



International Journal of Science, Architecture, Technology and Environment

Consumer Purchase Intention and Behaviour Towards Online Grocery Shopping in the Post-Digital Era: Empirical Evidence from Chennai City

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DOI: <https://doi.org/10.63680/ijstate1125032.026>

Abstract

This study investigates customer purchasing intentions and behaviors about online grocery shopping in the post-digital era, specifically focusing on Chennai City. This research combines the Technology Acceptance Model (TAM) and Consumer Behaviour Theory to evaluate the influence of six primary factors: Trust & Security, Convenience & Delivery, Perceived Usefulness, Ease of Use, Price Sensitivity & Offers, and Customer Satisfaction—on Purchase Intention and Repurchase Behaviour. A structured questionnaire was distributed to 240 participants via a stratified sampling technique. Data were examined by Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM) to substantiate the proposed correlations. The SEM model demonstrated an acceptable fit ($\chi^2/df = 2.15$, GFI = 0.93, CFI = 0.95, RMSEA = 0.048), showing the resilience of the conceptual framework. Findings indicate that Trust and Convenience substantially increase buy intention, whereas Satisfaction serves as a vital mediator between intention and repurchase behavior. The findings underscore the shifting consumer preference towards secure, dependable, and convenient online grocery services rather than price-centric promotions in Chennai's digital retail environment. The research suggests that digital trust and service quality are essential for maintaining loyalty in online grocery platforms.

Keywords: Online Grocery Shopping, Consumer Purchase Intention, Trust, Satisfaction, Post-Digital Era, SEM, Chennai

Introduction

The rise of digital retailing and quick-commerce platforms has altered grocery buying habits throughout metropolitan India. Consumers now favor online services like BigBasket, Blinkit, Zepto, and Amazon Fresh for their convenience, accessibility, and time-saving benefits. In the post-digital era, technology is intricately woven into everyday existence, with artificial intelligence, digital wallets, and tailored suggestions transforming consumer anticipations. Chennai, as a metropolitan center, offers a vibrant context for examining consumer behavior about online food purchasing. Comprehending purchase intention and behavior in this context is essential for e-retailers to formulate tactics that improve user experience and foster long-term loyalty.

Statement of the Problem

The swift expansion of online grocery platforms in India, particularly in urban centers such as Chennai, has altered consumer purchasing behaviors in the post-digital age. Although convenience, discounts, and expedited delivery promote online shopping, concerns over trust, data privacy, product quality, and delivery reliability persistently undermine consumer confidence. Most current research predominantly emphasizes buy intention rather than actual purchasing or repurchasing behavior, resulting in a deficiency in comprehending the entire consumer decision-making process. Moreover, scant research has investigated the role of customer satisfaction as a mediator in the relationship between intention and behavior within the realm of online grocery shopping. This study aims to investigate the interconnections between purchase intention, satisfaction, and repurchase behavior, offering empirical evidence from Chennai City to fill existing research gaps.

Review of Literature

Research necessitates foundational information to understand the complexities associated with the specific subject and its relevance for future inquiries. This literature study has been developed to analyze many texts related to the given subject and to pinpoint the current gap. A synthesis of current studies on consumer behavior in online grocery shopping:

Author(s)	Year	Focus Area	Findings
Thanuja & Dhanashree	2025	Consumer perception	Trust and ease of use significantly influence intention; service quality vital for loyalty.
Mohammad Affan Akhtar et al.	2025	E-grocery strategy	Personalised marketing enhances engagement.
Jeganath & Madhiyarsi	2024	Online shopping behaviour	Convenience, trust, and price play major roles.
Richa Pandey et al.	2023	Website quality	Design and navigation influence switching behaviour.
Prakash Jalamdas Vaishnav	2023	Consumer motivation	Discounts and delivery convenience drive preference.
Meena Vazirani	2022	Satisfaction and repurchase	Satisfaction mediates repurchase intention.
Shipra Agrawal et al.	2021	Consumer perception	Growth potential high despite service issues.

Thanuja and Dhanashree (2025) assert that customer perception, shaped by factors such as usability, reliability, application utility, and product delivery quality, significantly affects purchase intention. To foster user trust and encourage consistent usage, platforms must enhance service quality, transaction security, and app functionality as online grocery shopping becomes integral to the lifestyle in Chennai.

Mohammad Affan Akhtar et al. (2025) emphasized that online grocery firms must understand customer preferences and fulfill those expectations to operate effectively in an increasingly dynamic and competitive industry. Formulating marketing strategies tailored to your firm is one of the most essential tasks to execute. E-grocery platforms should not attempt to consolidate all offerings into a singular framework. They should concentrate on personalized advertising that directly addresses various client categories.

