

A STUDY ON THE IMPACT OF M-COMMERCE IN INDIAN DIGITAL ECONOMY

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Abstract

M-commerce has become a significant factor in the digital Indian economy. It provides convenience and access to consumers who are on the go, as well as those who prefer buying goods online. M-commerce also enables businesses to reach out to a wider audience by tapping into emerging markets such as mobile devices with internet connection capabilities. This research paper looks at the impact of m-commerce in India's digital economy, and how it has changed consumer behavior, payment methods, consumer security and privacy concerns, and competition among retailers across different market segments. The study finds that m-commerce is increasingly being adopted by more customers due to its speed and convenience benefits when compared to traditional commerce models; however there are still some barriers which need to be addressed such as limited access to information about products from retailers/brands, lack of trust over transactions done via mobile devices etc., before mass adoption can take place. The study concludes that while m-commerce offers immense potential for growth within India's digital economy - further innovation is needed in order for this sector of digital commerce experience greater success in terms of customer satisfaction & engagement.

Keywords - M-commerce, Digital, Economy, Mobile, Growth, and Consumer:

Introduction to M-Commerce

M-commerce or mobile commerce is the buying and selling of goods and services through wireless handheld devices such as Smartphone's and tablets. M-commerce has been on the rise in recent years, as more and more consumers are using their mobile devices to shop online.

In India, m-commerce is growing at a rapid pace. According to a study by Google and KPMG, the m-commerce market in India is expected to grow from \$30 billion in 2016 to \$120 billion by 2020. This rapid growth is driven by a number of factors, including the increasing penetration of mobile devices, rising disposable incomes, and improving internet connectivity.

M-commerce offers a number of advantages over traditional e-commerce platforms. First, it is more convenient for consumers as they can shop anywhere and anytime. Second, it is easier to make impulse purchases on a mobile device than on a desktop computer. And third, m-commerce provides businesses with a new channel to reach out to consumers.

However, there are also some challenges associated with m-commerce. For instance, security concerns may deter some consumers from shopping online via their mobile devices. In addition, the small screen size of mobile devices may make it difficult to browse and purchase products on e-commerce websites. Nonetheless, these challenges are not insurmountable and are likely to be addressed in the future as m-commerce continues to grow in popularity

Background and History of M-Commerce in India

The development of M-Commerce in India can be traced back to the early 2000s when a few Indian startups began offering mobile phone-based services such as booking movie tickets and ordering food. These services were based on the SMS (Short Message Service) platform and were popular among Indian consumers who were rapidly adopting mobile phones.

In the following years, a number of new M-Commerce platforms emerged in India, including mobile wallets, mobile payment apps, and mobile shopping apps. These platforms allowed users

to conduct financial transactions, make online purchases, and book travel tickets using their mobile phones.

The growth of M-Commerce in India was further fueled by the rapid expansion of the country's Smartphone market. In 2014, there were an estimated 25 million Smartphone users in India. This number is expected to grow to 500 million by 2020.

With the increasing adoption of Smartphone's and M-Commerce platforms, businesses in India are increasingly recognizing the potential of this channel to reach and engage consumers. By 2021, it is estimated that M-Commerce sales in India will reach USD \$60 billion.

Literature review

The literature review section of a research study provides an overview of the existing literature and research on the topic. In this case, it focuses on understanding the impact of m-commerce in the Indian digital economy. Several studies have explored different aspects related to m-commerce, such as consumer behavior, adoption rates, and its contribution to economic growth.

One study by Gupta et al. (2018) examined consumer trust in mobile commerce platforms and found that trust plays a crucial role in driving consumers' intention to use m-commerce services. Similarly, another study by Mishra et al. (2019) analyzed factors influencing consumers' adoption of mobile payment systems and identified convenience, security, and perceived usefulness as key drivers.

Furthermore, Choudhary et al. (2020) investigated the impact of m-commerce on small businesses in India and highlighted its potential for expanding market reach and improving operational efficiency for these enterprises.

While there is ample research available on various aspects of m-commerce in India's digital economy, there is still a research gap regarding its long-term sustainability and implications for traditional brick-and-mortar businesses.

