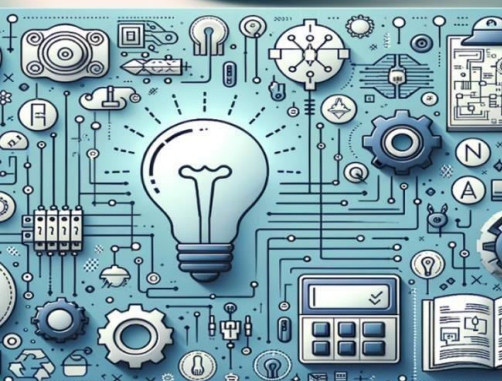


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A Study on E-Grocery Buying Behaviour

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ABSTRACT: This study examines consumer behaviour in the context of online grocery shopping, known as e-grocery. As digital platforms gain prominence, especially after the COVID-19 pandemic, understanding factors like convenience, trust, product freshness, and delivery speed becomes vital. Data was collected from 82 respondents using structured questionnaires. Tools such as percentage analysis, Chi-square, Mann-Whitney U test, and correlation were employed. The results reveal that younger, urban consumers dominate the e-grocery segment and value speed and digital convenience, though concerns about product quality and delivery charges persist. These insights can guide e-grocery providers to improve their services and better meet consumer expectations.

KEYWORDS: E-grocery, Consumer Behaviour, Online Shopping, Digital Retail, Customer Satisfaction

I. INTRODUCTION

The rise of digital commerce has dramatically reshaped retail. E-grocery, the online purchase of groceries, is a growing segment driven by changing lifestyles and widespread internet access. Major players like BigBasket, Blinkit, and JioMart have popularized app-based grocery shopping. During the pandemic, demand surged due to lockdowns and health concerns, creating new habits.

E-grocery appeals for its convenience—users can shop anytime and receive goods at their doorstep. Features like saved shopping lists, real-time tracking, and secure digital payments enhance usability. However, challenges such as product quality, late deliveries, and lack of trust persist, especially among older consumers. Understanding these behavioural patterns is essential to improve services and ensure inclusive access.

1.1 REVIEW OF LITERATURE

Davis (1989) introduced the Technology Acceptance Model (TAM), suggesting that perceived usefulness and ease of use are key factors in adopting new technologies, including online shopping platforms.

Pavlou (2003) expanded TAM by incorporating trust and perceived risk, which are especially relevant for online grocery purchases where product evaluation is not possible before delivery.

Park and Kim (2003) found that website quality, including layout, loading speed, and information accuracy, positively affects customer satisfaction and loyalty in e-commerce.

Gefen et al. (2003) emphasized that trust, alongside user familiarity with an interface, significantly impacts a consumer's willingness to shop online.

Hansen (2008) applied the Theory of Planned Behaviour to online grocery shopping, demonstrating that attitudes, perceived control, and subjective norms influence purchasing intentions.

Bhatti (2020) focused on Indian consumers and highlighted that price discounts, digital literacy, and app usability are major determinants of online grocery adoption in metro and tier-2 cities.

1.2 NEED FOR THE STUDY

As more consumers shift to online grocery platforms, understanding their buying behaviour becomes essential. Retailers face challenges like delivery issues, product returns, and customer churn. Analyzing consumer preferences



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helps design better digital platforms, reduce dissatisfaction, and increase adoption. The study aims to identify patterns, motivations, and barriers faced by e-grocery users.

1.3 OBJECTIVES OF THE STUDY

Primary Objective:

- To analyze the behavioral patterns and preferences of e-grocery consumers.

Secondary Objectives:

- To identify factors such as trust, price sensitivity, and convenience that influence purchase decisions.
- To study the role of demographics in e-grocery adoption.
- To assess consumer satisfaction and highlight key pain points.

1.4 SCOPE OF THE STUDY

This study focuses on users of e-grocery platforms in urban and semi-urban regions. It considers consumer behaviour regarding platform choice, payment methods, delivery expectations, and trust issues. The research is limited to respondents in Tamil Nadu and reflects behaviours typical to developing urban areas in India.

1.5 RESEARCH METHODOLOGY

Research Design:

This study adopts a descriptive research design to explore consumer buying behaviour toward e-grocery platforms. The approach allows for a detailed examination of consumer expectations, satisfaction levels, and decision-making factors.

Sampling Technique:

The sampling method used in this study is non-probability purposive sampling, focusing on individuals with experience using e-grocery platforms. The sample represents varied age groups, income brackets, and residential backgrounds.

Sample Size:

A total of 82 respondents participated in this study. Data was collected via an online survey shared through email and social media platforms.

