



A STUDY ON E-COMMERCE-BASED RURAL MARKET LOGISTICS

DILEEP KUMAR

Under the Supervision of

MS. PRAGYA JAISWAL

Galgotias University, Greater Noida

Abstract

The proliferation of online marketplaces in recent years has provided consumers with more options when looking to make a purchase. However, a lack of infrastructure and accessibility presents unique difficulties for e-commerce product delivery to rural areas. As a result, there is an urgent need to analyse and improve the supply chain and logistics processes associated with delivering goods to rural areas via e-commerce. The benefits and drawbacks of e-commerce in rural areas are two potential research topics. One of the many ways in which e-commerce can improve the lives of rural residents is by

making it more convenient for them to purchase the goods they need. Access to the online marketplace in underserved regions can be increased through technological innovations, new ways of conducting business, and novel approaches to logistics.

INTRODUCTION

Commercial circulation in rural areas is expected to increase rapidly as e-commerce grows, consumer habits change, and the Internet and personal computers become more widely available to the general public. Increases in the sophistication of the commodity circulation system, farmer incomes, consumer purchasing power, and government recognition of the importance of rural informationization are all

factors that will contribute to this expansion. E-commerce in rural areas, which has been largely overlooked by consumers so far, has the potential to usher in a new era of economic growth and social advancement in the countryside. This paper begins with an examination of the nature and challenges facing the rural logistics distribution market, before moving on to illustrate the demand for, developmental potential of, problems with, and strategies for expanding rural e-commerce. Based on research techniques like a literature review and questionnaires, the paper suggests logistics distribution strategies tailored to the rural market. Among these methods is the establishment of a first-rate distribution net at the terminal point of logistics distribution (from counties, towns, and villages) to coordinate the distribution of agricultural materials and household goods. The logistics cost can be effectively decreased by sending industrial products to the countryside and transporting agricultural products to the city through the alliance of distribution enterprises and its joint distribution. The implementation of all of these policies will have far-reaching effects, helping to create a new socialist countryside and addressing problems faced by farmers and the agricultural sector.

THE PURPOSE OF THE RESEARCH

E-commerce, like our understanding of the world economy, is speeding up. E-commerce has emerged as a promising new frontier for international trade as the field of information technology has developed. Despite being the final link in the chain of e-commerce, traditional logistics distribution has failed to live up to expectations. This thesis considers the parathion of material flow and business flow as a central feature of online trading in order to understand the impact of E-commerce and propose effective countermeasures

OBJECTIVE

- The overarching purpose of the research is to identify and eliminate the barriers that prevent rural-based online retailers from providing adequate service to their clientele.
- The primary purpose of the research is to learn about and take advantage of the benefits that e-commerce can bring to rural areas, such as increased access to consumer goods and services.
- The overarching objective is to improve the efficiency of e-commerce in rural markets through the use of technology, alternative business models, and careful logistics.

LITERATURE REVIEW

Final Mile Delivery in Rural China: An Analysis by Mengjie Zeng One of the many beneficial effects of rural e-commerce is a rise in farmers' income and a boost to the rural economy. However, the issue of last-mile delivery for rural e-commerce has become a bottleneck and a barrier to development. In order to solve the last mile delivery problems of rural e-commerce, this paper first analyses the issues in depth before proposing solutions.

These solutions include hastening the construction of the last mile infrastructure, increasing the level of rural informatization, maximising the use of local logistics resources, maximising the use of the Postal logistics system, and encouraging joint distribution.

Chao Tu, Mingke He, Ye Ren, and Yao Qin studied the role of logistics in e-commerce in small cities and towns. Insights from this research could help logistics service providers better serve the growing needs of rural e-commerce customers.

Research by Karine Haji into the development of e-commerce in the far reaches of the BRICS nations — This article explores the potential for cooperation between rural and remote areas to foster the growth of e-commerce as a means of reducing poverty. It looks at the current state of

e-commerce development in underserved regions and provides examples of public and private initiatives encouraging its growth. The article also discusses the benefits of online shopping for people who live in rural areas. It also takes stock of the existing threats and challenges. Despite the rapid growth of e-commerce and the significant opportunities it has created, the article concludes that there are still problems of unequal e-commerce in different regions

It is important to understand the unique challenges and opportunities presented by these markets in order to develop effective strategies for logistics and distribution, but overall, research in this field suggests that e-commerce can be a valuable tool for increasing access to goods and services in rural areas.

RESEARCH METHODOLOGY

There seems to be problems with the project's research methodology. Inability to complete the project and generate results due to lack of a well-structured research plan. The work started with a survey plan. The primary goal of the survey was to collect information for analysis and decision-making.

Thus, the term "methodology" is used to

describe a systematised approach to conducting research. Research methodology encompasses not only the methods used but also their justifications and the factors that led to their selection.

The importance of careful research planning is emphasised by the growing complexity of the market and the wide range of observable marketing approaches. The research design describes the procedures that will be used to complete the study. Researchers require a well-thought-out strategy, also known as a "research design," in order to find solutions to research questions and keep tabs on diversity.

Data Collection Using a Non-Probabilistic Sampling Scheme A total of 80 questionnaires were used in the sampling process.

Analysis of Data via Diagrams

FINDINGS & SUGGESTIONS

- The vast majority of shoppers agree that e-commerce has the potential to improve urban and rural residents' access to goods and services.
- Lack of adequate infrastructure and connectivity in rural areas is one of the biggest challenges in e-commerce based rural market logistics distribution. It is challenging to reach distant

customers and ensure timely deliveries due to poor road networks, limited internet connectivity, and inadequate warehousing facilities.

