



To cite this article: Swapnil David Minz, Dr. Julius Aind and Dr. Ajay Kumar (2026). GROWTH DYNAMICS AND FINANCIAL SUSTAINABILITY OF INSTANT GROCERY DELIVERY SERVICES: AN EMPIRICAL STUDY OF RANCHI, International Journal of Research in Commerce and Management Studies (IJRCMS) 8 (3): 655-672 Article No. 782 Sub Id 1306

GROWTH DYNAMICS AND FINANCIAL SUSTAINABILITY OF INSTANT GROCERY DELIVERY SERVICES: AN EMPIRICAL STUDY OF RANCHI

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DOI: <https://doi.org/10.38193/IJRCMS.2026.8344>

ABSTRACT

Instant grocery delivery services also known as Quick commerce is a new type of retail business model which has become popular and grown rapidly in recent years. The quick commerce companies after successfully gaining momentum in the metropolitan cities of India are expanding to the Tier-2 markets. This study focuses on understanding the growth dynamics and financial sustainability of the instant grocery delivery services in the market of a Tier-2 city that is Ranchi. The data which will be used to gain insights are from primary data sources collected from consumer questionnaire and semi-structured interviews of the supervisor/ managers of the dark stores across the city whereas the secondary data is collected from the authentic sources like the company annual reports, articles published online and other available company information. Factors that shape the financial sustainability from the consumer perception is used which are price reasonability, effect of discounts and offers, customer satisfaction and willingness to use in future as independent variable of hypothesis whereas the factors used to determine the operation of the business such as quickness and reliance on the platforms, accuracy of orders, time saving factor and ease of use of platforms are the dependent variables in this study. It was found that the quick delivery and discounts impact the use of the service platforms. The data suggests that the financial sustainability has a significant impact on the operation of the business model of grocery delivery. The study suggests the instant grocery delivery service model has huge potential in the future and can have optimized operations if it balances out the customer satisfaction and operational efficiency.

KEYWORDS: Instant grocery delivery services, growth dynamics, financial sustainability, operation.

INTRODUCTION

Background

The retail sector has undergone a drastic transformation in the past few years, which can be traced to the rise in e-commerce activities in the economy. The adoption of the internet and the introduction of



advanced digital technology gave rise to e-commerce. The retail sector, which was dominated by retail stores (kirana stores), supermarkets and malls, is being replaced by a more convenient and time-saving form of commerce, e-commerce, which gained popularity with the growth of the digital economy. This changed how consumers perceive the market, as the new market allowed them to have a wider range of products and services while offering convenience at the same time.

Instant Grocery Delivery Services, also known as quick commerce, is a new concept in e-commerce but is one of the most innovative business models that is relevant to the modern-day market. The instant grocery delivery services platforms, such as Blinkit, Swiggy Instamart, Zepto and Big Basket, offer to deliver everyday household goods to the consumers in about ten to thirty minutes after placing the order. These platforms first started their operations in Tier-2 cities like Mumbai, Bengaluru, Delhi and Hyderabad in order to target densely populated areas to reach maximum consumers, but now they are expanding their operations in untouched Tier-2 cities.

The relevance of Tier-2 cities such as Ranchi, Patna, Surat, Coimbatore, and Visakhapatnam is increasing in the economic growth of the country due to their changing demographic structure. These cities with populations of millions make them a fertile ground for the quick commerce platforms to set up their operations. The cities possess growing middle class, an increase in disposable income, an increase in internet users and an increase in cashless transactions, which is digital payment adoption. However, expanding the operation of quick commerce or instant grocery delivery services in a Tier-2 city like Ranchi faces several challenges. In contrast to Tier 1 cities, where the quick commerce can operate in favourable condition due to dense population, mature and efficient logistics ecosystems and homogeneous consumer behaviour, on the other hand Tier-2 cities face complexities such as fragmented road networks, lack of trained workforce, strong competition from Kirana stores, dispersed residential areas and lower order values, which make the operation scenario different. These challenges, in turn, hinder the growth and slow down the expansion of the q-commerce platforms.