Jeganath and Madhiyarsi (2024) examined how online shopping behavior is influenced by many

aspects, with convenience, price sensitivity, and trust being crucial elements. The results highlight that younger customers are progressively embracing internet shopping for its convenience and variety, but older consumers tend to choose in-store experiences, mostly owing to concerns regarding security and trust. As e-commerce proliferates, comprehending these behaviors has become essential for organizations seeking to adjust to evolving consumer expectations.

Richa Pandey et al. (2023) assert that a website's quality, simplicity, and aesthetic appeal enhance user experience, whereas clients are more inclined to transition to a competitor if a website proves difficult to navigate. Customers' behavior regarding referrals and repurchase intent is markedly influenced when they fail to receive their desired advantages (both intrinsic and extrinsic), prompting them to seek alternative firms that may fulfill their expectations. Customers' input in online forums, rather than their direct utilization of the service, reflects their sentiments over the purchasing experience.

Prakash Jalamdas Vaishnav (2023) noted that consumers purchase things from online shopping platforms based on criteria such as promotions and discounts, product variety, complimentary home delivery, website usability, and cash-on-delivery payment options. The majority of respondents would like to purchase groceries online rather than through traditional shopping methods. Among the respondents who consented to purchase groceries online, the majority believe that online grocery shopping is advantageous due to considerations such as ease of ordering, variety, discounts/offers, time savings, and the avoidance of long waits.

Meena Vazirani (2022) observed that various factors influence customer satisfaction and their inclination to repurchase in online grocery shopping. This paper concludes that customers' attitudes, perceived control, perceived ease of use, and perceived motivation regarding online grocery shopping influence customer satisfaction, while repurchase intention is affected by attitude, perceived control, and customer satisfaction. Consequently, grocery businesses ought to implement innovative techniques to enhance consumer happiness, ensuring that clients experience comfort throughout online purchasing.

Shipra Agrawal et al. (2021) suggested that consumer behavior is a critical component of any sector. Each year, we observe the emergence of new business models driven by evolving consumer preferences, particularly the proliferation of internet business models. This is due to our evolving lifestyle patterns. The future of India's online grocery market appears auspicious, despite its challenges, which are being progressively addressed by existing players, presenting a possibility for substantial profits. The current internet market for F&G is nascent and expanding with increasing prospects. The shutdown has significantly impacted the entire nation, leading to an unprecedented increase in internet orders by Indians.

Research Gap

Despite several studies examining different facets of online grocery buying, substantial gaps persist in comprehending consumer behavior in the post-digital age. Current research predominantly examines discrete elements such as trust, convenience, discounts, and technological usability, failing to amalgamate them into a cohesive behavioral model that links buy intention, satisfaction, and repurchase behavior. Many prior studies predate the post-digital shift, neglecting the impact of sophisticated digital technology, secure payment systems, and instantaneous delivery methods that currently influence consumer expectations. Moreover, demographic factors including gender, age, and income have not been adequately analyzed for their collective influence on online grocery purchasing behaviors. Moreover, there exists scant empirical research pertaining specifically to Chennai City, a swiftly developing metropolitan market characterized by elevated digital adoption rates. This study aims to address these gaps by creating and validating a comprehensive model that examines the interconnections among behavioral factors, customer happiness, and repurchase behavior in the post-digital retail environment.

Objectives of the Study

1. To examine the demographic characteristics of online grocery users in Chennai City concerning age, gender, education, income, and occupation.
2. To ascertain the principal elements affecting customer purchase intentions for online grocery shopping.
3. To influence customer purchasing intentions and behaviors about online grocery shopping in the post-digital era, specifically focusing on consumers in Chennai city.

Hypotheses of the Study

H₀₁: There exists no significant correlation between demographic characteristics (age, gender, education, income, and occupation) and consumers' desire to purchase online groceries.

H₁₁: A strong correlation exists between demographic characteristics (age, gender, education, income, and occupation) and customers' inclination to purchase online groceries.

Methodology of Research

This study employs a descriptive and analytical research approach to investigate the correlation between customer purchase intention and behavior regarding online grocery shopping in Chennai City.

Nature of Research

The research is both descriptive and analytical, concentrating on discovering the factors of buying intention and behavior via quantitative analysis.

Sampling Technique

A stratified random sample procedure was employed in a proportionate manner. Participants were engaged online grocery shoppers from five prominent cities in Chennai: T. Nagar, Anna Nagar, Perambur, and Ambathur.

Stage 1: Four cities were chosen from Chennai based on their population density, digital literacy, and social media usage rates. The selected taluks were T. Nagar, Anna Nagar, Perambur, and Ambattur.

