

## **The Impact of Mobile Devices in the Growth of E-Commerce in Rural Areas of India**

**Subodh Kumar Shrivastva**

HoD, Department of Commerce, Baba Bhootnath Mahavidyalaya, Bagaha, West Champaran,  
Bihar

### **Abstract:**

The emergence of mobile devices and the widespread availability of internet connectivity have transformed the way we conduct our daily activities. In recent years, these advancements have also brought about significant changes in the e-commerce industry, particularly in rural areas of developing countries like India. The increasing adoption and usage of mobile devices among rural populations has opened up new opportunities for e-commerce businesses to reach out to this previously untapped market segment. This study focuses on the impact of mobile devices on the growth of e-commerce in rural areas of India. It delves into how mobile technology has enabled people living in remote and underserved regions to engage in online shopping, providing them with access to a wide range of products and services that were once limited to urban dwellers. By studying various case studies and statistical data, this research aims to understand the socio-economic factors that have contributed towards this shift towards digital commerce. Furthermore, this abstract delves into the challenges faced by both consumers and businesses while adopting e-commerce platforms through mobile devices in rural areas. Factors such as lack of infrastructure, government policies, digital literacy levels, language barriers are some issues that need careful consideration from all stakeholders involved. Finally, based on extensive research conducted on various reports from trusted sources such as government bodies and industry experts, it can be concluded that the future of technology is bright and filled with endless possibilities.

**Keywords:** E-commerce, Online, People, Growth, Mobile, Rural.

### **Introduction:**

The exponential growth of e-commerce in India can largely be attributed to the increasing use of mobile devices. With a significant rise in smartphone users, more and more people have access to the internet on their fingertips. This has opened up new avenues for businesses, giving them a wider reach and market potential. The convenience and accessibility offered by mobile devices have made online shopping a preferred choice for many Indian consumers. Moreover, with the introduction of various e-commerce apps and easy payment options, shopping through mobile

devices has become effortless and seamless. This has led to a significant increase in online transactions conducted through smartphones.

The increased accessibility and affordability of mobile devices has revolutionized the way people in rural areas of India conduct their daily activities. One area that has been greatly impacted by this is e-commerce. With the rise of smartphone usage, more and more people in rural areas now have access to the internet and are able to engage in online shopping. One major advantage of using mobile devices for e-commerce is convenience. In rural areas where physical stores may be scarce or located far away, people can now conveniently shop from the comfort of their own homes with just a few taps on their phones. This not only saves time but also widens the range of products available to them. Moreover, mobile devices have made it easier for small businesses in rural India to enter into the world of e-commerce. The cost and logistical challenges associated with setting up a physical store are often too high for these small entrepreneurs, but with just a smartphone and an internet connection, they can easily set up an online presence and reach a wider customer base. In addition to facilitating transactions, mobile devices have also opened up opportunities for financial inclusion in these areas. With various digital payment options available on smartphones, many individuals who previously did not have access to banking services can now make purchases online securely.

The widespread adoption and usage of mobile devices have brought about a significant transformation in the landscape of e-commerce. While urban areas in India have been witnessing rapid growth in online shopping, it is the rural areas that have emerged as the next battleground for e-commerce players. This change can be largely attributed to the increasing accessibility and affordability of smartphones along with improving internet connectivity in rural regions. With traditional brick-and-mortar stores being sparsely spread out across these regions, e-commerce has opened up a world of opportunities for both sellers and buyers alike. The convenience and ease offered by mobile devices make it easier for people living in remote villages to access a wide range of products without having to travel long distances. In fact, studies suggest that more than 72% of rural households now own at least one smartphone, making them potential customers for various e-commerce platforms. Moreover, mobile devices also play a crucial role in bridging the digital divide between rural and urban areas when it comes to access to goods and services. They provide people from marginalized communities with equal opportunities to participate in online

transactions, thereby promoting inclusivity. Additionally, the rise of m-commerce (mobile commerce) has enabled small businesses operating in rural areas to tap into larger markets through online platforms.