When we look at these instant grocery delivery services from the financial sustainability point of view, we find that they have been frequently criticised for their inability to achieve profitability even in a more favourable ecosystem provided by the tier 1 cities. The business service model is heavily capital-intensive, as it consists of components like maintaining quick delivery, the cost of maintaining and operating the dark stores, offering discounts and promoting products by providing incentives to acquire customers and adding to it is the burden of loss caused by the spoilage of perishable goods. These issues pose a challenge to the platforms to sustain in the market. The dominant companies like Blinkit, Swiggy instamart, Zepto and BigBasket always come across the question of whether they can sustain and scale up the business model, especially in tier 2 cities where revenue potential per unit of area is lower and operational complexity is higher as compared to tier 1 cities.



The context of this research is based on these nuances present in the quick commerce industry. The study seeks to explore the growth dynamics and financial sustainability of instant grocery delivery services, specifically in a tier 2 city like Ranchi, with the objective to explore this field in detail with the help of evidence and produce insights that are beyond the basic and aggregate literature that exists based on tier 1 cities. The study aims to contribute to understanding whether quick commerce can be sustainable and viable in Ranchi by examining the interaction between the factors, such as financial performance, operational complexities, competition, market demand, and technological enablers.

STATEMENT OF PROBLEM

The rapid growth of instant grocery delivery services, also known as quick commerce, has transformed the retail landscape by offering consumers the convenience of receiving groceries and household essentials within a few minutes. While these services have achieved significant success in metropolitan cities, they are now expanding rapidly into Tier-2 cities such as Ranchi. However, the long-term viability of this business model remains uncertain due to high operational costs, dependence on discounts, intense competition, and the challenges associated with maintaining fast delivery standards.

Most quick commerce companies prioritize rapid expansion and customer acquisition, often at the expense of profitability. Factors such as delivery expenses, dark store maintenance costs, inventory management, and gig workforce dependence create significant financial pressures. At the same time, consumer expectations regarding speed, convenience, and affordability continue to increase. This raises important questions regarding whether these businesses can achieve sustainable operations while maintaining service quality and customer satisfaction.

Despite the growing presence of instant grocery delivery services in Tier-2 cities, there is limited empirical research examining their financial sustainability and operational performance in such markets. Existing studies largely focus on metropolitan areas and provide limited insights into the unique challenges and opportunities present in cities like Ranchi.

Therefore, the present study seeks to investigate the growth dynamics of instant grocery delivery services in Ranchi and examine the impact of financial sustainability on their operations. The study aims to identify the key factors influencing sustainability and provide insights that may help businesses develop strategies for long-term growth and operational efficiency in Tier-2 markets.

SIGNIFICANCE OF THE STUDY

The study on “Growth Dynamics and Financial Sustainability of Instant Grocery Delivery Services” is important for multiple stakeholders. The importance is as follows:



1. The study will add value to the existing literature by focusing on quick commerce in Ranchi and help bridge the gap between theoretical knowledge and practical business.
2. By collecting primary data relevant to the study, this study will provide insights into the demand behaviour, market condition and unique consumption patterns in Ranchi and help to enhance the understanding of how it differs from Tier-1 metropolitan cities in terms of growth trajectory and operational complexities.
3. From a managerial perspective, the study will help the platforms to optimise operations by improving efficiency and pricing strategies.
4. By providing data on financial sustainability, this study will assist investors in analysing and evaluating the expansion of quick commerce in Ranchi.
5. This study will help policymakers to make development decisions that support the growth of quick commerce and logistics infrastructure. It will also help them regulate the policies relating to the gig economy workers.

SCOPE OF THE STUDY

The present study focuses on examining the growth dynamics and financial sustainability of instant grocery delivery services (quick commerce) in Ranchi, a prominent Tier-2 city in India. The study aims to understand the factors driving the adoption and growth of these services among consumers and evaluate their long-term sustainability from both operational and consumer perspectives.

The scope of the study includes analyzing consumer awareness, usage patterns, preferences, and satisfaction levels regarding instant grocery delivery services. It also examines key operational factors such as delivery speed, order accuracy, ease of use, discounts and offers, and time-saving benefits that influence customer adoption and retention.