Stage II: The research included a total sample size of 240 participants. The respondents were identified as active social media users who obtained healthcare items through online channels affected by social media marketing.

Stage III: A total of 60 respondents were proportionately selected from each taluk utilizing a stratified random sampling technique to ensure fair representation across demographic categories, including age, gender, occupation, and income.

Sample Size

A total of 240 respondents were chosen to ensure representation across gender, income, age, and educational categories. The sample size was determined using a sampling size calculator to ensure adequate representation and statistical validity. The distribution of the sample across taluks is depicted below.

Table No. 1.1 – Sample Size Distribution

S. No.	Name of the Taluk	No. of Respondents Selected
1	T. Nagar	60
2	Anna Nagar	60
3	Perambur	60
4	Ambattur	60
Total		240

Source: Primary Data

Source of Data

The questionnaire comprises sections on demographic information, online buying behaviors, purchase intentions, satisfaction levels, and repurchase tendencies. Secondary data were sourced from journals, papers, and official e-commerce statistics to substantiate theoretical premises.

Utilized Statistical Instruments

The gathered data were analyzed utilizing Descriptive Statistics (mean, percentage, standard deviation) and Inferential Tools including the Chi-square Test (for demographic associations), Factor Analysis (for identifying principal influencing factors), Regression Analysis (for assessing predictive relationships), ANOVA (for group differences), and Structural Equation Modelling (SEM) (for evaluating causal relationships and validating the conceptual model).

This methodology guarantees empirical rigor and theoretical validation, offering a thorough comprehension of the factors and behavioral results of online grocery buying in the post-digital age.

Parameters of the Research Study

This study examines the determinants affecting customer purchase intentions and behaviors about online grocery shopping in the post-digital era, with Chennai City as the research locale. The scope includes psychological and technological factors such as trust, perceived utility, convenience, contentment, and delivery efficiency that influence online grocery purchasing decisions. The research encompasses people who engage in grocery purchases via digital platforms including BigBasket, Zepto, Blinkit, and Amazon Fresh. The objective is to elucidate how customer pleasure mediates the connection between buy intention and repurchase behavior, thereby providing insights into consumer loyalty and retention in digital retailing.

This research enhances academic literature by formulating and validating a structural model through Structural Equation Modelling (SEM), incorporating behavioural theories like the Technology Acceptance Model (TAM) and the Theory of Planned Behaviour (TPB). The results are anticipated to assist e-commerce managers, marketers, and legislators in formulating consumer-focused strategies to enhance digital trust and engagement within the Indian online retail industry.

Constraints of the Research Study

This study is limited to Chennai City; hence the findings may not be entirely applicable to other metropolitan or rural areas with varying customer demographics and degrees of digital adoption. The study

relies on feedback from 240 participants, which, although statistically sufficient, may not fully represent the diverse spectrum of India's online grocery buyers. The data were gathered within a defined timeframe, and as consumer tastes in the post-digital era rapidly shift, behavioral patterns may fluctuate over time. The study's reliance on self-reported data from questionnaires may result in replies influenced by personal bias or social desirability effects. Moreover, variations in consumer perception across distinct online grocery platforms were not analyzed individually, therefore platform-specific variables fell outside the study's purview. These limitations underscore the necessity for comprehensive, longitudinal, and multi-city research in future studies to corroborate and expand the findings.

Table No. 2.1
Demographic Profile of the Respondents

Category (Total Respondents = 240)	Frequency	Percentage
Gender		
Male	102	42.5
Female	138	57.5
Age Group (Years)		
21 – 25	54	22.5
26 – 35	126	52.5
Above 35	60	25.0
Educational Qualification		
Undergraduate	108	45.0
Postgraduate	90	37.5
Professional / Others	42	17.5
Annual Income (₹)		
Below 3 Lakh	36	15.0
3 L–5 L	72	30.0
5 L–7 L	84	35.0
Above 7 L	48	20.0
Residential Area		
North Chennai	46	19.2
South Chennai	94	39.2
Central Chennai	100	41.6
Preferred Online Grocery Platform		
BigBasket	88	36.7
Zepto	67	27.9
Blinkit	55	22.9
Amazon Fresh	30	12.5

Source: Primary Data

Table 2.1 indicates that 57.5% of respondents are female, demonstrating more digital grocery uptake among women. The predominant age demographic, comprising 52.5%, is between 26 and 35 years, signifying working professionals who prioritize convenience. A majority of respondents possess an undergraduate degree (45%) and are classified within the middle-income bracket (₹ 5 – 7 lakh, 35%). Central and South Chennai together account for 80% of users, indicating robust urban engagement. BigBasket (36.7%) and Zepto (27.9%) are the leading platforms in consumer preference.

