

Factors Affecting Customer Satisfaction in Online Grocery Shopping: An Empirical Analysis

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Abstract

In today's era, internet has become one of the most popular platforms to shop online including grocery products. Online grocery shopping (OGS) has been considered relatively new but a promising sector of e-commerce in India. Several scholars have investigated the factors affecting the customer intention to buy grocery products online in different research contexts, however, there is no consensus in the literature on determinants of OGS. This article aims to explore the factors, such as convenience, trust, website design and security, that influence customer satisfaction in OGS. A survey was developed, and collected responses were analysed using confirmatory factor analysis and multiple regression analysis. The findings suggest that one of the major determinants of customer satisfaction while buying groceries online is website user-friendliness and the information provided about the grocery items. Furthermore, convenience and payment security also have a very significant positive impact on customer satisfaction.

Keywords

Online grocery shopping, emerging economies, empirical research

Introduction

Grocery shopping is considered routine buying behaviour not only because decisions are made at regular intervals but also because a customer's behaviour is essentially habitual and automatic. With the rapid growth of the internet and e-commerce, Indian consumers' grocery buying pattern is transitioning from

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traditional methods to online, resulting in the phenomenon known as—online grocery shopping (OGS). Online grocery is the process of ordering groceries online from the comfort of one's own home or having them delivered to one's home or picking them up from a store or a pick-up location. It has grown in popularity as a means of providing consumers with additional information and options for comparing items, costs, ease and the capacity to search for anything on the internet.

OGS is a novel way to acquire your family's preferred supermarket items. The phenomenon has already gained traction in developed countries, and an increasing number of urban and suburban consumers are taking advantage of it for their benefit and convenience. India's markets have begun to respond positively to this occurrence as well. Even though online grocery business in India is a niche market inside the larger food and grocery market, due to the increase in the e-commerce business, increasing urbanisation, changing consumer lifestyles and tech-savvy young population who loves to shop products online, OGS is quickly gaining popularity in the country. Online grocery stores are rapidly displacing physical stores across India, thanks to remarkable growth in the e-commerce business, increased customer awareness, rising disposable income and the introduction of different technological advancements.

The online grocery market has benefited both retailers and customers. Consumers benefit from location, timing and product. Retailers, on the other hand, benefit from constant connectivity with their customers. OGS reduces both physical and mental effort for shoppers, and it is gaining popularity in India as a result of an increasing trend among consumers to shop online.

In recent years, widespread adoption of digital transactions has substantially impacted Indians' purchasing habits, particularly, in metropolitan areas, where 269 million (60%) of the population use internet¹. Because of the availability and affordability of smartphones, mobile is the primary device for accessing the internet for 77% of urban users and 92% of semi-urban users, according to the same report. As a result, internet retailing offers customers more shopping options and access to products and services than ever before. While the online grocery sector in India is still in its early stages, it is expected to exceed US\$ 3.19 billion in sales by 2020, representing a 76% increase over the previous year.²

While the statistics show an improvement in internet sales, assessing actual customer behaviour is more difficult. The distinctions between online and offline channels are becoming increasingly blurred³. Furthermore, some customers are still hesitant to purchase groceries from internet retailers for many reasons such as lack of trust in online shopping, payment security issues, etc. Sometimes customers also want to go out to meet up with friends/neighbours and take their feedback before buying the grocery products. These factors have a negative impact on the customer's intention to move online to buy grocery items. In addition to this, purchase habits are shifting dramatically as buyers can move effortlessly between offline and online channels. As a result of the internet's substantial influence on consumer preferences and purchasing

patterns, consumer behaviour related to online shopping is a topic of interest for both academics and practitioners.