The research further explores the concept of financial sustainability by using variables such as customer satisfaction, willingness to continue using the service, pricing perception, and the impact of promotional strategies. The study seeks to identify the relationship between financial sustainability and the operational performance of instant grocery delivery services.

Geographically, the study is limited to Ranchi and focuses on consumers who have access to and experience with quick commerce platforms. The findings are expected to provide insights into the opportunities and challenges faced by instant grocery delivery companies operating in Tier-2 markets and may help businesses develop strategies for sustainable growth and improved operational efficiency.



The study also contributes to the limited academic literature on quick commerce in emerging urban markets and provides a foundation for future research on digital retailing, last-mile delivery, and sustainable business models in India's evolving e-commerce ecosystem.

LITERATURE REVIEW

Joerss et al. (2016)¹ examined how the rapid growth of e-commerce is transforming last-mile delivery services. The study highlights that last-mile delivery is the most expensive and challenging part of the supply chain, with customers increasingly expecting faster and more convenient deliveries. The authors found that logistics companies must adopt innovative technologies such as automation, drones, and parcel lockers to improve efficiency and meet changing consumer demands. The report concludes that balancing delivery speed, cost, and customer satisfaction will be crucial for the future success of parcel delivery services.

Wollenburg et al. (2018)² explored how grocery retailers are adapting their logistics networks to support omni-channel retailing, where customers can shop through both physical stores and online platforms. The study highlights that the integration of online and offline channels requires significant changes in inventory management, order fulfillment, and distribution systems. The authors found that retailers are increasingly redesigning their logistics networks to improve flexibility, enhance customer service, and efficiently handle online grocery orders. The research concludes that a well-coordinated omni-channel logistics strategy is essential for retailers to remain competitive and meet evolving consumer shopping preferences.

Mehrotra and Agarwal (2020)³ examined how the COVID-19 pandemic accelerated the adoption of online grocery shopping in India by analyzing consumer behavior across metro and non-metro cities. The study found that health concerns, movement restrictions, and the need for contactless shopping significantly increased consumers' preference for online grocery platforms. It also revealed that convenience, safety, and doorstep delivery became key factors influencing purchase decisions during the pandemic. The authors concluded that COVID-19 acted as a catalyst for digital transformation in grocery retailing, encouraging both urban and semi-urban consumers to embrace online shopping and creating long-term opportunities for the growth of the e-grocery sector in India.

Reif, T. (2022)⁴ analyzed the emergence of quick commerce in Europe, focusing on ultra-fast grocery delivery services that promise deliveries within minutes. The study examined the business models, operational structures, and market potential of leading quick-commerce companies, highlighting speed, convenience, and the use of dark stores as their key competitive advantages. The research found that changing consumer lifestyles and increasing demand for instant gratification have fueled the growth of these services, particularly in urban areas. However, it also noted challenges related to profitability, high operational costs, and long-term sustainability. The study concludes that while quick commerce has significant growth potential, its future success will depend on achieving operational efficiency and maintaining a financially sustainable business model.



Dablanc et al. (2017)⁵ investigated the rapid growth of on-demand instant delivery services in European cities and their impact on urban logistics. The study found that advances in digital technology, smartphone applications, and changing consumer expectations have increased demand for faster and more flexible delivery options. The authors highlighted that instant delivery services offer greater convenience to customers but also create challenges such as increased traffic congestion, environmental concerns, and pressure on urban transportation networks. The research concludes that while instant deliveries represent an important innovation in last-mile logistics, policymakers and businesses must work together to ensure their growth remains efficient, sustainable, and beneficial for urban environments.

Sanghi, N. et al. (2024)⁶ examined the evolution of India's hyperlocal grocery delivery industry through a comparative analysis of Dunzo and Blinkit. The study highlights how factors such as rising smartphone usage, digital payments, urban lifestyles, and the COVID-19 pandemic accelerated the growth of quick-commerce services in India. The authors discuss the different business models, competitive strategies, and operational challenges faced by major players in the industry, particularly in achieving profitability while maintaining rapid delivery promises. The study concludes that success in the hyperlocal grocery market depends on efficient logistics, technological innovation, customer value creation, and sustainable unit economics in an increasingly competitive environment.

