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E-COMMERCE AND ITS GROWING ROLE IN THE ECONOMIC DEVELOPMENT OF INDIA

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ABSTRACT

E-commerce has emerged as a significant force in the economic development of India, changing the traditional ways of buying and selling goods and services. The rapid growth of internet connectivity, widespread use of smartphones, and expansion of digital payment systems have made online shopping easy and accessible to a large population across urban and rural areas. The purpose of this paper is to examine the growing role of e-commerce in India and to analyse its contribution to economic development, with special focus on retail growth, employment generation, MSMEs, digital payments, infrastructure development, and GDP contribution. The study is based on a descriptive research design. Secondary data have been collected from published research articles, government reports, websites, journals, and official statistics related to e-commerce and the Indian economy. The study finds that e-commerce has positively influenced India's economic growth by expanding market access, supporting small businesses and startups, generating employment, and strengthening digital and physical infrastructure. Government initiatives such as Digital India and Startup India have played a key role in encouraging digital trade. However, challenges such as cybersecurity risks, digital divide, data privacy issues, and logistics constraints still exist and need proper policy attention. This paper is useful for researchers, policymakers, academicians, entrepreneurs, and students who wish to understand the impact of e-commerce on India's economic development and its future growth potential.

KEYWORDS: E-commerce, Digital Economy, MSMEs, Online Shopping, Employment Generation, Digital Payments, Infrastructure Development, Economic Growth

1. INTRODUCTION

E-commerce means buying and selling goods and services through the internet. It allows people to shop for products online using a mobile phone or computer instead of going to a physical shop. Through e-commerce, customers can look at different items, compare prices, make payments online, and get the products delivered to their homes. Businesses also use e-commerce to sell their products to people in different cities and even different countries. It makes trading faster, easier, and more convenient for both buyers and sellers.

Growth of Internet and Smartphones in India

In India, the use of the internet and smartphones has grown very fast in the last few years. Earlier, only a small number of people had access to the internet, mostly in big cities. But today, millions of people in both urban and rural areas use smartphones and the internet every day. Affordable smartphones and low-cost data plans have made it easy for people to stay connected. Companies like Jio, Airtel, and Vodafone have helped reduce internet prices, allowing more people to go online. Because of this, Indians now use the internet for many activities such as online shopping, digital payments, education,

Research Article

entertainment, and social media. This large increase in internet users has also helped e-commerce grow quickly, as more people can now buy products online from anywhere and at any time.

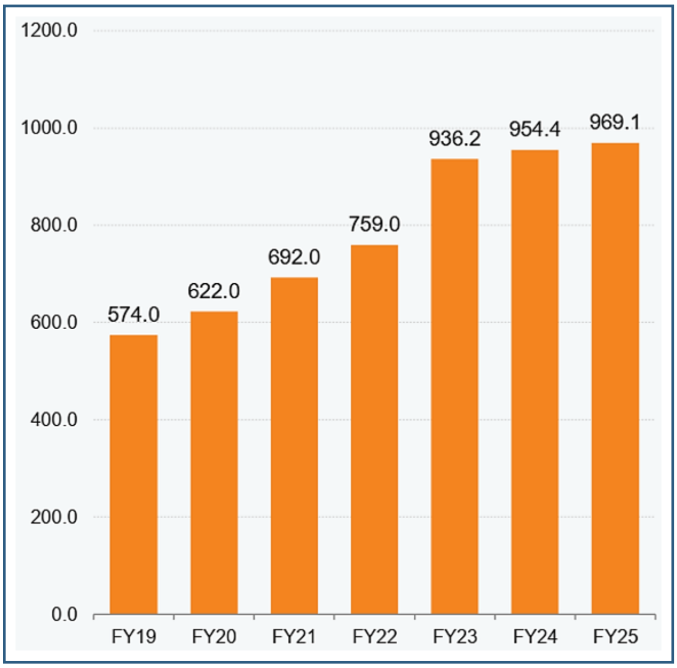

Fig. 1: Internet Users in India (in million)