Growth of the Online Grocery Shopping (OGS) Sector

Online grocery sales are expected to expand by 54% to \$95.82 billion by 2025 accounting for 12% of all online purchases. According to Singh and Söderlund (2020), from 2021 to 2028, the Indian online grocery market is anticipated to expand at a rate of 37.1% CAGR. The business has achieved significant popularity in recent years due to the change in consumer habits, rapid growth and access to the internet; making it easier for everyone to shop online. During the coronavirus pandemic, the government enacted many rules and regulations to try to combat and manage the virus spread. The most important rule was to stay at home as much as possible and maintain 1.5 meters distance from other people. The laws imposed by the Indian government had a significant impact on individuals as well as businesses. On 24 March 2020, Government of India ordered a nationwide lockdown and like other sectors, hospitality industry was compelled to shut down. Grocery stores cannot be closed since they provide a vital source of food and other necessities for society, however, they must adhere to regulatory standards regarding the coronavirus. Following the spike in COVID-19 cases, there was a surge in demand for online grocery delivery. Consumers were turning to OGS because of the social distancing standards, which are not only convenient but also cost-effective.

However, after certain months, despite the relaxation in social distancing, OGS continued to increase, topping \$100 billion in spending for the first time in 2021, a year ahead of previous predictions. Customers' reliance on the internet platform has grown dramatically as a result of safety concerns surrounding the coronavirus and the fact that a large section of the population works from home. The market is likely to grow significantly in the next few years because of initiatives like no-contact delivery and online payment, consumers have been drawn to several online platforms, including Amazon, Big-Basket, Blinkit and others. A brief description of major Indian online grocery retailers is given in Table 1.

The grocery market in India is a speciality market influenced by the wider food and grocery market and is a relatively new setting in India. During the pandemic, online grocery buying has gotten more popularity. In the year 2021, In terms of consumer use of online grocery purchasing methods, India was one of the leading countries.³ Therefore, the goal of this research is to examine what influences Indian consumers' satisfaction when they use internet for grocery shopping as customer satisfaction is a fundamental building block of repurchase intention.

This study will empirically examine the relationship between different factors, that is, convenience, trust, website design and security that influence customer satisfaction in OGS. To test the proposed hypotheses, the study has collected data from 118 individuals who have experience with OGS. The data analysis is done in the following two stages: In the first stage, confirmatory factor analysis (CFA) is used to verify the reliability and validity of the measurement items. In the second stage, multiple regression analysis is used to test the proposed hypothesis. The

key contribution of this paper lies in the amalgamation of four dimensions, that is, convenience, trust, website design and security, in the online grocery context for Indian consumers.

The rest of the study is as follows: in the second section, we have reviewed the existing literature and proposed the relevant hypotheses. The details of the research methodology used is described in the third section. The fourth section summarises the findings of data analysis and the fifth section concludes the discussion and implication of the study. Lastly, limitations and future research directions are provided.

Table I. Major Online Grocery Companies in India.

Major Online Grocery Companies in India	
Jio-Mart	Jio-Mart, a joint venture between Reliance Retail and Jio Platforms, is India's newest online grocery delivery service. Groceries and daily necessities are delivered to customers' doors from nearby stores via e-commerce websites and mobile apps.
Big Basket	Big Basket is a popular online grocery store, which sells over 1,000 brands and has over 20,000 items in its database. Big Basket has everything customers need, including fresh fruits and veggies, spices, dals and rice, seasoning, packaged goods, personal care products, beverages, meats and more, and a wide range of products in each category. The website provides an anticipated delivery time focusing on cutting-edge, creative retailing at a competitive cost.
Blinkit	'Blinkit, formerly known as gofers'. It's an Indian-based instant delivery service that was created in December 2013. Customers can use a smartphone app to order groceries and other supplies online.
Nature's Basket	Godrej Nature's Basket, a well-known online food retailer, which offers fresh veggies, fruits, and groceries online and through a mobile app, has been bought by Spencer's Retail.
Amazon Pantry	Amazon Pantry is a service that allows customers to shop for groceries online and have them delivered to their door in one delivery like other items.

Literature Review

OGS is a process of making a purchase on the internet that allows consumers to buy commodities and household items, particularly perishables, from the comfort of their own homes. To shop for groceries on the internet, most people use e-commerce websites or smartphone apps. Customers can order goods from businesses' websites by just clicking on the button for the items they want to buy, and groceries are delivered to their houses (Burke, 2005; Kurnia & Chien, 2003; Peterson, 1997).