Ganapathy and Gupta (2024)⁷ explored the critical factors that determine the long-term success of quick-commerce grocery delivery services in India. The study found that customer convenience, rapid delivery, efficient inventory management, strategic use of dark stores, technology-driven operations, and strong financial backing are essential for sustaining growth in the sector. The authors also highlighted challenges such as high operational costs, low profit margins, intense competition, and customer loyalty issues. The study concludes that quick-commerce companies must focus on profitability, operational efficiency, and sustainable business models rather than pursuing growth alone to achieve long-term success in the Indian market.

Ranjekar and Roy (2023)⁸ examined the rapid growth of quick commerce in India and the infrastructure required to support ultra-fast delivery services. The study discusses various business models adopted by quick-commerce firms, including inventory-led, hyperlocal, and hybrid approaches, while emphasizing the crucial role of dark stores, micro-fulfillment centers, warehouse automation, and technology-driven logistics. The authors found that increasing internet penetration, changing consumer preferences, and demand for convenience have accelerated the adoption of quick commerce. However, they also highlighted challenges related to high operational costs, profitability, and supply chain efficiency. The study concludes that robust logistics infrastructure and efficient fulfillment networks are essential for the sustainable growth of the quick-commerce sector in India.

Simmons, V., et al. (2022)⁹ analyzed the future growth prospects of online grocery retail and projected its development through 2030. The study highlights that changing consumer preferences, increasing digital adoption, and improvements in delivery infrastructure are expected to drive significant



expansion in the online grocery market. The authors found that while online grocery experienced rapid growth during the COVID-19 pandemic, sustained success will depend on improving profitability, enhancing customer experience, and optimizing fulfillment operations. The report concludes that retailers must invest in technology, efficient logistics networks, and omnichannel strategies to capture the next phase of growth and meet evolving consumer expectations in the grocery sector.

Rai, H. B. et al. (2023)¹⁰ investigated the role of dark stores in supporting quick-commerce operations in Paris and assessed their geographical and transportation impacts. The study found that dark stores enable ultra-fast grocery deliveries by locating inventory close to consumers, but they also increase delivery traffic and place additional pressure on urban infrastructure. Through mapping and field analysis, the authors highlighted concerns related to public space usage, transportation intensity, and urban planning challenges associated with rapid delivery services. The study concludes that while dark stores improve delivery efficiency and convenience, their expansion requires careful regulation and planning to ensure sustainable urban development.

Mukhopadhyay, M. (2022)¹¹ examined the emergence of dark stores as the backbone of India's quick-commerce ecosystem and explored how consumer demand for ultra-fast grocery deliveries has transformed the retail landscape. The case study discusses the rise of companies such as Zepto and explains how dark stores, predictive analytics, and hyperlocal logistics enable deliveries within minutes. It also highlights key challenges related to workforce management, sustainability, customer behavior, and long-term profitability. The study concludes that while dark stores have revolutionized convenience in grocery retailing, the future success of quick commerce will depend on balancing rapid growth with operational efficiency, sustainable practices, and evolving consumer expectations.

Akhtar and Farooqi (2022)¹² critically reviewed consumer purchasing behavior toward e-grocery shopping and examined the factors driving the shift from traditional grocery stores to online platforms. The study found that convenience, time savings, easy internet access, digital payment adoption, competitive pricing, and the impact of the COVID-19 pandemic significantly influenced consumers' preference for online grocery shopping. The authors also highlighted the importance of perceived usefulness, ease of use, trust, and risk perceptions in shaping purchase decisions. The review concludes that technological advancements and changing consumer lifestyles have accelerated the growth of e-grocery services, making online grocery shopping an increasingly important segment of the retail industry.