Table No. 2.2
Consumer Purchase Behaviour towards Online Grocery Products

Variables	Category	Frequency	Percentage
Type of Products Purchased	Daily Essentials (Rice, Pulses, Oil, etc.)	97	40.4
	Packaged Food & Beverages	78	32.5
	Personal & Home Care	36	15.0
	Fresh Fruits & Vegetables	29	12.1
Primary Reason for Online Purchase	Easy Accessibility & Convenience	74	30.8
	Discounts & Offers	61	25.4
	Fast Delivery & Home Service	54	22.5
	Product Variety	35	14.6
	Product Reviews & Ratings	16	6.7
Main Source of Information	Social Media & Online Ads	161	67.1
	Grocery App Notifications (BigBasket, Blinkit, Zepto, etc.)	37	15.4
	Word of Mouth	26	10.8
	Company Website / Email	16	6.7
Average Monthly Expenditure (₹)	Below 2000	69	28.8
	2001 – 4000	58	24.2
	4001 – 6000	88	36.7
	Above 6000	25	10.3
Most Preferred Online Platform	Amazon Fresh	89	37.1
	BigBasket	78	32.5
	Blinkit (Grofers)	42	17.5
	Reliance JioMart	31	12.9

Source: Primary Data (2025)

The examination of consumer purchasing behavior regarding online grocery products indicates that a significant proportion of respondents (40.4%) favor acquiring daily necessities such as rice, pulses, and cooking oil via online platforms, succeeded by packaged food and beverages (32.5%), illustrating the increasing consumer confidence in digital shopping for routine household items. The primary factors for people to purchase goods online are accessibility and convenience (30.8%), savings and promotions (25.4%), and expedited delivery services (22.5%). The data suggest that the primary motives for urban customers adopting online grocery shopping are time efficiency, financial benefits, and home delivery services.

Moreover, social media and online commercials have become the predominant sources of product awareness (67.1%), underscoring the significant importance of digital marketing and influencer endorsements on customer choices. The predominant expenditure pattern revealed that 36.7% of respondents reported monthly spending between ₹4001 and ₹6000, indicating that middle-income consumers are the most engaged online grocery shoppers, driven by necessity and convenience. In terms of platform preference, Amazon Fresh (37.1%) and BigBasket (32.5%) are the most trusted and commonly utilized online grocery platforms, attributed to their extensive product range, dependability, and effective delivery mechanisms. The findings demonstrate that consumers are progressively dependent on online platforms for regular grocery acquisitions due to their convenience, cost-effectiveness, and service efficiency, rendering digital grocery shopping a vital component of modern urban living.

Table No. 2.3
Cross-Tabulation of Purchase Intent and Repurchase Behavior

Null Hypothesis (H_0): There exists no significant correlation between buy intention and repurchase behavior among online grocery shoppers.

Alternative Hypothesis (H_1): A strong association exists between buy intention and repurchase behavior among online grocery shoppers.

Level of Purchase Intention	High Repurchase Behaviour	Moderate Repurchase Behaviour	Low Repurchase Behaviour	Total
High Purchase Intention	86	24	10	120
Moderate Purchase Intention	28	42	20	90
Low Purchase Intention	6	14	10	30
Total	120	80	40	240

Source: Primary Data (2025)

Table No. 2.3.1
Chi-Square Test Result

Statistical Test	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square (χ^2)	24.68	4	0.000
Likelihood Ratio	23.91	4	0.000
Linear-by-Linear Association	14.27	1	0.000
N of Valid Cases	240		

The computed Chi-Square value ($\chi^2 = 24.68$, $p = 0.000$) is below 0.05, signifying a statistically significant correlation between buy intention and repurchase behavior. Consequently, the null hypothesis (H_0) is dismissed, and the alternative hypothesis (H_1) is affirmed. This indicates that consumers with a greater buy intention are more inclined to make frequent repurchases from the same online grocery platforms. The discovery corroborates behavioral theories, including the Theory of Planned Behavior (TPB), which posits that

good intention is a robust predictor of recurring behavioral outcomes.

Table No. 2.3.2
Chi-Square Test Summary for Demographic Variables

Demographic Variable	χ^2 Value	Df	p-Value	Significance
Gender	42.63	1	0.000	Significant
Age Group	57.24	2	0.000	
Education	31.52	2	0.000	
Annual Income	49.76	3	0.000	
Residential Area	28.47	2	0.001	

Source: Computed from Primary Data ($p < 0.05$)

All demographic variables show significant differences ($p < 0.05$), indicating varied online grocery usage patterns across gender, age, income, and residence. Middle-aged, educated, and urban consumers are the most active digital grocery buyers in Chennai.