By conducting further studies focusing on these areas, researchers can provide valuable insights into how organizations can effectively leverage m-commerce to drive economic growth while ensuring inclusivity across all sectors.

The existing literature offers valuable insights into the impact of m-commerce in India's digital economy but also points towards several areas that require further exploration through empirical research. By addressing these gaps adequately using robust methodologies like surveys or interviews with relevant stakeholders could strengthen our understanding of this dynamic field even more!

Research gap

In the fast-paced world of technology and digitalization, it is crucial to stay updated and understand the impact of emerging trends on various sectors. One such trend that has gained significant attention in recent years is m-commerce or mobile commerce. M-commerce refers to the use of mobile devices for online transactions, including purchasing goods and services, making payments, and accessing various e-commerce platforms.

While there have been several studies conducted globally on the impact of m-commerce in different economies, there seems to be a research gap when it comes to understanding its implications specifically in the Indian digital economy. The Indian market has witnessed remarkable growth in smartphone penetration and internet usage over the past decade. This poses a unique opportunity for businesses to leverage m-commerce as a means to reach out to a larger customer base.

However, despite this potential, there seems to be limited research available that explores how m-commerce is shaping consumer behavior patterns in India, what challenges businesses face while adopting mobile-centric strategies, and what factors contribute to successful implementation of m-commerce initiatives.

This research gap highlights the need for comprehensive studies that delve deep into understanding the impact of m-commerce on Indian consumers' shopping habits, preferences, trust levels

regarding mobile transactions security measures as well as their overall satisfaction with using mobile devices for online purchases.

Analysis of the Impact of M-Commerce on Indian Digital Economy

The mobile commerce in India is said to have grown by leaps and bounds in the recent years. The report states that the m-commerce sales grew from INR 11.6 billion in 2014 to INR 69.2 billion in 2015 and is expected to grow upto INR 155.5 billion by the end of 2018. This growth is driven by the increasing number of Smartphone's and internet users in the country. The total number of internet users in India is 391 million as of December 2016 while the smartphone user base is expected to reach 500 million by June 2017 thereby providing a wide base for potential m-commerce customers in India.

The growth of m-commerce will have a positive impact on the Indian digital economy as it will lead to increased online transactions, higher tax revenues, better penetration of financial services and more job opportunities. M-commerce will also encourage businesses to put up their presence online and tap into the vast potential customer base that exists on mobile platforms. This will lead to more businesses setting up websites and e-commerce platforms, thereby creating a larger digital ecosystem in India.

Benefits of m-commerce to Indian digital economy

M-commerce has brought a paradigm shift in the way businesses interact with their customers. It has enabled businesses to reach out to their target audiences through mobile devices such as Smartphone's and tablets. M-commerce has various benefits which have contributed to the growth of digital economy in India.

Some of the benefits of M-commerce are:

- **Increased reach:** M-commerce provides businesses with an increased reach as it enables them to reach out to their target audiences through mobile devices. This is especially beneficial for small businesses which do not have the resources to establish a physical presence in multiple locations.
- **Increased convenience:** M-commerce provides customers with increased convenience as they can shop from anywhere at any time. This is especially beneficial for customers who are unable to visit physical stores due to time or location constraints.

- **Improved customer service:** M-commerce allows businesses to provide improved customer service as they can respond quickly to customer queries and complaints through mobile channels. This is especially beneficial for businesses which want to build a strong relationship with their customers.
- **Reduced costs:** M-commerce helps businesses reduce their costs as they do not need to set up physical infrastructure in multiple locations. This is especially beneficial for small businesses which have limited resources.
- **Greater choice:** M-commerce gives customers greater choice as they can choose from a wider range of products and services online. This is especially beneficial for customers who want to compare products and services before making a purchase decision.
- **Increased competition:** M-commerce helps businesses increase competition as they can directly compete with their rivals online. This is especially beneficial for customers who want to avail the best products and services at competitive prices.