Annadate and Mude (2020)¹³ conducted a comprehensive literature review of the online grocery industry in India to identify the key factors influencing its growth and future development. The study examined existing research on consumer attitudes, shopping preferences, perceived benefits and risks, and the factors affecting the adoption of online grocery services. The authors identified five major themes, including consumer behavior, convenience, trust, technology adoption, and service quality, which play a crucial role in shaping the e-grocery market. The review concludes that increasing internet penetration, changing lifestyles, and the demand for convenience are driving the expansion of



online grocery retailing in India. It also highlights the need for further research on areas such as automation, artificial intelligence, and sustainable business models to support the industry's future growth.

Harter, et al. (2025)¹⁴ investigated how delivery time influences customer repurchase behaviour in quick-commerce services. Using transaction data and experimental analysis, the study found that delivery performance plays a crucial role in customer retention. Late deliveries were shown to negatively affect customer satisfaction and increase the time between repeat purchases, while early deliveries had a positive but comparatively smaller impact on repurchase behaviour. The authors concluded that customers are more sensitive to delivery delays than to faster-than-expected deliveries, highlighting the importance of reliable and accurate delivery promises. The study suggests that quick-commerce firms should prioritize minimizing delivery delays and improving service consistency to enhance customer satisfaction and encourage repeat purchases.

Mohamadi, et al. (2024)¹⁵ examined how delivery radius affects the profitability and scalability of ultrafast grocery retailers. The study found that the size of the delivery area has a significant impact on both revenue generation and delivery costs, making it a critical strategic decision for quick-commerce firms. Using analytical models, the authors showed that the optimal delivery radius varies across locations depending on factors such as customer density, delivery costs, and local demand characteristics. The research also explored the benefits of consolidating nearby dark stores and found that such mergers can improve profitability under certain service conditions. The study concludes that quick-commerce companies should adopt location-specific delivery strategies rather than uniform service standards to enhance operational efficiency and achieve long-term financial sustainability.

Umarani & Jayashree Hareesh (2024)¹⁶ investigated customer satisfaction in the online grocery delivery industry by analysing responses from 300 consumers. The study found that convenience, time savings, doorstep delivery, and ease of online purchasing are the primary factors driving customer satisfaction with online grocery services. Using statistical tools such as frequency analysis, chi-square tests, and factor analysis, the authors observed that consumers have largely embraced online grocery platforms due to their efficiency and ability to reduce travel effort. The study concludes that improving service quality, delivery performance, and overall shopping convenience is essential for enhancing customer satisfaction and encouraging continued use of online grocery delivery services.

Ganapathy, et al. (2025)¹⁷ examined the digital transformation of grocery delivery services in India by tracing the sector's evolution from traditional retail formats to technology-driven online and quick-commerce platforms. The study highlights how increasing internet penetration, affordable mobile data, digital payment systems, and changing consumer lifestyles have accelerated the adoption of online grocery shopping. The authors found that technologies such as demand forecasting, inventory optimization, personalization, and data analytics are reshaping grocery retail operations and enhancing customer experiences. The chapter concludes that the future of grocery delivery in India will be driven by continued technological innovation, hyperlocal delivery models, artificial intelligence, and



customer-centric strategies, while businesses must also address challenges related to competition, profitability, and operational efficiency.

Pan, et al. (2017)¹⁸ explored how customer-related data can be utilized to improve the efficiency and effectiveness of e-grocery home delivery services. The study found that analysing customer purchasing patterns, delivery preferences, and ordering behavior enables retailers to optimize delivery schedules, reduce operational costs, and enhance service quality. The authors demonstrated that data-driven decision-making can improve route planning and resource allocation while increasing customer satisfaction through more reliable and personalized delivery services. The study concludes that the effective use of customer data is a key competitive advantage for e-grocery retailers seeking to improve delivery performance and strengthen customer relationships in a rapidly growing online grocery market.

Simmons, et al. (2022)¹⁹ examined the rapid rise of instant grocery delivery services and assessed their long-term viability in the retail market. The study found that consumers increasingly value instant grocery platforms for their speed, convenience, and ability to meet urgent shopping needs, with many users intending to continue using these services even after the pandemic. The authors highlighted that dark stores, micro-fulfillment centers, and technology-enabled logistics are key drivers of the quick-commerce model. However, they also noted challenges related to profitability, intense competition, and the need for sustainable business models. The study concludes that instant grocery delivery is likely to remain an important segment of the grocery industry, provided companies can balance customer convenience with operational efficiency and financial sustainability.