- Most buyers in rural areas would rather pay in cash upon receipt of their order, and they are also more likely to make fewer, larger purchases.
- Because of inadequate infrastructure, last-mile delivery, the final stretch of the delivery process from the distribution centre to the end customer, is more difficult in rural areas.
- The vast majority of online store users needed guidance before making any purchases.
- There are more problems with delivery.
- Customers also believe that there are many advantages to using ecommerce platforms, such as the ability to shop a broader selection of products and services and the comfort of doing so without leaving home. However, issues with privacy and security are problematic for them.

Suggestions

- Online retailers will not be successful in rural areas without forming partnerships with regional suppliers, logistics providers, and "last mile" couriers. By working together, we can speed up delivery to customers in rural areas and fix the problems with connectivity and infrastructure that plague them.

- Technology, such as GPS-enabled tracking systems and automated warehousing solutions, can help e-commerce businesses optimise their logistics distribution processes and provide a better customer experience. Small and medium-sized enterprises (SMEs) that serve customers in rural areas often face higher costs associated with adopting new technologies.
- Providing more customer support for rural customers who may have limited access to technology or internet
- Improving communication with customers to keep them informed of delivery times and delays

CONCLUSION

- The gap between rural and urban consumers can be narrowed through e-commerce, creating new opportunities for trade and boosting the demand for products made in rural areas.

- Only through cooperation between e-commerce businesses, logistics providers, and local communities can effective rural logistics solutions be developed. By working together, these communities can create sustainable logistics systems that can help them overcome challenges.

- With government policy and financial support, the rural logistics sector can expand, attracting private investment.

- Sustainable logistics practises not only improve efficiency and cut costs, but they also protect the environment and the well-being of rural communities in the long run. Provide training to the customers on using the ecommerce platforms.

Logistics and electronic commerce's ability to reach out to the rural market on a large scale has the potential to revolutionise this industry. The creation of new jobs in rural areas is one way this could improve people's standard of living.

However, the success of logistical distribution of the e-commerce market in rural areas depends on the development of necessary infrastructure, the availability of necessary technology, and the availability of necessary funding.

Government and private sector cooperation in the form of infrastructure development and technology provision can improve the efficiency of logistics distribution in rural areas. Affordable bank financing would also help logistics distribution service providers in the rural e-commerce sector expand their operations.

In addition, rural e-commerce logistics

distribution service providers should work to gain their customers' trust by providing consistently high-quality products and services.

Doing so will guarantee the company's long-term success by generating a steady flow of returning customers.

In conclusion, the growth of the e-commerce logistics market will have significant positive effects on rural areas. However, cooperation between the public sector, the private sector, and the financial sector is required for this to occur.

REFERENCES

- Abdulkader, S. J., & Abualkishik, A. M. Cloud Computing and E-commerce in Small and Medium Enterprises (SME's): the Benefits, Challenges.
- Retail e-commerce sales CAGR forecast in selected countries from 2016 to 2021 .
- Zeng, M. (2019, February). Research on the last mile delivery of rural E-commerce in China. In *2018 International Symposium on Social Science and Management Innovation (SSMI 2018)* (pp. 535-540). Atlantis Press.
- Tu, C., He, M., Ren, Y., & Qin, Y. (2018). Research on the Logistics Embeddedness in Rural Town E-commerce. In *Proceedings of the Fifth International Forum on Decision Sciences* (pp. 241-254). Springer Singapore.
- Malapane, T. A., & Ndlovu, N. K. (2022, April). The Adoption of Artificial Intelligence in the South African E-Commerce Space: A Systematic Review. In *2022 Systems and Information Engineering Design Symposium (SIEDS)* (pp. 7-12). IEEE.
- Shao, R. (2022). Improvement of Business Analysis Method of E-Commerce System from the Perspective of Intelligent Recommendation System. *Advances in Multimedia, 2022*.
- Khan, R., & Parvez, V. PROSPECTS AND

CHALLENGES OF E-COMMERCE IN INDIA: A THEORETICAL ANALYSIS OF RURAL AREAS.

- "The impact of e-commerce on supply chain management: A conceptual framework" by M. Khurana and K. Sun
- Abdulkader, S. J., & Abualkishik, A. M. Cloud Computing and E-commerce in Small and Medium Enterprises (SME's): the Benefits, Challenges.
- Waghmare, G. T. (2012). E-commerce; A Business Review and Future Prospects in Indian Business. *Internet Marketing in India: Indian Streams Research Journal*, 2, 1-4.
- Kalia, P., Kaur, N., & Singh, T. (2015). E-Commerce in India: Evolution and Revolution of Online Retail. Kalia, P., Kaur, N. and Singh, 99-120.
- Hawk, S. (2004). A comparison of B2C e-commerce in developing countries. *Electronic Commerce Research*, 4(3), 181-199.
- Sarode, R. M. (2015). Future of E-Commerce in India Challenges & Opportunities. *IJAR*, 1(12), 646-650.
- Wienclaw, R. A. (2013). E-commerce. *Research Starters: Business*
- .The problems and countermeasures of Green Logistics Development in India.
- Research on the Logistics Embeddedness in Rural Town E-commerce -- Chao Tu, Mingke He, Ye Ren, Yao Qin
- E-commerce development in rural and remote areas of BRICS countries by Karine Haji
- Research on the Last Mile Delivery of Rural E-commerce in China -- Mengjie Zeng