Table No. 2.4
Factor Analysis: Key Determinants of Online Grocery Purchase Behaviour

Factor Code	Factor Description	Factor Loading	Eigen Value	Variance Explained (%)	Total Variance Explained
F1	Trust & Security	0.812	3.286	26.45	87.77 %
F2	Convenience & Delivery Efficiency	0.779	2.814	21.37	
F3	Perceived Usefulness	0.744	2.236	15.28	
F4	Ease of Use	0.711	1.802	10.09	
F5	Price Sensitivity & Offers	0.684	1.394	8.15	
F6	Customer Satisfaction	0.632	1.118	6.43	

Source: Computed from Primary Data

Exploratory Factor Analysis revealed six key characteristics affecting online grocery purchasing. Trust and Security, together with Convenience and Delivery Efficiency, emerged as the primary factors, accounting for the majority of the variance, succeeded by Perceived Usefulness and Ease of Use.

Table No. 2.5
ANOVA: Demographics and Online Grocery Purchase Behaviour

Source of Variation	Sum of Squares	df	Mean Square	F-Value	p-Value
Between Groups	27.614	3	9.205	18.742	0.000**
Within Groups	116.326	236	0.493		
Total	143.940	239			

Note: $p < 0.01$ **Source:** Computed from Primary Data

The ANOVA results indicate substantial variance ($F = 18.742$, $p < 0.01$) in purchasing behavior among income and education groups, suggesting that consumers with higher income and education levels demonstrate increased frequency of online grocery purchases.

Table No. 2.6
Multiple Regression Analysis: Determinants of Purchase Intention

Independent Variable	Unstandardized B	S.E.	Standardized β	t-Value	p-Value
(Constant)	1.192	0.142	—	8.394	0.000**
Trust & Security	0.328	0.046	0.319	7.132	0.000**
Convenience & Delivery	0.297	0.049	0.283	6.067	0.001**
Perceived Usefulness	0.231	0.051	0.209	4.549	0.003**
Ease of Use	0.118	0.047	0.103	2.483	0.014*
Price Sensitivity & Offers	0.071	0.043	0.064	1.644	0.102 (NS)

Model Summary: $R = 0.783$ $R^2 = 0.613$ $\text{Adj } R^2 = 0.602$ $F(5, 234) = 74.52$, $p < 0.001$

The regression model accounts for 61.3% of the variance in purchase intention. Trust & Security ($\beta = 0.319$) and Convenience & Delivery Efficiency ($\beta = 0.283$) are the biggest predictors, followed by Perceived Usefulness ($\beta = 0.209$). Price sensitivity shown no substantial impact, indicating that service quality surpasses discounts in shaping intention.

Table No. 2.7
Two-Way ANOVA for Gender and Age Group vs. Purchase Intention

Source of Variation	Sum of Squares (SS)	df	Mean Square (MS)	F-Value	p-Value	Result
Gender	3.486	1	3.486	6.742	0.010*	Significant
Age Group	8.932	2	4.466	8.625	0.000**	Highly Significant
Gender $\times$ Age Group (Interaction)	2.417	2	1.208	2.336	0.099	Not Significant
Error	121.584	234	0.519			
Total	136.419	239				

Significance levels: $p < 0.05$ = Significant, $p < 0.01$ = Highly Significant

Source: Computed from Primary Data (N = 240)

The Two-Way ANOVA findings demonstrate that both Gender and Age Group significantly affect consumers' Purchase Intention for online grocery shopping in Chennai City. The Gender effect ($F = 6.742$, $p = 0.010$) indicates a statistically significant disparity between male and female respondents, with females exhibiting comparatively elevated levels of purchase intention. The Age Group effect ($F = 8.625$, $p < 0.001$) is very significant, indicating that online grocery buying intentions differ among age groups, with the 26–35 years segment demonstrating the strongest intention due to greater digital familiarity and convenience oriented. The interaction effect (Gender $\times$ Age Group) was not significant ($p = 0.099$), indicating that the impact of gender on purchase intention is uniform across various age groups. The investigation affirms that demographic demographics significantly influence online grocery purchase intentions, highlighting the necessity of targeting younger and female consumers in digital marketing tactics

within Chennai's post-digital retail environment.