Brown, G. (2023)²⁰ examined ways to improve the efficiency of grocery pickup and delivery services from the perspective of employees working at a major American grocery chain. Through qualitative research, the study identified key operational challenges such as workload management, communication gaps, staffing shortages, and order fulfillment inefficiencies. The findings revealed that employee training, better workflow coordination, effective technology utilization, and improved management support can significantly enhance service efficiency and customer satisfaction. The study concludes that incorporating employee feedback into operational decision-making is essential for optimizing grocery pickup and delivery processes and maintaining high service quality in an increasingly competitive retail environment.

RESEARCH GAP

The instant grocery delivery services have experienced significant growth in the last few years in India but despite this growth the field has not been explored much. Gaps in the literature exist which needs research especially in tier-2 city like Ranchi. Most of the literature that exist in the public domain keep Tier-1 as the primary focus for the research work, by focusing only on the data available based on Tier-1 metropolitan cities creates information that is biased to a specific type of population where the purchasing power is greater, demand is more and that has better infrastructure which facilitates these



service provider to thrive. It is essential to explore the Tier-2 city population in order to get a perspective of a different market where the income profile is different, demand pattern is different and infrastructure is also not that developed.

The quick commerce landscape has been studied to project profitability and unit economics in many literatures but only exploring these is not enough to ascertain the financial sustainability which has not been explored much especially in area beyond the metropolitan cities. It has been found by some research that Tier-2 city like Ranchi might offer lower operating cost but it might not be enough to achieve sustainable operation as the city might also have low demand, lower order value and people might be reluctant to adopt this kind of services. These speculations are theory based and lack backing that is why they need to be explored in a specific environment of Ranchi.

Even though considerable efforts were made to expand the quick commerce landscape in Tier-2 cities, their contribution to the business are not that significant as compared to metropolitan cities. Some studies that are done in this field has suggested that of the total market value only a small portion in contributed by these regions which indicated limited market acquisition and adoption rate. This gap in literature requires exploration to assess these problems.

A sustainable business caters the environment around it such as employment and the local supply chain. Hence, by assessing the sustainability the study can be connected to local economy as well.

RESEARCH QUESTIONS

Question 1- What factors influence the growth of Instant Grocery Services in India?

Question 2- How often does a consumer prefer to use the Instant Grocery Delivery Services Platform?

Question 3- What are the factors influencing the financial sustainability of Instant grocery Services?

Question 4- Can Instant Grocery Delivery Services operate sustainably and survive in long term in a city like Ranchi?

OBJECTIVES OF THE STUDY

- To study the growth trends and current market situation of instant grocery delivery services in Ranchi.
- To study how instant grocery delivery services operate by examining factors like logistics, dark store operation and gig workforce availability.
- To assess the financial sustainability of instant grocery services in Ranchi.
- To suggest strategies and innovations that might help businesses ensure the long-term financial sustainability of instant grocery delivery services in Tier-2 markets like Ranchi.



HYPOTHESIS

H0: There is no significant impact of financial sustainability on the operation of Instant grocery delivery services in Ranchi.

H1: There is a significant impact of financial sustainability on the operation of Instant grocery delivery services in Ranchi.

RESEARCH METHODOLOGY

RESEARCH DESIGN

In this study, a descriptive approach of research will be used to understand the consumer preferences and behaviour and the growth trajectory of instant grocery delivery services. Also, the research will be diagnostic in nature to evaluate the financial sustainability. This design will help to get insights through data and evaluate the research problem.

Data Collection

(A) Primary Data:

- Structured questionnaires for consumer data.
- Interviews of delivery partners
- Interviews Dark store managers.

(B) Secondary Data:

- Annual reports of Companies operating quick commerce platforms (Blinkit, Swiggy Instamart)
- Academic articles, Research papers and journals on instant grocery delivery services.
- Industry reports from BCG insights, McKinsey insights, Statista.

Sampling

(a) Sampling area: The local area of Ranchi district will be the sample area.