Grocery shopping online is not as common as buying durable items; as a result, the factors that influence customer satisfaction may differ in this product category (Van Droogenbroeck & Van Hove, 2017). Scholars believe that buying groceries on the internet is motivated by trust, convenience and security (Morganosky & Cude, 2000; Seitz et al., 2017), and consumers place a higher value on the delivery process and product quality when compared to shopping for durable items (Anesbury et al., 2016; Frank & Peschel, 2020). Scholars have used the theory of reasoned action (TRA) to study various contexts of e-commerce, such as apparel shopping (Yoh et al., 2003), eco-friendly products (Prakash & Pathak, 2017), green products (Paul et al., 2016) and OGS (Belleau et al., 2007; Cai & Cude, 2012; Hansen, 2008; Orzan et al., 2013; Rigas & Riaz, 2015; Rodriguez et al., 2017; Yoh et al., 2003).

TRA model proposed by Fishbein and Ajzen (1977) is a generic framework that proposes the relationship between attitude, behavioural intention and actual behaviour of the individuals. Understanding the individual intention is very important specifically in the case where consumers can exercise their control over their behaviour as in the case of buying groceries on the internet (Amaro & Duarte, 2015). Another theoretical framework, TAM (Technology Acceptance Model) has been used by many scholars to explain customer satisfaction or repurchase intentions. In literature, some scholars have used traditional TAM (Bauerová & Klepek, 2017; Hui & Wan, 2009), whereas the most commonly used is extended TAM, which includes the relevant variables with reference to the OGS context, such as security (e.g., Kurnia & Chien, 2003; Wang & Somogyi, 2018), trust (e.g., Childers et al., 2001) and website design (Loketkrawee & Bhatiasevi, 2018; Nguyen et al., 2019) are some of the factors added in extended models to improve the model's explanatory power (Loketkrawee & Bhatiasevi, 2018; Sreeram et al., 2017).

Beyond adoption models, scholars argue that a shopper's beliefs, attitudes and behaviours towards a multichannel retailer's online channel are shaped by his or her perception of the offline channel. Jones and Kim (2010) discovered that a customer's inclination to shop for groceries online is influenced by their offline purchases. According to Frassetto et al. (2017), customer loyalty to multichannel retailers is heavily influenced by the consumer's offline retail store loyalty. All of these studies are centred in the context of online apparel shopping. Nonetheless, these studies demonstrate learnings how grocery multichannel retailers' brand equity affects consumer intention to shop through their online retail stores. Using the TAM model, Khare and Sadachar (2014) described the people's intentions and

actual behaviour when it comes to a specific technology. Consumer satisfaction with online grocery buying is positively influenced by convenience and trust in online shopping (Hansen, 2006). Childers et al. (2001) found that online grocery website design and trust are major predictors of OGS usage. According to Park et al. (1996), high-tech baby boomers use home shopping services to simplify their life, and OGS provides one method to boost convenience. Morganosky and Cude (2000) and Raijas and Tuunainen (2001) indicated convenience and time savings as the key reasons for OGS. Furthermore, customer satisfaction with OGS is positively influenced by security (Çelik & Yilmaz, 2011). As a result, the objective of this study is to develop a research model that incorporates new constructs into the TAM theory: trust, convenience, website design and security.

Convenience

Convenience is defined as a reduction in stress or sacrifice caused by a transaction due to a reduction in time and effort (Jiang et al., 2013). Customers' perceptions of a website's user-friendliness, intuitiveness and simplicity during a purchase are referred to as online convenience. This reduces tiredness caused during the product and information search process, reduces error and boosts satisfaction, which leads to repeat purchase intention (Srinivasan et al., 2002; Van Droogenbroeck & Van Hove, 2014). Convenience is important in shaping customer behaviour, and their perceptions of convenience are important in deriving satisfaction (Seiders et al., 2005). Customers' perceptions of saving time and improved convenience are closely linked to their use of the internet for grocery shopping at any time of the day and from anywhere (Jiang et al., 2013; Morganosky & Cude, 2000; Van Droogenbroeck & Van Hove, 2014). Ramus and Nielsen (2005) looked at several factors that influence consumers' decision to purchase groceries online and found convenience to be one of the most influential factors. Therefore, we hypothesise that,

H₁: Convenience has a significant positive impact on customer satisfaction in OGS.