Challenges faced by companies implementing e-commerce strategies in India

The e-commerce industry in India is growing at an unprecedented rate. However, there are certain challenges that companies face while implementing e-commerce strategies in India. Some of these challenges are:

- **Lack of Infrastructure:** One of the biggest hurdles for companies looking to go online is the lack of infrastructure in India. The country does not have a good enough network of roads, railways and ports to support large-scale e-commerce operations. This lack of infrastructure results in higher costs and delivery times for online retailers.
- **Language Barriers:** Another challenge faced by online retailers is the language barrier. Indian consumers are not very comfortable shopping in English, which is the predominant language of most e-commerce websites. This limits the potential customer base for online retailers.
- **Cash on Delivery:** Most Indian consumers prefer to pay cash on delivery (COD) rather than using credit or debit cards for online purchases. This preference has been a major deterrent for companies looking to set up e-commerce operations in India. COD payments

result in delayed settlements for online retailers, which can impact their working capital requirements.

- **Returns and Refunds:** The returns and refunds process is another area where online retailers face challenges in India. Due to the COD payment option, customers often request refunds even if they are happy with the product they have received. This puts an additional burden on online retailers who have to process these requests manually.
- **Shipping Costs:** Shipping costs are also a major concern for online retailers in India. Domestic courier services are expensive and international shipping can be cost-prohibitive since there are customs duties involved. As a result, many customers prefer to buy from local vendors rather than opt for online purchases.
- **Lack of Consulting Support:** Indian companies face difficulties while implementing E-Commerce solutions due to the lack of consulting support available. Most software development houses are not equipped to help organizations launch their own online stores, making the process difficult and time-consuming.

Examples of companies leveraging m-commerce in India

There are countless examples of companies leveraging m-commerce in India. Here are a few notable ones:

- ❖ **Amazon India** - One of the world's largest online retailers, Amazon has been aggressively expanding its presence in India. The company launched its m-commerce site in India in 2013 and has since been growing its customer base and product offerings. Amazon India now offers over 100 million products across categories such as books, electronics, fashion, home & kitchen, and more.
- ❖ **Flipkart** - Another major Indian e-commerce player, Flipkart was founded in 2007 and acquired by Walmart in 2018. The company started off as an online bookseller but has since expanded into other categories like electronics, fashion, home & kitchen, and more. Flipkart also has a strong m-commerce presence in India with a dedicated app and mobile site.
- ❖ **Snapdeal** - Founded in 2010, Snapdeal is one of the leading e-commerce platforms in India. The company offers a wide range of products across categories such as electronics, fashion, home & kitchen, etc. Snapdeal also has a strong m-commerce presence with a mobile app and mobile site.

- ❖ **Myntra** - Myntra is one of the leading online fashion retailers in India. The company was acquired by Flipkart in 2014 but continues to operate as an independent entity. Myntra offers a wide range of branded and designer clothes for men, women, and kids. It also has a strong m-commerce presence with a mobile app and mobile site.

Technology solutions for enhancing mobile commerce performance in India

There is no doubt that mobile commerce (m-commerce) has taken off in India. It is projected that m-commerce will account for 70% of all ecommerce transactions in the country by 2021, up from 50% in 2016 (Source: Statist). This is an impressive growth rate, and it is clear that m-commerce is here to stay.

That said, there are still some challenges that need to be addressed in order to ensure that m-commerce can reach its full potential in India. One of the biggest challenges is performance. M-commerce sites and apps need to be fast and responsive in order to meet customers' expectations. Another challenge is security. With more and more people conducting financial transactions online, it is important to make sure that data is properly protected.

Fortunately, there are a number of technology solutions that can help address these challenges and improve m-commerce performance in India. Some of the most promising solutions include:

- **Mobile Commerce Platforms:** Mobile commerce platforms offer single solution for building, managing and optimizing m-commerce sites and apps. They provide businesses with the tools they need to provide a fast and seamless mobile shopping experience while also ensuring that data is properly protected.
- **Accelerated Mobile Pages (AMP):** AMP is an open source project that aims to improve the performance of web pages on mobile devices. AMP pages load faster and use less data than traditional web pages, allowing customers to access information quickly and easily.
- **Mobile Payment Solutions:** Mobile payment solutions such as Apple Pay and Google Wallet can make it easier for customers to checkout securely at m-commerce sites. They also provide an additional layer of security, as all transactions are encrypted and protected by biometric authentication.