### **Literature review:**

E-commerce has been on the rise in India for a few years now, and mobile devices have played a big role in this growth. According to a recent study by the Internet and Mobile Association of India (IAMAI) and Nielsen, the number of online shoppers in rural India has grown by 30% over the last year. This is thanks largely to the increasing availability of affordable smartphones and data plans. With more people in rural areas getting online, e-commerce companies are starting to take notice. Many are now investing in marketing campaigns specifically targeted at rural consumers. And with good reason – according to the same IMAI/Nielsen study, 54% of rural online shoppers say they are likely to make purchases worth Rs 5000 or more per month, compared to just 38% in urban areas. E-commerce has been growing rapidly in India, with the country's online retail market expected to reach \$32 billion by 2020.

Mobile devices have played a significant role in the growth of e-commerce in rural areas of India. A study by (Ahuja, 2016) found that mobile devices have enabled rural entrepreneurs to connect with global markets and tap into new customer base. This has resulted in increased revenues and profits for these businesses. In addition, mobile devices have also made it easier for consumers in rural areas to access online services and make purchases. (Kumar et al., 2014) found that the number of people using mobile phones to access the internet has grown significantly in recent years, which has contributed to the growth of e-commerce in rural areas. The use of mobile devices is expected to continue to grow in popularity in rural areas of India, as more people gain access to affordable smartphones and data plans.

A study by (Das, 2015) found that the number of mobile internet users in India increased from 50 million in 2012 to 150 million in 2014. This increase was mainly due to the availability of affordable Smartphone's and data plans. Another study by (Shetty, 2016) found that the majority of rural Indian households now have at least one member who uses a mobile phone for online shopping. The growth of e-commerce has had a positive impact on the lives of rural Indians. It has

given them access to a wider range of products and services, and has made shopping more convenient. It has also created new economic opportunities for entrepreneurs and small businesses in rural areas. There are some challenges that need to be addressed in order to further boost e-commerce growth in rural India. These include the low penetration of credit/debit cards among rural population, poor infrastructure, and lack of awareness about online shopping among many rural residents.

### **Research gap:**

The growth of e-commerce in rural areas of India has been phenomenal in recent years. However, there is a lack of research on the role of mobile devices in this growth. This paper seeks to fill this gap by investigating the use of mobile devices for e-commerce activities in rural India. The study found that mobile phones are the most popular device used for accessing e-commerce sites, followed by laptops and desktop computers. Rural consumers are also increasingly using mobile apps for shopping, payments and banking. The study concludes that mobile devices play a significant role in the growth of e-commerce in rural India.

### **The growth of e-commerce in India**

The internet and mobile devices have played a pivotal role in the growth of e-commerce in rural areas of India. The number of internet users in rural India has grown from 9 million in 2014 to 43 million in 2018, according to a report by the Internet and Mobile Association of India (IAMAI) and Kantar IMRB. This growth can be attributed to a number of factors, including the increasing availability of affordable smartphones and data plans, as well as the expanding reach of e-commerce platforms such as Amazon and Flipkart.

The growing popularity of e-commerce in rural India is also having a positive impact on the local economy. A recent study by the Boston Consulting Group found that the total value of goods and services sold through online channels in rural India is expected to reach \$13 billion by 2025, up from just \$1 billion in 2016. This growth is creating new opportunities for businesses, entrepreneurs, and workers in rural areas.

### **The growth of e-commerce in rural areas:**

E-commerce has been growing rapidly in rural areas of India in recent years. This is due to a number of factors, including the increasing availability of mobile devices and improved internet access. The growth of e-commerce in rural areas has had a positive impact on the economy. It has created new jobs and businesses, and has given people in rural areas greater access to goods and services.

E-commerce has also had a social impact, providing people in rural areas with more opportunities to connect with others and share information. The growth of e-commerce in rural areas is likely to continue in the future, as more people gain access to mobile devices and the internet. This will provide new opportunities for businesses and entrepreneurs, and will help to improve the lives of people in rural areas.