(b) Sampling Technique: Convenience sampling and Purposive sampling.

(c) Sample size:

- 107 respondents for the questionnaire.
- 5 Dark store manager interviews

Techniques for data analysis

(a) Financial analysis:

- Average order value
- Contribution Margin

(b) Quantitative Analysis:

- Regression analysis



Statistical tools used

- **MS Excel:** For data arrangement
- **SPSS Software:** For data analysis

Data analysis and hypothesis testing

The primary objective of the analysis is to examine the relationship between financial sustainability and the operations of instant grocery delivery services. The data collected through structured questionnaires were coded and analysed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics and regression analysis were employed to achieve the research objectives and test the proposed hypothesis.

To examine the impact of financial sustainability on the operations of instant grocery delivery services, a simple linear regression analysis was conducted.

REGRESSION MODEL

Where:

- Operations = Dependent Variable
- Financial Sustainability = Independent Variable

Model Summary

The regression model produced an R Square value of 0.340. This indicates that 34% of the variation in the operational performance of instant grocery delivery services is explained by financial sustainability. The remaining variation may be attributed to other factors not included in the model.

ANOVA Results

The ANOVA results revealed an F-value of 54.177 with a significance level (p-value) of <0.001. Since the significance value is less than the accepted level of 0.05, the regression model is statistically significant. This indicates that financial sustainability significantly contributes to explaining variations in operational performance.

Coefficient Analysis

The regression coefficient (β) for financial sustainability was found to be 0.578 with a significance value of <0.001. The positive coefficient indicates that financial sustainability positively influences the operations of instant grocery delivery services.

This implies that higher levels of financial sustainability are associated with improved operational efficiency, better service delivery, enhanced customer satisfaction, and greater business stability.



Hypothesis Testing

The study tested the following hypothesis:

Null Hypothesis (H₀)

Financial sustainability has no significant impact on the operations of instant grocery delivery services in Ranchi.

Alternative Hypothesis (H₁)

Financial sustainability has a significant impact on the operations of instant grocery delivery services in Ranchi.

Decision Rule

- If p-value < 0.05, reject H₀ and accept H₁.
- If p-value > 0.05, accept H₀ and reject H₁.

Result

The regression analysis produced a significance value of <0.001, which is less than 0.05. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted.

Conclusion of Hypothesis Testing

The findings confirm that financial sustainability has a significant impact on the operations of instant grocery delivery services in Ranchi. The results suggest that financially sustainable business practices contribute positively to operational efficiency, service quality, customer retention, and long-term business viability.

Summary

The analysis demonstrates that financial sustainability plays a significant role in influencing the operational performance of instant grocery delivery services. The reliability and regression results support the validity of the research model and indicate that operational success is closely linked to sustainable financial practices. The findings provide empirical evidence supporting the importance of financial sustainability in ensuring the long-term growth and stability of quick commerce services in Tier-2 cities such as Ranchi.

Objectives achieved

To study the growth trends and current market situation of instant grocery delivery services in Ranchi: The objective to study the growth and current market situation of instant grocery delivery services in Ranchi fulfilled as the research study found that the quick commerce has grown from the



COVID-19 pandemic phase to post pandemic phase at a rapid pace. This growth can be said to have been brought by the increase in smartphone users, internet access to individuals, and change in consumer behaviour to a time saving mentality due to change in lifestyle. Most of the consumers of quick commerce are students and working professionals as per the insights gained by the study which is due to the fact that these individuals have a time constrained lifestyle, so they often prefer to use instant grocery delivery services to fulfil their emergency needs or small purchase. Major companies like Blinkit and Swiggy Instamart are experiencing rapid growth and they have room for even more growth potential.

To study how instant grocery delivery services operate by examining factors like logistics, dark store operation and gig workforce availability: The dark stores play a central role in the operation and functioning of the instant grocery delivery services as their main goal is to deliver the orders as soon as possible that to fulfil orders quickly. It was noticed while studying the quick commerce businesses that the dark stores with efficient inventory management, good logistics and availability of delivery partner are able to run the operations smoothly. It was found that the when the consumers perceive that the platforms provide good services which are quick delivery, accurate orders and reasonable pricing it indicates that the operations of the business is efficient.