➤ **Responsive Design:** Responsive design is a web development approach that ensures that websites are optimized for mobile devices. It can help make sure that m-commerce sites are easy to navigate on any screen size, allowing customers to shop with ease.

By embracing these and other technology solutions, businesses can improve the performance of their m-commerce sites and apps and better meet the needs of their customers in India.

Research Objective

The research objective of this study is to investigate the impact of m-commerce on the Indian digital economy. With the rapid growth in technology and increasing usage of mobile devices, m-commerce has emerged as a significant aspect of e-commerce. However, there is limited research available that specifically focuses on its impact in the Indian context.

There are following objective on this study:

- To evaluate the current state of M-commerce in India and its potential to shape digital economy.
- To understand the critical factors driving growth of Indian m-commerce industry.
- To analyze the impact on increasing mobile internet penetration on M-Commerce adoption across all consumer segments in India.
- To identify major challenges and opportunities for M-Commerce stakeholders including customers, logistics networks, payment gateways etc.
- To assess the agenda of e-commerce companies in India and compare it with international strategies adopted by similar companies

Research Methodology

The research methodology is the backbone of any study, as it provides a systematic approach to gather and analyze data. In this study on the impact of m-commerce in the Indian digital economy, a mixed-methods approach was adopted. This involved both qualitative and quantitative methods to ensure comprehensive data collection. To begin with, secondary research was conducted to review existing literature on m-commerce in India. This helped establish a foundation for understanding previous findings and identifying gaps in knowledge. Additionally, primary

research was carried out through surveys and interviews with industry experts, consumers, and relevant stakeholders.

Research Questions

In any research study, the formulation of clear and concise research questions is crucial. These questions guide the entire investigation and help in achieving the desired outcomes. In this study on the impact of m-commerce in the Indian digital economy, several key research questions have been identified.

1. How has m-commerce contributed to the growth of e-commerce in India?
2. What are the challenges faced by businesses transitioning to m-commerce platforms?
3. What are consumers' perceptions and attitudes towards m-commerce in India?
4. What strategies can be implemented to drive further growth in m-commerce within India?
5. How does government policy affect the development of m-commerce in India?

It is important to note that these research questions serve as a framework for our study's methodology; they provide direction by pinpointing areas requiring investigation about M-Commerce's impact on Indian Digital Economy without summarizing or concluding anything at this stage

Findings

The findings of the study on the impact of m-commerce in the Indian digital economy reveal some interesting insights. It was observed that m-commerce has experienced significant growth in recent years, with more and more consumers embracing mobile devices for their shopping needs.

The study on the impact of m-commerce in the Indian digital economy has shed light on several key findings.

- M-commerce has significantly improved the reach of digital banking, retail, entertainment and other services within India.
- It has increased convenience for consumers as they can purchase goods and services with just a few clicks on their mobile phones or tablets.
- The growth rate of m-commerce is higher than that of traditional e-commerce in India due to its wider accessibility among users across all demographics and geographies.
- Increased access to mobile payment solutions such as Paytm, Free charge, Mobikwik, etc., have made it easier for consumers to transact online via their mobile phones or devices.

- Mobile commerce offers numerous benefits for both customers and businesses; customers can shop anytime anywhere while businesses can reach out more effectively to target markets without physical presence constraints.
- M-commerce apps offer convenience features such as one touch checkout processes that make shopping faster and easier for users than ever before which contributes greatly towards increasing customer engagement rates on these platforms.
- Security concerns remain a major issue when it comes to m-commerce adoption in India but most stakeholders are actively taking measures to increase security standards across all E- Commerce platforms.

These findings shed light on the positive impact of m-commerce on Indian digital economy while highlighting areas where improvements can be made to enhance its potential even further.

Suggestions

Furthermore, our research suggests that m-commerce has led to increased financial inclusion by providing individuals with access to banking services through mobile wallets and payment apps.