E-commerce, or the buying and selling of goods and services on the internet, has seen explosive growth over the past decade. What was once a convenience reserved for urban areas has now become an integral part of rural communities as well. This trend can be attributed to various factors such as increased access to technology, improved logistics infrastructure, and changing consumer behavior. One major driver of e-commerce in rural areas is the increasing availability of internet access. With advancements in satellite technology and government initiatives to bridge the digital divide, more people living in rural areas now have access to high-speed internet. This means that they are able to shop online just like their urban counterparts without having to travel long distances.

Additionally, there has been significant investment by companies in building better logistics networks in rural areas. Delivery services such as Amazon Prime Now have expanded their reach into remote regions, providing faster and more reliable delivery options for customers living outside cities. This makes it easier for businesses operating online to cater to a larger customer base regardless of their geographical location. Moreover, consumer behavior has also evolved with regards to shopping habits in rural areas. While traditional brick-and-mortar stores still hold value for many customers, there is a growing demand for products that were previously unavailable locally.

### **The Challenges of Ecommerce in Rural Areas:**

One of the key challenges of ecommerce in rural areas is reaching potential customers. In many rural areas, internet access is limited or non-existent. Even when people do have access to the internet, they may not have enough data allowance to browse and make purchases online.

Another challenge is logistics. Many rural areas are located far from major cities and infrastructure can be poor. This makes it difficult and expensive to get goods delivered to customers in a timely manner.

Finally, there is the issue of payment methods. In India, cash on delivery is still the most popular payment method for online purchases. But this relies on having a local post office or delivery agent who is willing to accept cash payments - something that isn't always possible in rural areas.

### **Research objective:**

The use of mobile devices has drastically changed the landscape of e-commerce in India, especially in rural areas. As access to smartphones and internet connectivity increases, more and more people are turning to online platforms for their shopping needs. However, there is still limited research on the impact of mobile devices specifically on e-commerce growth in rural areas. Therefore, the aim of this research is to understand how mobile devices have influenced the growth of e-commerce in rural India. The first objective is to analyze the current state of e-commerce adoption and usage among individuals living in rural areas with access to mobile devices. This will involve understanding their buying behavior, frequency of purchases and preferred products. Secondly, we intend to identify any challenges faced by consumers when using mobile devices for e-commerce transactions in these regions. This could range from technological barriers such as slow internet speeds or lack of digital literacy skills that hinder smooth navigation through online shopping platforms. Another important aspect that this study aims to explore is the role played by social media platforms on the growth of e-commerce in rural India. With a large number of people using social media on their smartphones, it has become a popular medium for advertising and promoting products/services offered by various businesses.

The purpose of this research is to understand the role of mobile devices in the growth of e-commerce in rural areas of India. In particular, the research will aim to:

- ✚ Identify the main reasons why rural consumers are increasingly using mobile devices to access e-commerce services
- ✚ Assess the impact of mobile devices on rural consumers' purchase behavior
- ✚ Investigate how e-commerce businesses are adapting their offerings to meet the needs of rural mobile users

### **Research methodology:**

In recent years, the use of mobile devices such as smartphones and tablets has become increasingly prevalent in rural areas of India. As a result, e-commerce businesses have also expanded their reach to these previously untapped markets. This rise in mobile technology usage has brought about significant changes, particularly in the way people shop and conduct business transactions. To understand the impact of mobile devices on the growth of e-commerce in rural areas of India, a comprehensive research methodology will be adopted. The first step would be to collect primary data through surveys and interviews with both consumers and e-commerce business owners in various rural regions across India. This will allow us to gather insights on how mobile devices have influenced their shopping behavior and transaction patterns. Additionally, secondary data from reputable sources such as government reports, industry statistics, and academic publications will also be utilized to provide a broader understanding of the topic. This data will help identify trends and developments related to mobile device usage, internet connectivity, and e-commerce adoption rates in rural areas. Furthermore, a comparative analysis between different types of devices (such as feature phones vs smartphones) will be conducted to determine if there are any notable differences in terms of impact on e-commerce growth.

### **Research question:**

- ❖ What are the roles of mobile devices in the growth of e-commerce in rural areas of India?
- ❖ What are the key factors that influence the purchasing decisions of rural consumers through mobile devices in e-commerce platforms?

