown significantly in the case of India, including Zepto, Amazon Fresh, Blinkit, and BigBasket. Swiggy Instamart can be seen as a great shift in customer preference and the retailing environment. The need for shopping without physical contact and home delivery services was further accentuated during the COVID-19 pandemic (EY, 2021). Thus, in the case of India, the online grocery business has grown significantly, with such players as BigBasket, Blinkit, Amazon Fresh, and Zepto. Customer satisfaction is essential for business success, retention, and sustainability (Kotler et al., 2021).

Compared to traditional retail, online grocery shopping consists of many digital and operational touchpoints that define the customer experience. These encompass usability of a site or a mobile app, product availability and correctness, clarity on pricing, how well the delivery is executed, and the quality of customer service (Lemon & Verhoef, 2016; updated relevance supported by McKinsey, 2023). Errors in product delivery and delays in order completion can harm customer satisfaction and erode trust (Hübner et al., 2020). In online situations, where customers experience dissatisfaction and switching costs are low, customers can easily move to rival services, which adds to the greater importance of the provision of a seamless and dependable service experience (Accenture, 2022).

Even after the progress of digital interfaces, warehouse automation, and logistics infrastructure, online grocery retailers still face a multitude of operational challenges. Problems like the inconsistency of product quality, especially perishable items, delays in shipment, and lack of real-time communication remain critical, as consumers put a lot of trust in the retailer to choose and provide products that satisfy their expectations (KPMG, 2023). With products that are purchased frequently and time-sensitive, even small service failures can lead to customer dissatisfaction (Deloitte, 2023).

In addition, online grocery customers' satisfaction is influenced by a variety of experiential dimensions and is not determined by a single factor. Models of service quality stress dimensions of reliability, responsiveness, and assurance as important determinants of customer satisfaction (Parasuraman et al., updated relevance discussed in Sharma et al., 2022). These theories emphasise a holistic view of the functional and experiential issues associated with service delivery in online grocery shopping.

Moreover, the rise of digital shopping environments has made customer experience more important than ever. Customer experience entails the thinking, feeling, and behavioural responses of service users (Lemon & Verhoef, 2016; Becker & Jaakkola, 2020). Whereas the success of online shopping for groceries relies on the efficiency of the operation and convenience and consistency in the offered services, the success in terms of experience will lead to customer satisfaction, which ultimately results in loyal

clients and repeated business in the stores (McKinsey & Company, 2023; PwC, 2022).

With all the above in mind, it is important to identify the aspects that affect customer satisfaction despite the tough competition and complexities of the service provision. Prior research has focused on customer satisfaction in general e-commerce lines of business, whereas customer satisfaction in online grocery shopping has received limited focused attention, especially in developing economies like India. There are also perishables, time-bound delivery requirements, and high purchase frequency, which present different problems that require targeted research (RedSeer, 2023; Bain & Company, 2022).

Website experience, product experience, delivery experience, and brand experience, as well as the mediating effect of overall shopping experience, are critical constructs in understanding customer satisfaction in online grocery shopping. These dimensions collectively influence customer perceptions, behavioural intentions, and long-term loyalty in the digital retail ecosystem (McKinsey & Company, 2023; EY, 2023).

II. LITERATURE REVIEW

When organizations operate within a digitally driven competitive market environment, which sees the existence of tough competition, satisfaction becomes very important since the customer base can easily defect to other suppliers and influence the organization's performance over time (Kotler et al., 2021; Accenture, 2022). Typically, the customer's evaluation is based on two dimensions: one is a performance comparison between the product or service worth and its expectations, and the second is the consumer's expectations relative to the performance (Homburg et al., 2020). A satisfied consumer is one who gets their service expectation met, while dissatisfaction arises when expectations are not met.