Source: *TRAI, Economic Times, Live Mint, Department of Telecommunications*

As of March 2025, India has about 969.1 million internet subscribers. India's internet economy is expected to grow ten times and reach US$ 1 trillion by 2030. This growth will mainly come from e-commerce, which was worth Rs. 8,70,500 crore (US$ 100 billion) in 2024. In 2024, India's internet penetration rate was 52.4% of the total population. India has the highest data use in the world, with each person using 32 GB of data per month in June 2025. This is expected to grow to 62 GB per person per month by 2030, showing the need for strong 5G networks. India has the second-highest number of active internet users in the world and is also one of the biggest data consumers globally. India's 5G subscriber base is expected to grow more than three times, from 29 crore in 2024 to about 98 crore by 2030. Social commerce in India could reach US$ 16–20 billion in 2025, growing 55–60% each year, and may jump to US$ 70 billion by 2030 because of high mobile use. A report by IAMAI and Kantar Research says India's internet users are expected to reach 900 million by 2025, up from about 700 million in 2022.

Overview of E-Commerce Industry in India

In recent years, more people in India have started using the internet and smartphones. This has helped India's digital sector grow, which is expected to reach US$ 1 trillion by 2030. Higher incomes and more online use have helped the e-commerce industry grow fast. E-commerce has changed how business works in India, including business-to-business (B2B), direct-to-consumer (D2C), consumer-to-consumer (C2C), and consumer-to-business (C2B) models. In 2024, India's e-commerce industry was worth Rs. 10,82,875 crore (US$ 125 billion). It is expected to grow to Rs. 29,88,735 crore (US$ 345 billion) by 2030, with a growth rate of 15% per year. A report by ANAROCK and ET Retail says it could reach Rs. 47,64,650 crore (US$ 550 billion) by 2035, due to more people using digital platforms and changing shopping habits. E-commerce is also attracting many investments. In 2024–25, the industry got Rs. 26,527 crore (US$ 3.1 billion) across 79 deals, which is 31% of all start-up funding. This was 128% more than in 2023, when it got Rs. 11,980 crore (US$ 1.4 billion) from 59 deals.

Hyperlocal and B2C businesses led the growth. For example, Zepto alone raised Rs. 11,980 crore (US$ 1.4 billion), making up 44% of all e-commerce investments. In 2024, e-commerce was the fifth largest sector in private equity and venture capital investments, attracting Rs. 38,865 crore (US$ 4.6 billion). India's e-commerce industry is growing fast, helped by higher incomes, more internet use, and more shoppers in smaller cities. Quick commerce is growing at 70–80% per year, and the D2C market is expected to cross Rs. 8,70,500 crore (US$ 100 billion) in 2025. Overall, the industry may grow 17–22% per year in 2025.

By August 2025, the Government e-Marketplace (GeM) had reached Rs. 15,00,000 crore (US$ 171.3 billion) in total sales since 2016, showing its role in fair and open online government buying. India has also passed the United States to become the world's second-largest online shopping market, with 270 million online shoppers in 2024. Trend-based fashion is expected to grow nearly four times, reaching Rs. 68,456–85,570 crore (US$ 8–10 billion) by 2028, with more than half of sales coming from online platforms.

The beauty and personal care (BPC) market in India is also growing fast. It may reach Rs. 2,60,610 crore (US$ 30 billion) by 2027, which is 5% of the global market. Growing around 10% per year, it is the fastest-growing BPC market among major countries. Subscription e-commerce is another growing area. It was worth Rs. 88,479 crore (US$ 10.34 billion) in 2024 and is expected to grow to Rs. 3.2 lakh crore (US$ 374.24 billion) by 2033, with an annual growth rate of 45% from 2025 to 2033.

Research Objectives

1. To study the growth and development of e-commerce in India.
2. To analyse the role of e-commerce in the economic development of India with special reference to retail growth, employment generation, MSMEs, digital payments, and infrastructure development.
3. To identify the major challenges faced by e-commerce in India and its future growth prospects.