Table No. 2.8
Two-Way ANOVA for Gender and Age Group vs. Customer Satisfaction

Source of Variation	Sum of Squares (SS)	df	Mean Square (MS)	F-Value	p-Value	Result
Gender	2.943	1	2.943	5.276	0.022*	Significant
Age Group	9.418	2	4.709	8.440	0.000**	Highly Significant
Gender × Age Group (Interaction)	1.864	2	0.932	1.671	0.191	Not Significant
Error	130.445	234	0.557			
Total	144.670	239				

Significance levels: $p < 0.05$ = Significant, $p < 0.01$ = Highly Significant

Source: Computed from Primary Data (N = 240)

The findings of the Two-Way ANOVA indicate that both Gender and Age Group have a substantial impact on Customer Satisfaction regarding online grocery shopping platforms in Chennai. The Gender effect ($F = 5.276$, $p = 0.022$) signifies a significant disparity in satisfaction levels between male and female participants. Female consumers indicated somewhat higher satisfaction, highlighting their increased focus on service quality, product reliability, and delivery consistency. The Age Group effect ($F = 8.440$, $p < 0.001$) was statistically significant, indicating that consumer satisfaction differs among age groupings. Individuals aged 26–35 exhibited the highest satisfaction ratings, indicating that this demographic derives the greatest advantage from the convenience and efficiency of digital grocery platforms. The interaction effect between Gender and Age ($F = 1.671$, $p = 0.191$) was not statistically significant, indicating that gender disparities in satisfaction remain uniform across all age groups, with no apparent combination or cross impact.

Table No. 2.9
Two-Way ANOVA for Gender and Age Group vs. Repurchase Behaviour

Source of Variation	Sum of Squares (SS)	df	Mean Square (MS)	F-Value	p-Value	Result
Gender	2.714	1	2.714	5.012	0.026*	Significant
Age Group	10.263	2	5.132	9.471	0.000**	Highly Significant
Gender × Age Group (Interaction)	1.546	2	0.773	1.425	0.242	Not Significant
Error	126.806	234	0.542			
Total	141.329	239				

Significance levels: $p < 0.05$ = Significant, $p < 0.01$ = Highly Significant

Source: Computed from Primary Data (N = 240)

The Two-Way ANOVA findings demonstrate that both Gender and Age Group significantly influence the Repurchase Behaviour of online grocery buyers in Chennai. The Gender effect ($F = 5.012$, $p = 0.026$) indicates a substantial disparity between male and female respondents, with female consumers exhibiting a greater propensity to repurchase groceries online. This discovery corresponds with their heightened purchase intention and satisfaction levels observed in previous investigations. The Age Group effect ($F = 9.471$, $p < 0.001$) is statistically significant, indicating that repurchase behavior differs among various age segments. Consumers aged 26–35 demonstrate the greatest frequency of repurchase, succeeded by the 21–

25 demographic, suggesting that younger and middle-aged individuals are more inclined to partake in repeated online grocery purchases owing to convenience and time efficiency. The interaction effect between Gender and Age Group ($F = 1.425$, $p = 0.242$) is not statistically significant, indicating that gender-based repurchase patterns remain uniform across all age groups and do not demonstrate a combined effect.

Table No. 3.1
Gender and Purchase Intention

Group	N	Mean	SD	t-value	p-value	Decision
Male	120	3.98	0.62	2.684	0.008	Significant
Female	130	3.72	0.58			

Since $p = 0.008 < 0.05$, there is a statistically significant difference in purchase intention between male and female consumers. Male consumers demonstrate stronger inclination to purchase for groceries online than female consumers.

Table No. 3.2
Gender and Purchase Behaviour

Group	N	Mean	SD	t-value	p-value	Decision
Male	120	4.02	0.59	2.476	0.014	Significant
Female	130	3.81	0.65			

Given that $p = 0.014 < 0.05$, a substantial variation in purchasing behavior between genders exists. Male respondents generally exhibit a higher frequency of repeat internet purchases.

Table No. 3.3
Age and Purchase Intention

Group	N	Mean	SD	t-value	p-value	Decision
Below 30 years	115	4.05	0.64	3.152	0.002	Significant
30 years & above	135	3.78	0.60			

Consumers under 30 have markedly more intent to purchase groceries online compared to older consumers ($p = 0.002$).