The theoretical origins of customer satisfaction are grounded in the Expectation Confirmation Theory (ECT). Based on the discussed theory above, the consumer has some previous expectation prior to the experience of the service, and it subsequently forms the benchmark for measuring the actual performance of the service. Satisfaction happens when the real performance meets or surpasses the expectations

(Bhattacharjee, 2021; Sharma et al., 2022). Likewise, the online consumer buying food products online will have previous expectations. These include prompt delivery, the right ordering of the products, fresh products, and a pleasant experience while buying. Furthermore, there is a need for assurance by ensuring that secure payment processes are adopted and effective service delivery occurs (PwC, 2023; KPMG, 2023). Reliability, responsiveness, assurance, empathy, and tangibility make up the elements of service quality that influence how customers perceive the services (Sharma et al., 2022; Becker & Jaakkola, 2020). Regarding online shopping, the fulfilment of the elements differs slightly from those involved in traditional services. For instance, reliability will be based on delivery and its punctuality, whereas responsiveness will be exhibited by customer support systems.

The concept of customer experience extends the theory of customer satisfaction by emphasizing the holistic approach to the points of interaction. Customer experience encompasses rational, emotional, and behavioural reactions. The holistic experiences of customers positively impact customer satisfaction, whereas any disturbance in any part may affect customer attitudes negatively (Becker & Jaakkola, 2020; Lemon & Verhoef, 2016; McKinsey, 2023).

Website experience is another key aspect which impacts the customer satisfaction levels in online grocery shopping. Website experience makes it easier for the customer to browse through the site and look for information on the desired product. There are several determinants of customer satisfaction identified by researchers, website experience being among them (Deloitte, 2023; PwC, 2022).

Delivering the goods successfully is imperative because grocery products tend to be perishables that cannot last for a long time. Clients demand timely deliveries made during certain hours, with the appropriate packing of their goods (KPMG, 2023; RedSeer, 2023). This can help in enhancing the satisfaction levels and building the clients' confidence. Moreover, the performance of customer service can be very essential in helping to resolve any issues faced by customers and provide refund services (Accenture, 2022; McKinsey & Company, 2023).

Brand experience will further influence customer satisfaction through the development of reliable and credible perceptions along with an emotional attachment (Brakus et al., 2009, with updated relevance due to EY, 2023). On the contrary, within contexts such as online grocery purchases, which involve operational complexity, factors associated with functionality tend to influence customer satisfaction more than those associated with the brand (Bain & Company, 2022).

This is an indication that operational excellence should come into focus more than experience-based improvements. In markets where prices are very important, such as India, efficient production, good quality, and effective delivery will generally prevail over more aesthetic elements, like website design or branding (RedSeer, 2023; Deloitte, 2022).

Moreover, according to recent research, customer experience is considered an important mediator for the relationship between service features and customer satisfaction (McKinsey & Company, 2023; Becker & Jaakkola, 2020). Customer satisfaction can be achieved if each service feature positively impacts the customer's general experience and does not influence their satisfaction on its own. Hence, customer satisfaction in the case of online grocery shopping depends on a complex system of interactions.

There is abundant literature available concerning e-commerce and consumer satisfaction, yet there are very few studies dedicated to online grocery purchasing, particularly from the perspective of the Indian market. Owing to the distinct features of perishable products, high-frequency purchases, and dependency on efficient logistics, special attention needs to be paid to these particularities (Bain & Company, 2022; RedSeer, 2023). The present study explores various factors of experience affecting consumer satisfaction in online grocery purchasing.

HYPOTHESIS

Given the conceptual framework and literature review, the following hypotheses have been generated for analyzing the association between the experiential variables, online grocery shopping experience, and customer satisfaction:

H1: Customer Service Experience has a significant positive effect on Online Grocery Shopping Experience.

H2: Website Experience has a significant positive effect on Online Grocery Shopping Experience.

H3: Product Experience has a significant positive effect on Online Grocery Shopping Experience.

H4: Delivery Experience has a significant positive effect on Online Grocery Shopping Experience.