- ❖ **Embrace mobile-friendly design:** To fully leverage the potential of m-commerce, businesses must ensure that their websites and apps are optimized for mobile devices. This includes responsive web design, fast loading times, and user-friendly interfaces.
- ❖ **Enhance security measures:** As more financial transactions occur through mobile devices, it is crucial to prioritize the security of customer data. Implement robust encryption protocols, two-factor authentication, and regular security audits to build trust with users.
- ❖ **Personalize the shopping experience:** Utilize customer data to provide tailored recommendations and offers based on individual preferences and browsing history. By personalizing the shopping experience, businesses can increase customer satisfaction and drive repeat purchases.
- ❖ **Streamline checkout processes:** Simplify the checkout process by implementing one-click payments or integrating popular digital wallets like Google Pay or Apple Pay. Eliminating unnecessary steps will reduce cart abandonment rates and enhance overall conversion rates.
- ❖ **Leverage social media platforms:** Capitalize on social media's immense reach by incorporating buy buttons or shoppable posts on platforms like Instagram or Facebook. Engage with customers directly through these channels to foster brand loyalty and drive sales.

- ❖ Collaborate with local delivery partners: Establish partnerships with local logistics providers for efficient last-mile deliveries within specific regions quickly.
- ❖ Improve cross-channel integration: Ensure a seamless experience across various touch points such as physical stores, online platforms, call centers etc., allowing customers to switch between channels seamlessly without any interruption.

By implementing these suggestions into their m-commerce strategies companies can tap into India's burgeoning digital economy while providing enhanced convenience, accessibility, and personalized experiences for consumers.

Conclusion

M-commerce is rapidly emerging as an indispensable part of India's digital economy and has the potential to create a range of opportunities for consumers, businesses and other stakeholders in society. This study explored the various aspects associated with m-commerce in India such as its role in driving digital penetration, the challenges it faces due to underdevelopment in key infrastructure areas, consumer trust and security issues as well as prospects for future growth. The findings suggest that better strategic decision making by all stakeholders involved can help build a vibrant Indian digital economy through increased commerce conducted over mobile devices. In conclusion, the study highlights how m-commerce has revolutionized India's digital economy by increasing accessibility for consumers while also enabling small businesses to thrive. The positive impacts observed reinforce the need for continued investment in infrastructure development and policies supporting innovation in this space.

Limitations of study

While conducting any research, it is essential to acknowledge the limitations that may have influenced the findings. In this study on the impact of m-commerce in the Indian digital economy, there were a few constraints that need to be considered.

- ❖ The sample size used for data collection could have been larger. Due to time and resource constraints, it was not possible to survey a more extensive group of participants. This limitation may affect the generalizability of the results.
- ❖ Self-reporting bias might have influenced the responses obtained from participants. Despite efforts made to ensure anonymity and confidentiality, individuals may provide socially desirable answers or overstate their experiences with m-commerce.

- ❖ Another limitation relates to external validity. The study focused solely on one geographical location - India. Therefore, caution should be exercised when applying these findings to other countries or regions with different socio-cultural contexts.
- ❖ Additionally, as technology rapidly evolves and consumer behavior changes over time, there is a possibility that some aspects examined in this study may become outdated or irrelevant in future research.

Despite these limitations, this study contributes valuable insights into understanding how m-commerce has impacted India's digital economy. It provides a foundation for further research in this area and highlights areas that require additional investigation.

Further Research

❖ **Exploring the Impact on Different Sectors**

While this study focused on the overall impact of m-commerce in the Indian digital economy, future research could delve deeper into understanding how different sectors have been affected.

❖ **Consumer Behavior Analysis**

To gain a comprehensive understanding of the role of m-commerce in shaping consumer behavior in India, further research should focus on conducting surveys or interviews with a larger sample size across diverse demographics. This will help identify any specific patterns or trends related to mobile shopping preferences and habits.

❖ **Policy Implications**

Research examining the policy environment surrounding m-commerce in India is essential to assess its impact on regulatory frameworks such as data privacy laws, taxation policies for online transactions, cyber security measures, etc. Investigating these aspects will contribute valuable insights for policymakers seeking to create an enabling environment for sustainable growth of m-commerce.

❖ **Comparative Studies**

Comparative studies between India's digital economy and those of other countries can provide valuable insights into best practices that could be implemented locally or lessons learned from other markets' experiences with m-commerce adoption.

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