Trust

Trust is found on a set of assumptions that 'individuals behave in a socially acceptable manner toward others' (Constantinides et al., 2010). D'Alessandro et al. (2012) define trust as 'confidence' shown to another party and suggest that while making critical purchasing decisions, trust is a necessity of social behaviour. In electronic commerce, trust gives customer's the confidence and comfort to disclose personal information, follow online vendor recommendations, and make transactions over the internet (Kim et al., 2011). According to the current literature on e-commerce, first-time customers' trust development may be lower than that of recurring customers (Eastlick & Lotz, 2011). Online sellers must demonstrate their honesty, competency and friendliness to clients when serving or connecting

with them to gain their trust (McCole et al., 2010). Grabner-Kräuter and Kaluscha (2008) also suggest that establishing trust with new internet customers is critical for long-term success, and this initial trust should be prioritised. Çelik and Yilmaz (2011) also found that customer satisfaction in OGS is influenced by the trust. Citrin et al. (2003) suggest that in an online transaction environment, trust is even more vital, especially when dealing with commodities like food and groceries, and is necessary for an online grocer's success (Toufaily et al., 2013). If trust has been developed, it increases the customer satisfaction with the OGS process, positively affecting the repurchase intention. Therefore, the hypothesis is proposed as follows:

H_2 : Trust has a significant positive impact on customer satisfaction in OGS.

Website Design

The grocery retailer's website design plays a significant part in building an online relationship with consumers. It has the capacity to affect the image of the company as well as customer satisfaction, loyalty and repurchase intention (Sanchez-Franco & Rondan-Cataluña, 2010). The image of the company's website becomes more important in online shopping, the process takes place in a virtual environment and it increases the uncertainty and risk (Mostafa et al., 2005). Websites that give the impression of being user-friendly, and easy to search for products and information appeal the consumers more (Kim & Niehm, 2009); therefore, website homepage is crucial in generating that impression (Pandir & Knight, 2006). In online shopping, customers cannot examine or feel things, thus other critical aspects of the website including pictures, graphics, video material, etc., become very important. Additionally, some new features such as 3D photos, zoom functions, suggestions for similar items and substitute items in case of stock out help in establishing and increasing consumer impressions of the website (Kim et al., 2008). Websites that are modern, thorough, innovative, provide detailed information about the products and appealing to the eyes increase the consumer's interest and help in retaining existing ones (Kim et al., 2008). In prior studies, the website design is found to be an important component in enhancing consumer happiness (Pandir & Knight, 2006). The customer's perception of the online store's user-friendliness is used to measure the performance of the online business (Lin, 2007):

H_3 : Website design has a significant positive impact on customer satisfaction in OGS.

Security

Security in online shopping context relates to the safeguarding of payment and financial information from unauthorised breaches (Nysveen et al., 2005). The literature suggests that one of the most important aspects of online grocery buying is the security (Khan & Khan, 2020; Lauer & Deng, 2007; Shukla et al., 2014).

Customers’ negative sentiments are influenced by internet businesses’ incapacity to protect their platforms from attacks or any damages, which they perceive as a risk to financial transactions (Lauer & Deng, 2007; Teoh et al., 2013). Customer satisfaction in online food purchasing is increased with a robust security system on the online grocery website (Khan & Khan, 2020):

H₄: Security has a significant positive impact on customer satisfaction in OGS.

Based on the proposed hypotheses, Figure 1 presents the research framework of the study.