To assess the financial sustainability of instant grocery services in Ranchi: The study through consumer perception of the quick commerce portrays that the business model is financially sustainable as the consumers are satisfied and are most likely to use the platforms for grocery delivery in future, which means that the consumers are most likely to avail these services and the business has a potential to grow in the future and sustain itself financially.

To suggest strategies and innovations that might help businesses ensure the long-term financial sustainability of instant grocery delivery services in Tier-2 markets like Ranchi: After evaluating the situation of instant grocery delivery services in Ranchi it can be concluded that the business model has strong growth potential if the companies adopt a few strategies to boost its operational efficiency. The quick commerce platforms can expand its operation by offering a hybrid model of operation to the local kirana stores, this might help them expand their area of operation and put off load from some overworked dark stores by distributing the order volume without actually investing much on setting up a new dark store. Improvement in workforce management and better logistics technology can improve the delivery time. These suggestions if adopted by strategically planning can lead to even more long-term growth and benefit to the instant grocery delivery services.

FINDINGS OF THE STUDY

1. The study found that instant grocery delivery services have gained significant popularity in Ranchi due to their convenience, quick delivery, and time-saving benefits.
2. Delivery speed and service reliability emerged as one of the most influential factors affecting customer satisfaction and continued usage of these services.



3. Discounts and promotional offers play an important role in attracting customers and encouraging repeat purchases.
4. Consumers generally perceive instant grocery delivery applications as user-friendly and easy to navigate, contributing to higher adoption rates.
5. Customer satisfaction was found to have a positive influence on future usage intentions and loyalty towards quick commerce platforms.
6. The study revealed that operational factors such as order accuracy, delivery efficiency, and convenience significantly contribute to the perceived value of instant grocery delivery services.
7. The regression analysis indicated a statistically significant relationship between financial sustainability and the operations of instant grocery delivery services. The hypothesis testing results confirmed that financial sustainability significantly impacts the operations of instant grocery delivery services in Ranchi.
8. The quick commerce sector demonstrates strong growth potential in Tier-2 cities like Ranchi due to changing consumer preferences and increasing digital adoption.

CONCLUSION

The present study examined the growth dynamics and financial sustainability of instant grocery delivery services in Ranchi. The findings indicate that quick commerce has emerged as an important component of the modern retail ecosystem by providing consumers with convenient, fast, and reliable access to grocery products. Increasing smartphone penetration, changing lifestyles, and growing demand for convenience have significantly contributed to the expansion of these services in Tier-2 cities.

The study further revealed that operational factors such as delivery speed, order accuracy, service reliability, and customer satisfaction play a crucial role in determining the success of instant grocery delivery services. Financial sustainability was found to have a significant impact on operational performance, indicating that businesses with stronger financial sustainability are better positioned to maintain efficient operations and service quality. Although the sector faces challenges related to profitability, delivery costs, and discount dependency, its future prospects remain promising. Therefore, achieving a balance between growth, operational efficiency, and financial sustainability is essential for the long-term success of instant grocery delivery services in Ranchi and similar Tier-2 markets.



SUGGESTIONS

1. Quick commerce companies should focus on increasing operational efficiency through better route optimization and delivery management systems.
2. Companies should focus on increasing the average order value through product bundling and cross-selling techniques.
3. Efficient inventory management systems should be implemented to minimize stock shortages and product wastage.
4. Dark stores should be strategically located to improve delivery speed and reduce transportation costs.
5. Companies should strengthen customer relationship management programs to enhance customer satisfaction and loyalty.
6. Companies should continuously monitor customer feedback and service quality indicators to improve the overall customer experience.
7. Policymakers and industry stakeholders should support the development of sustainable logistics infrastructure to facilitate the long-term growth of quick commerce services.
8. Future business strategies should prioritize profitability and financial sustainability alongside market expansion to ensure long-term viability.
9. Collaboration with local suppliers and retailers may help reduce procurement costs and strengthen local supply chains.

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