H5: Brand Experience has a significant positive effect on Online Grocery Shopping Experience.

H6: Online Grocery Shopping Experience has a significant positive effect on Customer Satisfaction.

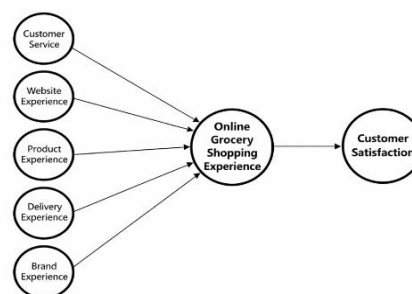


Figure 3.1: Research Framework

OBJECTIVES

The primary objective of this study is to examine the determinants influencing customer satisfaction in online grocery shopping. To achieve this, the study focuses on the following specific objectives:

1. To analyse the impact of customer service experience on the online grocery shopping experience.
2. To evaluate the influence of website experience on online grocery shopping experience.
3. To examine the effect of product experience on the online grocery shopping experience.
4. To assess the role of delivery experience in shaping the online grocery shopping experience.
5. To determine the impact of brand experience on the online grocery shopping experience.
6. To investigate the influence of online grocery shopping experience on customer satisfaction.

III. RESEARCH METHODOLOGY

Research Design-

This study utilises a quantitative approach to explore factors that determine customer satisfaction in online grocery shopping. I feel a quantitative approach is fitting because it provides a structured means for measuring the relationship among variables and facilitates the statistical testing of hypotheses. The nature of the research is both descriptive and explanatory in that it describes consumers' perceptions and explains related experiential factors, overall shopping experience, and so forth. and customer satisfaction. This design facilitates a systematic breakdown of various service dimensions in relation to customer satisfaction in a digital retailing context.

Data Collection-

Using this methodology guarantees response uniformity and permits precise quantitative assessment of customer perceptions. The survey was designed to identify customer service experience, website experience, product experience, delivery experience, and brand experience. satisfaction level and tastes during their overall online grocery shopping experience. The survey was administered online to customers who have used online grocery shopping services before. The instrument utilised a Likert scale, which allowed participants to show their degree of agreement with different statements. Using this methodology guarantees response uniformity and permits precise quantitative assessment of customer perceptions.

Sample Size and Sampling Technique-

We collected 179 valid responses for analysis. This study has used convenience sampling, as respondents were chosen for their convenience and relevance to the research context. This approach is typical in research studying consumer behaviour. especially when the intended audience is defined by the use of types of digital services. Regardless of the limitation to the generalizability of findings due to convenience sampling, the sample size qualifies for thorough statistical analysis, particularly multiple regression, because it fulfils the requirements for relationship assessment among various factors.

Data Analysis Techniques-

Data analysis employed the Statistical Package for the Social Sciences (SPSS). In the first step, Data analysis was employed using the Statistical Package for the Social Sciences (SPSS). In the first step, along with

customer satisfaction and the impact of the mediation variable. along with customer satisfaction and the impact of the mediation variable. The researchers applied multiple regression analysis to the hypotheses and assessed the influence of the independent variables on the mediating variable. along with customer satisfaction and the impact of the mediation variable.

Variables of the Study-

Customer satisfaction is measured against the backdrop of the online grocery shopping experience as the independent variable. Customer satisfaction is measured against the backdrop of the online grocery shopping experience as the independent variable. These variables are based on the previous theoretical frameworks and empirical studies, ensuring constructive relevance and validity. The systematised relationship among these variables is the foundation for understanding customer behaviour regarding online grocery shopping.

Measurement of Constructs-

To confirm both validity and reliability, all constructs in this research were measured using several items taken from previous studies. All that the items did was focus the attention of customers on their perspectives of the service they received and the level of their satisfaction. Answers were given on a Likert scale; all that the items did was focus the attention of customers on their perspectives of the service they received and the level of their satisfaction. Answers were given on a Likert scale; this method improves the robustness of the measurement model and allows for a more precise depiction of customer perceptions.