Research Methodology

Sample and Data Collection

This study focuses on a sample of Indian residents. This study’s sampling frame was youth, and the convenience sampling technique was used during data collection. This particular sampling technique is known to allow researchers easy access to information from participants, and it is also known to be convenient. The goal was to minimise the researcher’s bias in data collection. The survey questionnaire was emailed to the targeted respondents who had some prior experience with OGS. After data screening, a total of 118 usable responses were received for analysis, representing a response rate of approximately 47%.

Survey Design and Measurement Items

To prepare the questionnaire, we followed a two-stage development approach. In the first stage, we thoroughly reviewed the literature for well-tested measurement scales of the proposed constructs with favourable psychometric properties relevant to the context of study. In the second stage, we took the expert recommendation to detect any problem in wording and/or ambiguity in the questions, and based on their recommendations, survey questions were finalised.

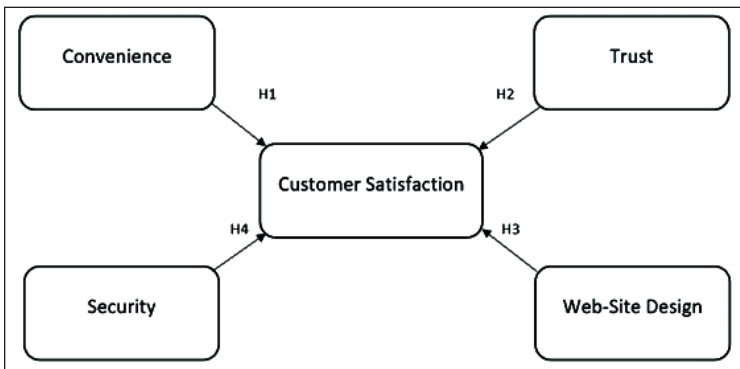


Figure 1. Proposed Research Framework.

Table 2. Construct Items and Relevant References.

Construct Items	References	Factor Loading
<i>Convenience (CO)</i>		
CO1: It is easy to access the website of online grocery store	Khan and Khan (2020)	0.841
CO2: It is easy to search for products on the website of online grocery store		0.832
CO3: It is easy to transact at online grocery websites.		0.820
CO4: Buying groceries online enables me to buy my groceries faster		0.894
<i>Trust (T)</i>		
T1: Grocery shopping on online store website is a trustworthy experience	Mortimer et al. (2016)	0.820
T2: While shopping online I trust stores that are connected with well-known offline stores		0.891
T3: I can rely on online store websites to keep the promises that they make		0.918
<i>Website design (WSD)</i>		
WSD1: The online store provides in-depth information regarding products	Azhar and Bashir (2018)	0.847
WSD2: Online store offers appropriate personalized services		0.881
WSD3: Online store has a good selection of products		0.882
<i>Security (SEC)</i>		
SEC1: Payments on online store are safe and secure	Azhar and Bashir (2018)	0.845
SEC2: Online grocery store implements security measures to protect Internet shoppers		0.885
SEC3: Online grocery store has a very safe online paying mechanism		0.878
SEC4: The transactions are protected by the state-of-the-art security technique at this online store		0.862
<i>Customer satisfaction (CS)</i>		
CS1: I am satisfied with the purchase experience from online grocery shopping websites	Chin and Goh (2017) and Pham et al. (2017)	0.873
CS2: I am satisfied with the post-purchase experience of after-sales support from online store website		0.871
CS3: I am satisfied with the post-purchase experience of delivery care		0.920
CS4: Overall, I am satisfied with online grocery shopping experience		0.861

The survey was prepared in two sections. The first section includes the questions on demographic such as age, gender, etc. The second section of the survey included the question on the main constructs. All the latent constructs were measured using a seven-point Likert scale ranging from (1) strongly disagree to (7) strongly agree. The final list of measurement items is presented in Table 2 and has been adapted from the respective original studies.