Data Collection Tool:

A structured Google Form was employed to gather primary data. The questionnaire included multiple-choice and Likert-scale questions designed to assess shopping patterns, preferences, and satisfaction levels.

Statistical Tools Used:

- Percentage Analysis
- Chi-square Test
- Mann-Whitney U Test
- Spearman's Rank Correlation
- Weighted Average Mean

LIMITATIONS OF THE STUDY

- **Limited Sample Size:** With only 82 respondents, the findings may not reflect national trends or fully capture rural perspectives.
- **Sampling Bias:** The purposive sampling approach may overrepresent digitally active users, especially from urban and semi-urban areas.
- **Self-Reported Data:** The data is subject to personal biases, recall errors, and varying interpretations by respondents.
- **Platform Representation:** While major platforms were considered, the study may not fully capture experiences from regional or niche e-grocery providers.
- **Time Constraint:** The survey period was brief, potentially overlooking behavioural shifts during festive or seasonal periods.



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II. DATA ANALYSIS & INTERPRETATION

2.1 PERCENTAGE ANALYSIS

Category	Key Findings
Age Group	67% aged 18–25, 22% aged 26–35, 11% aged 36 and above
Gender	63% Female, 37% Male
Monthly Income	37% earn < ₹20,000; 26% earn ₹20,001–₹50,000; 37% earn > ₹50,000
Location	56% Urban, 28% Rural, 16% Semi-Urban
Household Size	39% have 3–4 members, 27% have 2 members, 18% live alone, 16% have 5+ members
Satisfaction Level	71% Satisfied or Highly Satisfied, 15% Dissatisfied
Trust in Freshness	55% Satisfied, 29% Neutral, 16% Dissatisfied
Shopping Frequency	30% shop 4–5 times/week, 26% shop 2–3 times/week, 27% rarely, 17% once/week
Main Challenges	46% Quality issues, 28% High delivery charges, 13% Delivery delays
Platform Preference	50% use delivery apps, 17% store websites, 17% online marketplaces
Delivery Preference	Speed
	32% Same-day, 28% Next-day, 23% within 2–3 days, 17% No preference
Payment Method	39% Digital wallets, 37% COD, 13% Cards, 11% Buy Now, Pay Later

2.1 STATISTICAL ANALYSIS

2.2.1 Chi-Square Test

Association Between Payment Method and Willingness to Pay Membership Fee



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Statistic	Value
Pearson Chi-Square	14.251
Degrees of Freedom (df)	6
p-value	0.027

Interpretation: The p-value of 0.027 indicates a significant association between payment method and willingness to pay for membership. Consumers who prefer digital payments are more likely to opt for paid services that offer convenience, such as free delivery or priority support.

2.2.2 Spearman's Rank Correlation

Correlation Between Household Size and Frequency of Grocery Shopping

Correlation Type	Coefficient (r)	p-value
Pearson's r	0.267	0.015
Spearman's rho	0.287	0.009

Interpretation: Both correlations are positive and statistically significant, indicating that as household size increases, so does the frequency of online grocery purchases. Larger families tend to have higher and more regular demand, influencing their shopping habits.

III. SUMMARY OF FINDINGS, SUGGESTION

3.1 FINDINGS

1. Young adults (18–25) form the majority of online grocery consumers.
2. Urban users show greater adoption of app-based grocery platforms.
3. Most users prefer digital wallets and COD over card payments.
4. A significant number of users are satisfied with the convenience and ease of e-grocery.
5. Concerns over product quality and delivery timing persist.
6. Larger households tend to shop more frequently online.
7. Payment preference influences membership subscription interest.
8. Trust in product freshness is a key satisfaction driver.

3.2 SUGGESTIONS

1. Improve product quality assurance and return mechanisms.
2. Offer tiered memberships with benefits like free delivery.
3. Expand delivery networks to reduce delays in semi-urban zones.
4. Integrate clear tracking features and delivery alerts.
5. Ensure availability of multiple secure payment options.
6. Implement targeted discounts and loyalty programs.
7. Encourage verified reviews and ratings to boost consumer trust.
8. Train delivery personnel and invest in logistics efficiency.



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IV. CONCLUSION

The study confirms that e-grocery platforms are widely used, especially by younger consumers in urban settings. Convenience, speed, and digital payment ease drive their popularity. However, product freshness and delivery quality remain concerns. Statistical analysis shows that household size and payment preference influence user behaviour. Consumers value secure platforms, real-time tracking, and responsive service. Addressing these areas can significantly enhance satisfaction. Retailers must prioritize quality, flexible policies, and loyalty programs. Building trust and offering tailored services will help sustain long-term customer relationships.

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