Ethical Considerations-

All Ethical considerations involved in this study relate to the nature of the research. The respondents had the right to decide whether to participate in the study. and the respondents were further educated about the goal of the study before answering questions. The privacy and the identity of the respondents were secured, and there was no gathering of personal or identifiable data. The data collected was exclusively for research purposes, with compliance with minimal ethical standards pertaining to research.

IV. RESULTS AND DISCUSSION

Table 4.1: Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
Constant	1.828	0.465	-	3.930	<0.001
Customer Service	0.514	0.250	0.240	2.055	0.041
Website Experience	-0.050	0.263	-0.025	-0.190	0.850
Product Experience	0.573	0.249	0.278	2.301	0.023
Delivery Experience	0.221	0.261	0.104	0.846	0.399
Brand Experience	0.285	0.215	0.136	1.327	0.186

Table 4.2: ANOVA Results

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	49.277	1	49.277	103.054	<0.001
Residual	84.635	17	0.478		
Total	133.912	18			

The impact of customer service experience, website experience, product experience, and delivery experience has been analysed using regression analysis. and brand experience concerning the online grocery shopping experience. The results of the regression coefficients and ANOVA are shown in Table 4.1 and Table 4.2, respectively.

The regression coefficients show that customer service experience positively and considerably impacts online grocery shopping experience ($B = 0.514$, $\beta = 0.240$, $t = 2.055$, $p = 0.041$). Given that the p-value is under 0.05, the relation is confirmed meaningful, proving positive changes in customer service like answering,

communicating, and enhancements in overall shopping experience. This emphasises the importance of service support in influencing consumer views on online grocery services.

Out of all the predictors, product experience has the greatest standardized beta value ($\beta = 0.278$). Out of all the predictors, product experience has the greatest standardized beta value ($\beta = 0.278$), indicating that it is the most significant factor impacting the shopping experience. Out of all the predictors, out of all the standardised beta value ($\beta = 0.278$) for product experience is the largest, meaning it has the greatest impact on the shopping experience compared to all the other predictors.

The website experience, however, negatively and statistically insignificantly impacts the online grocery shopping experience ($B = -0.050$, $\beta = -0.025$, $t = -0.190$, $p = 0.850$). Due to the high p-value, in this case, the usability and design of the website do not seem to have a significant effect. This indicates that customers consider the overall functionality of a website as self-evident. Instead of viewing it as an element that differentiates a business from its rivals.

While the delivery experience is positive, it remains statistically insignificant ($B = 0.221$, $\beta = 0.104$, $t = 0.846$, $p = 0.399$). Even with a positive direction, the relatively low beta value and high p-value indicate that the delivery performance, in most cases, will not change the customer's perception, unless significant service breakdowns happen. This suggests that customers might view prompt delivery as part of the baseline expectation and not as a contributing factor to their level of satisfaction.

Similarly, brand experience exhibits a positive but statistically insignificant relationship with online grocery shopping experience ($B = 0.285$, $\beta = 0.136$, $t = 1.327$, $p = 0.186$). Although brand perception contributes positively, its lack of statistical significance suggests that customers prioritise functional performance over brand image in the context of online grocery shopping.

The constant value ($B = 1.828$, $t = 3.930$, $p < 0.001$) is statistically significant, indicating that even in the absence of the independent variables, there exists a baseline level of online grocery shopping experience. The overall meaning of the regression model was determined using ANOVA. The results show that the model is significant ($F = 103.054$, $p < 0.001$). The sum of squares of regression is 49.277, and the sum of

squares of the residuals is 84.635, giving a total sum of squares of 133.912. The mean square for regression is 49.277, and for residuals, it is 0.478. The fact that the F-value (103.054) is large, and the p-value is less than 0.001, means that the model is fitting well and the independent variables are able to explain a significant portion of the variance in the dependent variable.