Sample Demographics

The characteristics of the survey respondents are outlined in Table 3. They are primarily located in metropolitan or semi-urban areas, have a majority of bachelor's or higher degree holders (68.00%), and are between the ages of 18 and 34 (82.2%). In this poll, there is a roughly equal proportion of male (54.2%) and female (45.8%) participants by gender. Regarding annual family income, 51.7% of respondents reported having an income above 5 LPA, 33.1% reported having an income between 3 and 5 LPA and 15.3% reported having an income below 3 LPA. A total of 47.5% of respondents are from urban areas, 45% are from semi-urban areas, and the remaining 7.5% are from rural areas. In total, 51.7% of respondents are between the ages of 18 and 24, 30.5% are between the ages of 25 and 34, 11% are between the ages of 35 and 44, and the remaining 6.8% are over the age of 45. In addition, 47% of respondents were students, 24.6% of respondents worked for a private employee, 17.3% of respondents worked for the government and 11.1% of respondents were self-employed.

Common Method Bias

Common method bias pertains to the shared variance among the measured constructs that takes place when all the responses (independent and dependent variables) are collected using same method (Jordan & Troth, 2020; Podsakoff et al., 2012). The presence of common method bias results in artificial modification of the relationships between the constructs. In this study, to test if the data collected is not suffering from common method bias, we followed Podsakoff et al. (2012) approach of the 'single factor procedure'. In 'single factor procedure', model fit is evaluated in which all the measurement items are loaded onto one factor. The reasoning is that if the CFA model shows a good fit with the data, common method bias is largely responsible for the covariation among the constructs. The model fit for the single factor model (CMIN/DF = 4.923, GFI = 0.640, comparative fit index [CFI] = .707, RMSEA = 0.158) is very poor. It suggests that common method bias is not a serious concern in this study.

Results and Analysis

To test the proposed hypotheses, the theoretical model (Figure 1) was tested using regression analysis. In the first stage, to test the reliability and validity of measurement items, we performed CFA using SPSS-AMOS 23 software. After the validity and reliability check, multiple regression analysis was performed using SPSS-23 software.

Table 3. Respondents' Demographic Profile.

	Frequency (n = 118)	Percentage
Gender		
Male	64	54.2
Female	54	45.8
Age		
18–24	61	51.7
25–34	36	30.5
35–44	13	11.0
45 and above	08	6.8
Annual family income		
1–3 LPA	18	15.3
3–5 LPA	39	33.0
Above 5 LPA	61	51.7
Location		
Urban	56	47.5
Semi-urban	53	45.0
Rural	09	7.5
Occupation		
Student	55	47.0
Govt. employee	21	17.3
Private employee	29	24.6
Self-employed	13	11.1
Qualification		
Intermediate or lower	03	2.5
Bachelor's degree	50	42.4
Master's degree	49	41.5
Ph.D.	16	13.6

Validity and Reliability of Measurement Items

A measurement model was tested to ensure the psychometric properties of the items used (Figure 2). The measurement model in CFA showed an adequate fit with the data (see Table 4). Based on the recommendation proposed by Hair et al. (2018), the CMIN/*df* value is less than 3, and most of the cut-off criteria of the model fit indices were also met. To test the validity of the measurement items, we checked for the standardised factor loadings of the items, which are significant ($p < .001$) and more than 0.50 (Hair et al., 2018) (see Table 2). Also, no major cross-loading arose, supporting the unidimensionality of the latent variables. The reliability of latent constructs was assessed using Cronbach alpha values. As suggested in the literature, the values were more than the cut-off criteria of 0.70

Table 4. Model Fit Indices.

Model Goodness of Fit Indices	Cut-Off Values	Final Measurement Model	References
χ^2/df	<3	2.088	
RMSEA	<0.08	0.051	
GFI	>0.90	0.941	Hair et al. (2018)
AGFI	>0.80	0.915	
NFI	>0.90	0.920	
CFI	>0.90	0.956	

Table 5. Factor Correlation Matrix, Cronbach Alpha (α), Composite Reliability (CR) and Average Variance Explained (AVE).