2. EVOLUTION OF E-COMMERCE IN INDIA

The story of e-commerce in India started in the early 2000s when only a few people had access to the internet. In the beginning, online shopping was very limited. Only a few companies sold basic products like books, CDs, or small electronics. Many people did not trust online payments, and delivery services were not well developed. Because of this, e-commerce grew very slowly during the early years.

A major change came after 2010 when internet access started spreading across the country. More people began using computers and later smartphones. Companies like Flipkart and Amazon entered the Indian market and introduced new ideas such as cash on delivery, easy returns, and quick delivery services. These features helped build trust among customers who were trying online shopping for the first time. E-commerce slowly became more popular, especially in metro cities.

Another big push for e-commerce came with the launch of the Digital India initiative in 2015. The government encouraged people to use the internet and digital payments. At the same time, mobile networks improved, and data became much cheaper. More people in small towns and rural areas started using smartphones. This allowed e-commerce companies to reach areas where physical stores were limited.

The COVID-19 pandemic in 2020 further increased the use of e-commerce. During lockdowns, people could not go to markets or shops, so they began buying groceries, medicines, and other daily items online. Even people who had never shopped online before started using e-commerce platforms because it was safe and convenient. This period brought a major shift in consumer behaviour.

Today, e-commerce in India has grown into a strong and fast-moving industry. It includes online shopping, digital payments, food delivery, online education, and many more services. From big cities to small villages, more people now use online platforms for their daily needs. The evolution of e-commerce shows how technology and connectivity have changed the way people in India buy and sell goods.

3. DRIVERS OF E-COMMERCE GROWTH

The growth of e-commerce in India has been supported by several important factors:

- **Increasing Smartphone and Internet Use**
  More people in India now own smartphones and have access to the internet. This makes it easier for them to browse online stores, compare prices, and place orders anytime. Even people in small towns and villages can now connect to e-commerce platforms, increasing the number of online shoppers.

- **Affordable Data Plans**
  The availability of low-cost mobile data has played a big role in the growth of e-commerce. Companies like Jio, Airtel, and Vodafone made internet access cheaper and faster. Because of this, more people can spend time online, explore products, and shop conveniently without worrying about high internet costs.

- **Growth of Digital Payments (UPI, Wallets)**
  Digital payment systems like UPI, Paytm, Google Pay, and wallets have made online transactions easy and safe. Customers no longer need to carry cash, and businesses receive payments quickly. This convenience encourages people to shop

online more often.

- Trust in Online Shopping
  Earlier, many people were afraid to buy online because of payment fraud or poor-quality products. Today, e-commerce companies provide cash on delivery, easy returns, and customer support. These features have increased trust in online shopping, attracting more buyers.

- **Government Initiatives to Promote Digital Trade**
  The Indian government has introduced initiatives like Digital India, Startup India, and e-commerce regulations to encourage online business. Policies to support digital payments, GST simplification, and digital infrastructure have made it easier for companies to sell online and reach more customers.

4. CONTRIBUTION OF E-COMMERCE TO ECONOMIC DEVELOPMENT

Market Size

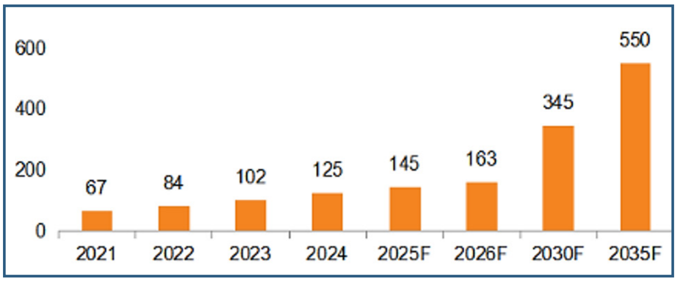

Fig. 2: Indian E-Commerce Market (US $ billion)
Source: *IBEF.Org*

The Indian e-commerce market is projected to grow from US$ 125 billion in 2024 to US$ 345 billion in 2030 and is expected to touch US$ 550 billion by 2035, up from US$ 84 billion in 2022, largely driven by tier-2 and tier-3 city adoption. The country's B2B online marketplace opportunity is also estimated to reach US$ 200 billion by 2030.