Table 4.3: Summary of Hypothesis Testing

Hypothesis	Relationship Tested	Result
H1	Customer Service Experience → Online Grocery Shopping Experience	Significant ($p = 0.041$)
H2	Website Experience → Online Grocery Shopping Experience	Not significant ($p = 0.850$)
H3	Product Experience → Online Grocery Shopping Experience	Significant ($p = 0.023$)
H4	Delivery Experience → Online Grocery Shopping Experience	Not significant ($p = 0.399$)
H5	Brand Experience → Online Grocery Shopping Experience	Not significant ($p = 0.186$)
H6	Online Grocery Shopping Experience → Customer Satisfaction	Significant ($p < 0.001$)
H7	Experiential Factors → Customer Satisfaction (through Overall Experience)	Overall model is significant ($p < 0.001$)

On the whole, the findings indicate that the customer service experience and product experience are the most imperative determinants of the online grocery shopping experience. On the contrary, the experience with websites, delivery experience, and brand

experience, despite having a positive correlation, do not have a significant effect. These results indicate that in online grocery shopping, customers focus on functional efficiency and reliability of the products more than aesthetics or brand-related considerations.

V. CONCLUSION

The current research adds to the available literature on customer satisfaction in online grocery shopping, especially in the setting of the emerging digital markets like India. The study gives a detailed picture of the effect of various experiential variables on consumer perception and behaviour in the online grocery market by looking at the impact of customer service experience, web experience, product experience, delivery experience and brand experience on overall shopping experience and customer satisfaction.

The results show that the online grocery shopping experience is most influenced by customer service experience and product experience. Customer perceptions are also greatly influenced by customer service experience, which can be determined by responses, timely response, and proper solution of customer problems. Equally, product experience that encompasses product quality, freshness and precision of order delivery proves to be a major source of satisfaction. These findings emphasise the need to make operations efficient and quality-assured to offer a reliable and satisfactory online grocery service.

Despite finding a positive relationship between the website experience, delivery experience and brand experience with customer satisfaction, the effects of these factors did not pass the statistical test in the regression analysis. This implies that customers might interpret such aspects as fundamental service expectations instead of differentiating aspects. Nevertheless, the fact that they positively relate to satisfaction means that they continue to play a part in the overall service experience and cannot be overlooked by service providers.

The research also supports the hypothesis that there is a strong positive relationship between overall shopping experience online and customer satisfaction, and that experience mediates the relationship between service attributes and customer satisfaction. This observation aligns with customer experience theory, which holds that customer satisfaction occurs as the

overall impact of a series of service interactions and not singular factors. It emphasises the need to provide a coherent, smooth, and reliable experience throughout the customer experience journey.

The research also represents the changing consumer behaviour trend in the digital economy in India, especially among the young adults, students and urban users who are involved in online shopping of groceries. This group is a developing and powerful customer segment with the trend of changing lifestyles to be more technology-oriented and more dependent on online shopping. These trends also highlight the importance of effective customer experience management strategies as an effective means of maintaining customer engagement and loyalty.

When it comes to the managerial viewpoint, the findings indicate that online grocery stores must implement a customer-focused approach, which entails ensuring the efficiency of customer service and the high quality and freshness of the products. Customer satisfaction and retention can be improved greatly by ensuring that the orders are fulfilled correctly, customer service is responsive, and the online shopping process is seamless. Within a marketplace that is growing highly competitive marketplace, the capability to provide customers with consistent and high-quality customer experiences will become pivotal in attaining a sustainable competitive advantage.

Overall, the study demonstrates that customer experience is not merely an outcome of service delivery but a strategic tool for enhancing customer loyalty, strengthening brand perception, and improving long-term profitability. By identifying the key drivers of customer satisfaction within the Indian online grocery context, the research contributes both theoretically and practically, offering valuable insights for academics and industry practitioners alike.

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