Construct	Cronbach α	CR	AVE	CO	T	WSD	SEC	CS
CO	0.903	0.910	0.718	0.847				
T	0.904	0.909	0.770	0.836	0.877			
WSD	0.903	0.903	0.757	0.802	0.763	0.870		
SEC	0.924	0.924	0.753	0.755	0.715	0.842	0.868	
CS	0.931	0.933	0.777	0.784	0.743	0.838	0.818	0.882

Note: Diagonal values (bold) show the square root of the AVE.

(see Table 5). Based on the procedure recommended by Fornell and Larcker (1981), we also assessed the composite reliability values of the constructs, which are higher than the minimum cut-off level of 0.70.

The values of average variance explained (AVE) were also more than their cut-off levels of 0.5 (Hair et al., 2006). Lastly, following the approach proposed by Fornell and Larcker (1981), we tested for the discriminant validity of the latent constructs. The authors suggest that the correlation of the constructs should have lower values than the square root of the construct's AVE values, which is the case in this study (see Table 5). As a whole, the CFA results suggest that the measurement items are reliable and valid.

Multiple Regression Analysis

After measuring the research model's fitness against various parameters, hypothesis testing was done using multiple linear regression analysis. The regression model shown in Table 6 contributed significantly and predicted 81.8% of variance (adjusted R^2) in customer satisfaction by security, website design, trust and convenience in OGS.

Table 7 shows the coefficient summary for the proposed regression model, which shows that security (= 0.306, $p = .001$), convenience (= 0.161, $p = .045$) and website design (= 0.418, $p = .001$) are significant predictors of online grocery behaviour. It shows that convenience, security and website design have an effect on the dependent variable, that is, customer satisfaction when shopping for groceries online. However, the findings indicate that trust has no significant impact on customer satisfaction. With the highest coefficient beta, 0.418, website

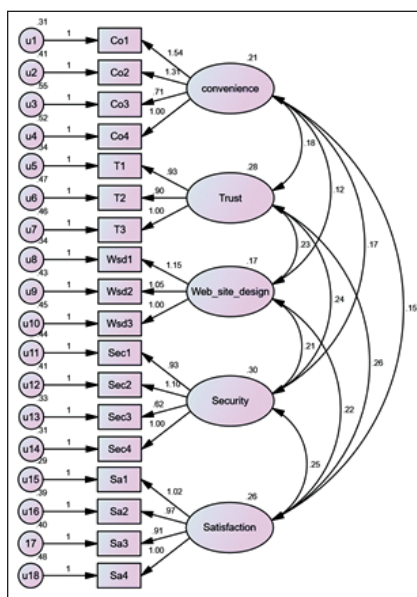


Figure 2. Confirmatory Factor Analysis of the Measurement Model.

Table 6. Model Summary for R Square.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.908a	0.824	0.818	0.60123

Note: Predictors: (Constant), convenience, security, trust, website design.

Table 7. Coefficient Summary.

Model	Standardised Coefficients Beta	Sig	Status
Security	0.306	0.001	Accepted
Website design	0.418	0.000	Accepted
Trust	0.073	0.404	Rejected
Convenience	0.161	0.045	Accepted

Note: Dependent variable: Customer satisfaction.

design is identified as the most important factor influencing customer satisfaction on OGS.

Conclusion and Implication

OGS is a brand-new way to get your favourite supermarket items for home consumption. Many online grocery companies have made successful and sustainable online grocery retailing a top priority in today’s highly competitive business environment, even though shopping online for groceries differs

significantly from general online shopping due to its perishable nature and product variety. As this channel continues to grow rapidly in the next years, the perceived benefits of OGS give businesses a competitive advantage in various ways. Thus, for both multichannel and pure-play food e-retailers, OGS remains both an opportunity and a big administrative problem. The goal of this study is to understand the customer's perspective on the decisive aspects of OGS.

The main objective of this study is to examine the key factors affecting customer satisfaction in OGS in the Indian context. In OGS, many factors affect customer satisfaction. The study has included several independent constructs, for example, convenience, trust, website design and security to examine the impact on customer satisfaction. The main findings of this study are consistent with past research and further extend it. This study has confirmed that convenience, website design and security are positively associated with customer satisfaction.