According to a recent report by EY India, generative artificial intelligence (GenAI) could enhance productivity in India's retail industry by 35-37% by 2030. The report, titled 'The AIdea of India: 2025', highlighted that 48% of Indian businesses have already initiated proof of concept (PoCs) for GenAI solutions, while another 32% are planning to invest or have allocated budgets for AI adoption.

In August 2025, the Unified Payments Interface (UPI) facilitated a total of 20 billion transactions, processing over Rs. 24,85,000 crore (US$ 288.65 billion) in value. This reflected a 34% rise in volume and a 21% increase in value YoY. PhonePe, Google Pay, and Paytm led the market, accounting for 85% of India's digital payments. The volume of digital payment transactions reached 222.19 billion in FY25, up from 164.43 billion in FY24.

India's quick commerce sector witnessed rapid momentum in FY25, with consumers spending Rs. 64,000 crore (US$ 7.47 billion), more than doubling FY24 levels. Gross order value is expected to touch Rs. 2,00,000 crore (US$ 23.34 billion) by FY28, as the sector shifts focus from hypergrowth to profitability through fees, ads, subscriptions, and technology-driven innovations. FMCG leaders such as HUL, Britannia, AWL Agri-Business, Dabur, Tata Consumer Products, and Marico recorded cumulative quick commerce sales of over Rs. 4,400 crore (US$ 515 million) in FY25.

Tier-2 and tier-3 cities drove significant e-commerce growth during the 2025 summer sales, with tier-3 cities posting 21% YoY growth and contributing 38% of order volumes. This underlines the rising adoption of online shopping beyond metros. Advertising has also become a key growth engine, with Flipkart and Myntra's combined ad revenues rising 27% to Rs. 7,232 crore (US$ 836.36 million) in FY25, offsetting losses and aiding profitability.

As of March 2025, India has around 969.1 million internet subscribers. Smartphone adoption continues to accelerate, with Indian consumers increasingly shifting to 5G devices. By CY24, India had positioned itself as the second-largest smartphone market in the world by unit volume and the third-largest by value, accounting for 15.5% of global shipments. According to IDC, shipments grew 4% YoY to 151 million units, with 7% growth in the first half offsetting a slower 2% expansion in the second half.

India's e-retail market continues to expand at a fast pace. Projections indicate that e-retail will exceed US$ 160 billion by 2028. Long-term fundamentals remain strong, with annual growth expected to average over 18% and gross merchandise value (GMV) reaching

Rs. 14.5 lakh crore (US$ 170 billion) by 2030. Nearly one in ten retail dollars will be spent online, supported by rising discretionary spending as India's per capita GDP climbs to Rs. 3,00,000-4,00,000 (US$ 3,500-4,000).

The number of online shoppers in India has grown significantly, from 140 million in 2020 to nearly 260 million in 2024. This is projected to reach 300 million by 2030 and 700 million by 2035, with much of this growth coming from tier-2 and tier-3 cities. Earlier, India had 150 million online shoppers in FY21, with expectations of 350 million by FY26. Between 2019 and 2026, rural online shoppers are expected to grow at a CAGR of 22% to 88 million, while urban online shoppers will rise at a CAGR of 15% to 263 million.

Globally, India has become the third-largest online shopper base after China and the US. The country's B2C e-commerce exports, currently at US$ 2 billion, hold substantial room for growth, given the global B2C e-commerce market is projected to reach US$ 8 trillion by 2030.

Boost to Retail and Consumer Market

E-commerce has brought a significant boost to India's retail and consumer market. Earlier, people in smaller towns and rural areas had limited access to goods and products. They had to rely on local stores, which often offered fewer choices and higher prices. With the rise of online shopping platforms, customers can now browse and purchase a wide variety of products from anywhere in the country. Items such as electronics, clothing, groceries, and even luxury products are now available at their fingertips. This easy access has expanded the consumer market and increased overall consumption.

Another way e-commerce has boosted retail is by creating price competition among sellers. Online platforms often allow multiple sellers to offer the same product, giving customers the chance to compare prices and choose the best deal. This competition encourages businesses to offer better prices, discounts, and promotional offers. As a result, consumers benefit from affordability while businesses gain more customers and higher sales volumes.