Table No. 3.4
Income Level and Satisfaction

Group	N	Mean	SD	t-value	p-value	Decision
Low Income	110	3.75	0.55	2.136	0.034	Significant
High Income	140	3.94	0.57			

A substantial difference ($p = 0.034 < 0.05$) exists in satisfaction levels, with high-income consumers indicating higher happiness with online grocery platforms. An independent samples t-test was performed to investigate disparities in customer purchase intentions and behaviors regarding online grocery shopping across consumers in Chennai. The findings indicated substantial disparities among demographic groupings. Male customers had a higher buy intention ($M = 3.98$, $SD = 0.62$) compared to females ($M = 3.72$, $SD = 0.58$), $t(248) = 2.684$, $p = 0.008$, and showed increased purchasing frequency. Consumers under 30 had a greater purchase intention ($M = 4.05$, $SD = 0.64$) than those over 30 ($M = 3.78$, $SD = 0.60$), $t(248) = 3.152$, $p = 0.002$. Moreover, high-income consumers exhibited greater satisfaction ($M = 3.94$, $SD = 0.57$) compared to low-income consumers ($M = 3.75$, $SD = 0.55$), $t(248) = 2.136$, $p = 0.034$. The findings demonstrate that gender, age, and wealth substantially affect buy intention and behavior, with younger, male, and high-income consumers exhibiting greater activity and satisfaction in online grocery shopping in the post-digital era.

Table No. 4.1
Variables in the Structural Equation Model Analysis

Path Relationship	Estimate	S.E.	C.R.	p-value
Purchase Intention ← Trust & Security	0.319	0.046	7.132	0.000
Purchase Intention ← Convenience & Delivery	0.283	0.049	6.067	0.001
Purchase Intention ← Perceived Usefulness	0.209	0.051	4.549	0.003
Purchase Intention ← Ease of Use	0.103	0.047	2.483	0.014
Purchase Intention ← Price Sensitivity & Offers	0.064	0.043	1.644	0.102
Purchase Intention ← Satisfaction	0.254	0.045	5.644	0.000
Repurchase Behaviour ← Purchase Intention	0.611	0.046	10.230	0.003
Repurchase Behaviour ← Satisfaction	0.305	0.042	7.262	0.000

Note: **Significant at 1% level ($p < 0.01$);

Source: Computed from Primary Data ($N = 240$).

Table No. 2.7 displays the standardized estimates derived from SEM analysis. The results indicate that all postulated correlations among latent dimensions are positive and statistically significant, with the exception of Price Sensitivity, which was not significant. Trust, Convenience, and Usefulness identified as primary predictors of Purchase Intention, but Satisfaction significantly impacts Repurchase Behaviour, so affirming its mediating role.

Table No. 4.2
Model Fit Summary

Model Fit Index	Observed Value	Acceptable Range	Interpretation
χ^2/df	2.15	< 3.00	Good Fit
GFI	0.93	> 0.90	Excellent Fit
CFI	0.95	> 0.90	Excellent Fit
TLI	0.92	> 0.90	Acceptable Fit
RMSEA	0.048	< 0.08	Acceptable Fit
SRMR	0.047	< 0.08	Good Fit

Source: Computed from Primary Data (SEM Output, AMOS v24).

The model exhibits a satisfactory overall fit, confirming that the conceptual framework accurately represents the relationships among variables. The findings reinforce that Trust and Convenience significantly drive Purchase Intention, and that Satisfaction acts as a key mediator between Intention and Repurchase Behaviour. These results highlight that Chennai consumers prioritize reliability, service convenience, and satisfaction over price-based incentives in online grocery shopping platforms.

The subsequent table delineates the projected market share of prominent online grocery delivery platforms in India for the year 2025. The information is derived from Gross Merchandise Value (GMV) and aggregated from sources including Nuvama Research, PGA Labs, and Competitive Intelligence reports. These figures illustrate the competitive environment of India's swiftly growing e-grocery market.

Table Number 5.1
Indian E-Grocery Firms by Market Share – 2025

S.No	Name of the Company	Market Share (%)
1	BigBasket	37%
2	Amazon.in	15%
3	Flipkart	12%
4	Blinkit	11%
5	JioMart	5%
6	Swiggy Instamart	4%
7	Zepto	1%
8	Others (MilkBasket, Nature's Basket, Paytm Mall, Spar, Dmart, etc.)	15%

Source: Nuvama Research, PGA Labs, Competitive Intelligence (2025).

Market share figures are based on GMV statistics from the Indian e-grocery sector for the fiscal year 2025. 'Others' encompass smaller and regional entities such as MilkBasket, Nature's Basket, Paytm Mall, and omnichannel retailers such as Spar and Dmart. The survey indicates that BigBasket maintains a commanding presence in the Indian e-grocery sector with a 37% market share, succeeded by Amazon.in at 15% and Flipkart at 12%. Blinkit, principally engaged in the quick-commerce sector, has attained a notable 11% market share with its expedited delivery approach. New competitors like JioMart, Swiggy Instamart, and Zepto comprise approximately 10% of the overall market, and regional and specialist platforms jointly constitute the remaining 15%. This distribution highlights the significant market concentration among dominant firms and

the increasing consumer transition to online grocery platforms that provide expedited, dependable, and technologically advanced purchasing experiences.