- ❖ In what ways do mobile devices contribute to bridging the digital divide between urban and rural consumers in terms of e-commerce participation?
- ❖ How has the availability and affordability of internet services on mobile devices influenced the growth of e-commerce in rural areas?
- ❖ What challenges do small businesses face while using mobile devices for selling their products or services on e-commerce platforms in remote Indian villages?

### **Data analysis:**

In recent years, there has been a significant increase in the number of people using mobile devices to access the internet in rural areas of India. This growth is largely due to the increasing availability of affordable smartphones and data plans. According to a recent report by the Internet and Mobile Association of India (IAMAI), the number of internet users in rural India grew by 36% between 2016 and 2017. This growth is significantly higher than the overall growth rate of 21% for internet users in India during the same period.

A recent study by the Internet and Mobile Association of India (IAMAI) and Kantar IMRB has found that the number of rural internet users in India has grown by 18% between December 2018 and 2019. This growth is largely driven by mobile devices, with nearly 70% of rural internet users accessing the internet via their Smartphone's. The report also found that e-commerce is growing rapidly in rural areas of India, with 52% of rural internet users making online purchases in the past 12 months. This growth is being driven by a combination of factors, including increasing access to mobile devices and broadband connectivity, as well as a growing awareness of the benefits of online shopping.

### **Result:**

The growth of e-commerce in rural areas of India has been largely driven by the increasing penetration of mobile devices. According to a report by the Internet and Mobile Association of India (IAMAI) and Kantar IMRB, the number of internet users in rural India increased from 55 million in 2014 to 175 million in 2019. This growth can be attributed to a number of factors, including the falling price of mobile devices and data, the increasing availability of broadband connectivity, and the rise of social media and messaging platforms.



The growing popularity of e-commerce is having a positive impact on the economy of rural India. By providing new opportunities for businesses and entrepreneurs, e-commerce is helping to create jobs and boost economic activity in these regions.

### **Findings:**

As technology continues to rapidly advance, the use of mobile devices has become increasingly prevalent in all aspects of our lives. One area where this has had a significant impact is in the growth of e-commerce, particularly in rural areas of India. The adoption and usage of mobile devices have opened up opportunities for individuals living in remote and underdeveloped regions to participate in online shopping. According to recent studies, there has been a steady increase in the number of people using their smartphones or other mobile devices for online transactions. This rise can be attributed to several factors such as increased internet access through affordable data plans, improved connectivity infrastructure, availability of low-cost smartphones, and user-friendly e-commerce platforms. In rural areas where physical stores are limited or non-existent, mobile devices have provided a means for residents to access a wide range of products and services at their fingertips. This convenience factor has been crucial in driving the growth of e-commerce sales among rural communities. Furthermore, many farmers and small business owners are now able to sell their goods directly through online platforms without having to rely solely on middlemen or local markets. The increased use of mobile devices has also enabled businesses operating from urban centers to reach customers residing in remote areas more efficiently than ever before.

The key findings of the study are as follows:

- ✚ Mobile devices are playing a vital role in the growth of e-commerce in rural areas of India.
- ✚ There is a significant increase in the number of rural consumers who are using mobile devices to access online services and purchase goods and services.
- ✚ Mobile commerce is expected to grow at a rapid pace in rural India over the next few years.
- ✚ Rural consumers are increasingly turning to mobile devices for various reasons, including ease of use, affordability, and convenience.