E-commerce has also played a crucial role in the growth of organized retail in India. Many traditional retailers and small shops have started selling online to reach a wider audience. By joining e-commerce platforms, these businesses can connect with customers outside their local area, increasing their revenue and market presence.

Seasonal and festive sales, such as Diwali, Holi, and New Year, have become major drivers of retail growth through e-commerce. Online platforms offer special discounts, flash sales, and attractive deals during these times, which attract large numbers of buyers. This not only boosts consumer spending but also strengthens the overall retail market in India.

Employment Generation

E-commerce has become an important source of employment in India. As online businesses grow, they require a large number of people to manage different operations. This includes jobs in areas such as order processing, customer service, inventory management, logistics, and delivery. Companies like Amazon, Flipkart, and other e-commerce platforms have created millions of jobs directly and indirectly across the country.

The logistics and delivery sector has seen especially high growth due to e-commerce. Couriers, warehouse staff, drivers, and supply chain managers are in high demand to ensure that products reach customers on time. This has opened employment opportunities not only in big cities but also in smaller towns and rural areas, helping reduce regional employment gaps.

E-commerce has also supported jobs in IT and digital services. Software developers, app designers, digital marketers, and data analysts are needed to manage online platforms, improve user experience, and analyse customer behaviour. This has encouraged the growth of skilled employment in India's technology sector.

Furthermore, e-commerce has encouraged entrepreneurship and self-employment. Many small business owners and artisans now sell their products online, creating jobs for themselves and sometimes for others in their local communities. Digital platforms give them access to a larger market without the need for large investments in physical stores.

Growth of MSMEs and Startups

E-commerce has played a major role in the growth of Micro, Small, and Medium Enterprises (MSMEs) and startups in India. Earlier, small businesses faced difficulties in reaching customers beyond their local area. Physical stores required high investment, and advertising was costly. With online platforms, MSMEs and startups can now sell their products across cities and even internationally without large expenses. This has opened new markets and increased their revenue potential.

Online marketplaces like Amazon, Flipkart, and niche platforms provide MSMEs with tools to showcase their products, manage inventory, and receive payments digitally. This support makes it easier for small businesses to compete with larger companies. Startups have also benefited by using e-commerce platforms to launch innovative products quickly, test customer response, and scale their operations efficiently.

E-commerce has also encouraged innovation and entrepreneurship. Many startups in India focus on areas such as online grocery delivery, fashion, handicrafts, and digital services. These businesses can reach a national audience without needing physical stores, which reduces costs and risks. Additionally, digital marketing, social media, and online payment systems allow these startups to build their brand and customer base faster than traditional methods.

Government initiatives like Startup India, Make in India, and Digital India have further strengthened the role of e-commerce for MSMEs and startups. By promoting digital trade, offering tax benefits, and simplifying regulations, the government has made it easier for small businesses to grow online.

Development of Digital Payment Systems

The growth of e-commerce in India has gone hand in hand with the development of digital payment systems. Online shopping requires safe, fast, and convenient ways to pay for goods and services, and digital payment methods have made this possible. Platforms like UPI, Paytm, Google Pay, PhonePe, and mobile wallets have made transactions easier for both customers and businesses.

Digital payments reduce the need for cash, which is especially helpful in online shopping. Customers can pay instantly using their smartphones, and businesses receive the money quickly. This speed and convenience have increased trust in online shopping, encouraging more people to buy products through e-commerce platforms.

The rise of digital payments has also helped small businesses and MSMEs. They can now sell their products online without worrying about handling cash or setting up complicated banking systems. Payment gateways, QR codes, and UPI links allow even small sellers in remote areas to receive payments easily.

Government initiatives like Digital India and demonetization have further promoted the use of digital payments. These policies encouraged people to adopt online transactions and reduced the reliance on cash. Today, millions of digital transactions happen every day, supporting the growth of e-commerce and making India's economy more digital.