The findings indicate that convenience is related to customer satisfaction in OGS, which suggest that customers like to buy their groceries without any hassles, and easiness in searching for the grocery items, and ability to buy at any time of the day from anywhere improves their satisfaction. The finding is consistent with previous results (Aylott & Mitchell, 1998; Bauerová & Klepek, 2018). Furthermore, website design and security positively influence customer satisfaction. It suggests that customer satisfaction is highly affected by the online grocery's website design and the level of relevant and detailed information provided about the groceries. Studies also suggest that shoppers are more willing to buy groceries online if they find the payment transaction to be properly secured. Previous studies have also indicated similar results (Pechtl, 2003; Prabowo & Hindarwati, 2020). Online grocery retailers need to make sure that customers feel secure while purchasing from their website. When customers feel that a grocery website has used a state-of-art security system and their financial information will not be shared with others, they are more satisfied with the grocery shopping process.

Trust, on the other hand, is not significantly affecting customer satisfaction. This particular finding is not in line with the previous studies (Inman & Nikolova, 2017). The reason for this might be that our sample responses mostly belong to younger age and given the usage of the internet in the current era, they have access to sufficient information about brand, product quality, delivery process, etc., and have become quite comfortable in online shopping.

With the increased use of e-commerce adoption by SMEs, many grocery retailers have entered the market. Due to increased competition in the market, online grocery retailers need to find out new ways to increase customer satisfaction. The findings provide many strategies for online grocery retailers to improve their customer satisfaction in the OGS process. Online retailers also need to make sure that the customer data is safe and not leaked or shared with others in any possible way. Customer data and financial information safe are very important in online shopping as here everything is driven by technology. Further, convenience is another important factor in driving customer satisfaction. Retailers need to ensure that the company's website is easy to access and search for the products. The whole process of searching and buying groceries is quick and easy as customers are concerned about the time, they spend to shop products. Several payment

options should be given to the customers and transaction failure have a negative impact on customer satisfaction.

Theoretical and Managerial Implications

Our study confirms that TAM can still be used to describe online food buying. One important factor in developing a favourable opinion of OGS is website design. Our study approach is distinctive because it combines theoretical frameworks and illustrates a fresh perspective on how consumer satisfaction is developed—a perspective that was overlooked in earlier studies. The assumptions of the existing theories are extended by this method since it has been effective in enhancing our understanding of the factors that influence the intention to shop for groceries online. Our research confirms that convenience is related to customer satisfaction in OGS, implying that customers prefer to buy their groceries without any hassles, and that the ease of searching for grocery items, as well as the ability to buy at any time of day from anywhere, improves their satisfaction. Website design also has a positive influence on customer satisfaction. It implies that the design of the online grocery's website and the amount of relevant and detailed information provided about the groceries have a significant impact on customer satisfaction. These findings contribute to the existing literature by helping to understand the impact of customer satisfaction on OGS.

This study also contributes to the generation of managerial advice, as online grocery retailers must focus on developing a user-friendly website that provides consumers with an efficient and easy way to shop for groceries because shoppers need to experience a hassle-free process while searching for the products and product-related information on the website. They also need to ensure that the company's websites provide appropriate products and service suggestions to the shoppers and have a good range of products to offer to the customers. To summarise, if online grocery retailers want to increase the number of customers who shop online, they must first improve their attitude towards OGS by creating online solutions that are, above all else, useful and then develop customer loyalty by raising awareness and the calibre of the products and services offered.

Limitations and Future Research Directions

One of the limitations of this study is that it has considered only four factors that have an impact on customer satisfaction in the OGS process. There can always be other factors, for instance, individuals' characteristics, that can influence consumer satisfaction while shopping for groceries on the internet. Future studies can take other elements into the consideration and find the exact relationship of drivers of customer satisfaction in OGS. Apart from this, there is the possibility of the presence of some mediator or moderator variables, which might change the casual relationship among these factors. Understanding the customer needs will help the retailers to position their services and find an edge over competitors in this rapid growth of the online grocery industry.

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