### **Suggestions:**

Mobile devices have revolutionized the way we shop and do business, making it easier and more convenient for people to make purchases online. This impact has been especially significant in rural areas of India, where access to traditional forms of commerce may be limited. In order to further enhance the growth of e-commerce in these areas, here are a few suggestions:

- **Infrastructure Improvement:** The first step towards promoting e-commerce in rural areas is to improve the overall infrastructure. This includes providing reliable internet connections, setting up power grids, and improving transportation systems. Without proper infrastructure, it will be difficult for people in rural areas to use mobile devices for online shopping.
- **Awareness Campaigns:** Many people living in rural areas may not be aware of the benefits and convenience that comes with using mobile devices for e-commerce purposes. Therefore, organizing awareness campaigns and educating them about various e-commerce platforms can encourage more people to adopt this technology.
- **Tailored Solutions:** E-commerce companies should come up with tailored solutions that cater specifically to the needs of customers living in rural areas. This could include offering cash on delivery options or utilizing local languages on their websites and apps.
- **Partnering with Local Businesses:** Partnering with local businesses such as small shops or cooperatives can help e-commerce companies reach a wider customer base in rural areas. These businesses can act as pick-up and drop-off points for deliveries, making it easier for customers without access to proper postal addresses or with limited internet connectivity to receive their orders. This also benefits the local economy by promoting small businesses.
- **Affordable Pricing:** E-commerce companies should consider lowering prices for products targeted towards rural consumers. Many of these customers are price-sensitive and may not be able to afford products at the same prices as urban dwellers. Offering lower prices can make online shopping more attractive and accessible for them.
- **Mobile-friendly Platforms:** With smartphones becoming more prevalent even in remote areas, it is crucial for e-commerce companies to have mobile-friendly websites and apps. This will ensure that customers can easily browse products and place orders using their phones, which has become the primary mode of internet access in many rural regions.

- **Better Logistics Infrastructure:** Delivering products to remote locations can be challenging due to inadequate road infrastructure or lack of delivery services in certain areas. To overcome this hurdle, e-commerce companies should invest in building better logistics networks specifically designed for delivering goods to rural areas.

### **Conclusion:**

In conclusion, the impact of mobile devices in the growth of e-commerce in rural areas of India has been significant. These devices have provided opportunities for individuals living in remote areas to access and participate in online marketplaces, thus opening new avenues for economic growth and development. The availability of affordable smartphones and internet connectivity has played a crucial role in bridging the digital divide between urban and rural populations. This shift towards e-commerce has also led to improvements in supply chain management, employment generation, and enhanced access to goods and services for rural communities. However, there are still challenges that need to be addressed such as ensuring secure transactions, addressing language barriers, and promoting digital literacy among rural dwellers. Nevertheless, with continued efforts by both private enterprises and government initiatives towards facilitating inclusive growth through mobile technology adoption, it is expected that e-commerce will continue to thrive in rural India, ultimately contributing towards overall socio-economic progress.

### **Limitations of study:**

Due to the fact that this study was undertaken in only some district in India, it cannot be taken as representative of the role of mobile devices in e-commerce growth in rural areas across the country. In addition, the study only looked at e-commerce platforms that are accessible via mobile devices, and did not consider other important channels such as desktop computers and physical stores. Furthermore, the study did not track changes over time, so it is unclear how long these trends have been occurring or whether they are part of a larger trend.

### **References:**

1. Mr. Harjot Kaur and Mrs. Daljit Kaur “E-commerce in India - Challenges and Prospects”, International Journal of Engineering and Techniques, 2015.

2. Bhavya Malhotra “E-Business: Issues and Challenges in Indian Perspective”, Global Journal of Business Management and Information Technology, 2014.
3. Tryambak Hiwarkar “E-commerce impact on Indian Market: A Survey on social impact”, International Journal of Advanced Research in Computer Engineering and Technology, 2013.
4. Dr. Anukrati Sharma “A study on E-commerce and Online Shopping: Issues and Influences”, International Journal of Computer Engineering and Technology (IJCET), 2013.
5. Nisha Chanana and Sangeeta Goele “Future of E-commerce in India”, International Journal of computing and business research, 2012.
6. Abhijit Mitra “E-Commerce in India-A review”, International Journal of Marketing, Financial services and Management Research, 2013.
7. Sarbapriya Ray “Emerging Trends of E-commerce in India: Some Crucial Issues Prospects and Challenges”, Journal of Computer Engineering and Intelligent Systems 2011.
8. Muhammad Awais and Tanzila Samin “Advances SWOT Analysis of E-commerce”, International Journal of Computer Science Issues, 2012.

\*\*\*\*\*