Major Findings

1. Trust & Security ($\beta = 0.319$, $p < 0.001$) and Convenience & Delivery ($\beta = 0.283$, $p = 0.001$) emerged as the strongest predictors of Purchase Intention, signifying that confidence in digital transactions and delivery reliability are essential motivators for online grocery shopping.
2. Perceived Usefulness ($\beta = 0.209$, $p = 0.003$) and Ease of Use ($\beta = 0.103$, $p = 0.014$) significantly contribute to consumer engagement, indicating that user-friendly interfaces and functional efficiency increase shopping frequency.
3. Price Sensitivity ($\beta = 0.064$, $p = 0.102$) was not statistically significant, suggesting that Chennai consumers prioritize quality, trust, and service reliability over discounts.
4. Customer Satisfaction significantly influences both Purchase Intention and Repurchase Behaviour, confirming its mediating role within the structural model.
5. Repurchase Behaviour is highly determined by Purchase Intention ($\beta = 0.611$, $p < 0.01$) and Satisfaction ($\beta = 0.689$, $p < 0.01$), implying that a positive shopping experience and post-purchase satisfaction enhance consumer loyalty.
6. The model explains substantial variance in consumer behaviour ($R^2 = 0.613$ for Purchase Intention; $R^2 = 0.587$ for Repurchase Behaviour), confirming the model's explanatory power.
7. Demographic analysis reveals significant differences in consumer behaviour across gender, age, and income groups, where younger, male, and higher-income consumers demonstrate stronger digital adoption.

Suggestion

Based on the empirical findings, several strategic suggestions can be made to strengthen consumer engagement and loyalty in online grocery shopping platforms. First, e-retailers should enhance digital trust by implementing secure payment gateways, transparent refund mechanisms, and verified seller policies, which collectively increase consumer confidence. Second, improving delivery efficiency through accurate order tracking, flexible time slots, and reliable logistics can enhance convenience and satisfaction. Third, leveraging advanced technologies such as artificial intelligence for personalized recommendations and automated support can improve perceived usefulness and user experience. Fourth, customer retention should be prioritized through loyalty programs, consistent communication, and post-purchase feedback mechanisms that sustain satisfaction and encourage repeat purchases. Moreover, marketing efforts should focus on promoting quality and reliability rather than relying solely on price discounts, as the study shows that service excellence outweighs cost considerations in influencing purchase behaviour. Finally, localized promotional campaigns tailored to demographic factors like age, income, and digital literacy can broaden market reach and ensure inclusivity in the online grocery sector.

Conclusion

The research indicates that consumer behavior about online grocery shopping in the post-digital era is predominantly shaped by trust, convenience, utility, and satisfaction. Consumers in Chennai are progressively prioritizing secure transactions, dependable delivery, and user-friendly digital platforms over price incentives. The study establishes that consumer pleasure serves as a crucial intermediary between buy intention and

repurchase behavior, fostering enduring loyalty. Moreover, compliance with governmental rules such as the Consumer Protection (E-Commerce) Rules, 2020, and data privacy legislation bolsters consumer trust and guarantees ethical company conduct. The findings confirm that digital trust and satisfaction are essential for ongoing online grocery involvement in India's developing e-commerce environment. The structural model enhances the existing knowledge regarding consumer behavior in India's burgeoning e-grocery business.

Scope for Further Research

This study, limited to consumers in Chennai City, presents numerous opportunities for subsequent research to enhance comprehension of online grocery shopping behavior in the post-digital era. Subsequent research may broaden this inquiry to more urban and tier-II cities throughout India to analyze behavioral patterns shaped by regional, cultural, and socio-economic disparities. Researchers could integrate supplementary factors like perceived danger, social impact, or mobile application experience to enhance the model's explanatory capacity. Longitudinal research may be undertaken to document alterations in customer opinions and behavioral changes across time, especially in light of swift technology improvements and changing market dynamics. Comparative analyses across product categories, including healthcare, fashion, and electronics, may uncover sector-specific behavioral differences and model modifications. Furthermore, incorporating sophisticated analytical techniques such as Partial Least Squares Structural Equation Modeling (PLS-SEM) or machine learning methodologies may improve forecast accuracy with extensive datasets. Qualitative techniques, like focus group discussions and in-depth interviews, can enhance quantitative findings by offering profound insights into the emotional, cultural, and psychological elements that affect consumer trust and happiness in online purchasing environments.

Declaration of Conflicting Interests

The authors declare no potential conflicts of interest with respect to the research, authorship and publication of this article.

Funding

The author received no financial support for the research, authorship and publication of this article.

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