Contribution to GDP

E-commerce has become an important contributor to India's Gross Domestic Product (GDP). As online shopping grows, it increases the overall economic activity by boosting sales of goods and services across the country. Consumers from cities, towns, and rural areas are spending more online, which adds to production, trade, and business revenue.

The growth of e-commerce also stimulates related sectors such as logistics, warehousing, IT, digital marketing, and payment services. These industries expand their operations to support online businesses, creating more jobs and income. This, in turn, adds to the national GDP.

Startups and MSMEs using e-commerce platforms are able to reach national and international markets. By increasing exports and promoting local products, e-commerce helps generate foreign exchange and strengthens the economy. This contributes to India's overall economic growth and competitiveness in the global market.

Moreover, government initiatives supporting digital trade, cashless transactions, and infrastructure development have further enhanced the impact of e-commerce on GDP. The convenience of online shopping encourages higher consumption, which is a key factor in economic development.

Infrastructure Development

The rapid growth of e-commerce in India has led to significant development in infrastructure. Online businesses require efficient systems to store, manage, and deliver products to customers quickly. As a result, companies have invested heavily in warehouses, fulfillment centers, and distribution networks across the country. These facilities help ensure that products are available and can reach customers in both cities and remote areas on time.

Logistics and transportation infrastructure have also improved due to e-commerce. Delivery companies now have better roads, regional hubs, and tracking systems to manage the movement of goods. This has not only benefited online businesses but has also strengthened the supply chain network for the entire retail industry.

Data centers and IT infrastructure have expanded as well. E-commerce platforms rely on cloud computing, digital storage, and high-speed internet to manage their operations efficiently. This growth has supported the broader digital economy by creating reliable systems for transactions, customer data, and online services.

The development of infrastructure for e-commerce has also created jobs in construction, warehousing, transport, and technology sectors. It supports small businesses and startups by providing them with access to advanced logistics and storage facilities that were previously available only to large companies.

5. CHALLENGES IN E-COMMERCE GROWTH

Despite its rapid growth, e-commerce in India faces several challenges that can limit its full potential. One major challenge is cybersecurity and online fraud. As more people shop online, the risk of hacking, data theft, and payment fraud increases. Customers often worry about the safety of their personal and financial information, which can reduce trust in online platforms.

Another challenge is the digital divide between urban and rural areas. While cities have good internet access and smartphone penetration, many rural areas still face connectivity issues. Lack of digital literacy also prevents some people from using e-commerce platforms confidently, limiting the reach of online businesses.

High competition is another issue. With many online platforms and sellers, companies often engage in price wars and heavy discounting. While this benefits consumers, it can reduce profit margins for businesses and make it difficult for small sellers to survive.

Logistics and last-mile delivery also remain challenging, especially in remote areas. Delivering products to distant locations can be expensive and time-consuming, affecting customer satisfaction. Poor road infrastructure and transportation networks in some regions add to these difficulties.

Data privacy is another concern. E-commerce platforms collect large amounts of customer information, and improper handling of this data can lead to misuse or breaches. Customers are increasingly aware of their privacy rights, and businesses must invest in secure systems to maintain trust.

6. CONCLUSION

E-commerce has become a powerful force in India's economic development. It has transformed the way people buy and sell products, making shopping more convenient, affordable, and accessible. The growth of smartphones, internet access, digital payments, and supportive government initiatives has accelerated the rise of online commerce across cities, towns, and rural areas.

E-commerce has boosted the retail sector, created employment opportunities, supported MSMEs and startups, strengthened digital payment systems, and contributed significantly to India's GDP. It has also driven infrastructure development, including warehouses, logistics networks, and IT systems, which benefit the broader economy.

Despite these advantages, challenges such as cybersecurity risks, digital divide, logistics issues, and data privacy concerns remain. Addressing these challenges is essential to sustain growth and ensure that the benefits of e-commerce reach every part of the country.

Overall, e-commerce is not just changing the way people shop; it is shaping India's digital economy and supporting the nation's journey toward economic growth and development. Its continued expansion promises to create more opportunities for businesses, consumers, and the overall economy in the years to come.

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