



Research Article

E-Commerce: An Accelerator of Economic Growth: Some Evidence from Indian Economy

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Abstract

One of the prominent focus of this research paper is to analyse the impact of e-commerce and technology on the economic status of India and ascertain its potential for creating suitable opportunities for employment. In the current scenario, technology being the key economic driver, it becomes absolutely essential to integrate the economy and digital markets. A thriving economy benefits firms, prices, and productivity. Increased internet penetration, rapid technological adoption, and high sales of technical gadgets such as smart phones, tablets, and so on have resulted in an ever-expanding attractive online customer base and unprecedented exponential growth of the e-commerce business in India. Nonetheless, a proper business model, as well as other strategies, are required to ensure the business's long-term viability and economic growth. Digitization in a timely manner would allow India to compete with other developed economies, create jobs, and maintain a consistent increase in GDP, resulting in socioeconomic growth for the entire country.

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1. INTRODUCTION

The rapid advancement of digital technology has significantly transformed the global economic landscape, with e-commerce emerging as one of the most dynamic drivers of economic growth. In recent years, the integration of technology with business activities has reshaped production systems, market structures, consumption patterns, and employment generation across economies. E-commerce, defined as the buying and selling of goods and services through electronic platforms, has become a crucial component of modern economic development, particularly in emerging economies like India. India has witnessed a remarkable expansion of e-commerce due to increased internet penetration, widespread use of smartphones, declining data costs, and a growing digitally literate population. The digital revolution has enabled businesses—ranging from large corporations to micro and small enterprises—to access wider markets, reduce transaction costs, and improve operational efficiency. As a result, e-commerce has not only contributed to higher productivity and competitiveness but has also played an important role in employment creation across logistics, warehousing, digital marketing, payment services, and allied sectors. The Indian economy, characterized by a large consumer base and a youthful demographic profile, provides fertile ground for the expansion of digital markets. Government initiatives such as Digital India, Start-up India, and the promotion of cashless transactions have further accelerated the growth of the e-commerce ecosystem. These initiatives aim to integrate digital platforms with traditional economic activities, thereby fostering inclusive growth and enhancing economic resilience. The rise of e-commerce has also empowered small and medium enterprises (SMEs) and rural entrepreneurs by enabling them to participate in national and global markets. However, despite its significant growth potential, the e-commerce sector faces several challenges, including infrastructure gaps, cybersecurity concerns, regulatory uncertainties, digital divide, and issues related to consumer protection and data privacy. Moreover, sustaining long-term economic growth through e-commerce requires robust business models, skilled human resources, and continuous technological innovation. Against this backdrop, the present study seeks to examine the role of e-commerce as an accelerator of economic growth in India. It focuses on analyzing how technological advancement and digital markets contribute to GDP growth, employment generation, and overall economic development. By assessing the opportunities and challenges associated with e-commerce, the study aims to provide insights into policy measures and strategic interventions required to harness its full potential for sustainable and inclusive economic growth in India.

2. OBJECTIVES

The study's primary goals are as follows:

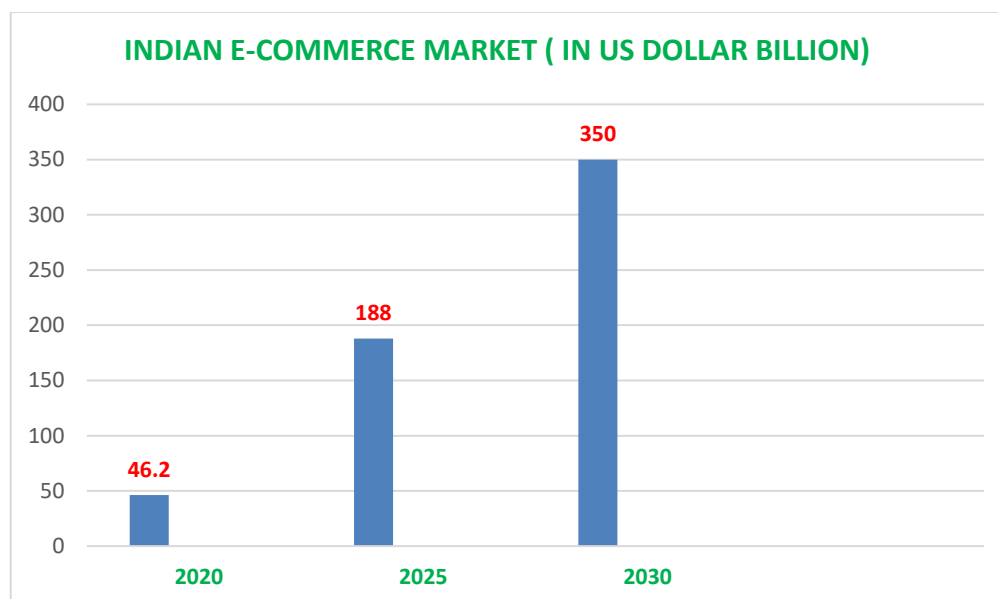
1. How does modern technology aid India's economic growth?
2. What is the internet's and e-commerce's contribution to India's GDP?
3. What types of new job opportunities are being created as a result of technology and e-commerce, and how can these opportunities be effectively leveraged in India?

3. RESEARCH METHODOLOGY

The data in this paper is secondary in nature. The information for this research paper was gathered from journals, books, magazines, research papers, government of India publications, and the internet. The purpose of exploratory research is to present and comprehend the research problem.

Research Findings

As e-commerce in India expands employment and educational opportunities, an increasing number of young people are pursuing technological skills related to e-business. In the Indian business world, e-business is one of the most popular concepts. In terms of technology, it is spawning a completely new economy, one that holds enormous promise and is fundamentally altering how businesses operate. E-commerce is a symbol of globalisation and the pinnacle of digital achievement. It has transformed and is continuing to transform global business. Electronic commerce has evolved into one of the most effective channels for inter-organizational business activities as a result of the commercialization of the Internet. Online retail is no longer limited to only tier-1 towns and cities. The previously unreachable pockets and 2nd and 3rd tier towns are now being targeted as the largest currently untapped potential consumers by e-commerce companies. They are overcoming the present infrastructure barriers by establishing warehouses in the most remote locations and enabling easier access of goods and services to the remotest corners of India. The advent of e-commerce has completely altered the way transactions are now conducted in the country. The country's e-commerce market is expected to grow from \$46.2 billion in 2020 to \$188 billion by 2025. It is expected to reach a staggering US\$ 350 billion by the end of 2030. It is also predicted that it will reach US\$ 111 billion by 2024, and US\$ 200 billion by 2026. Increased internet and smartphone penetration has significantly aided the industry's growth. The total number of internet connections is expected to reach 830 million by 2021, owing primarily to the 'Digital India' programme. 55% of all internet connections were in cities, with 97% in rural areas.



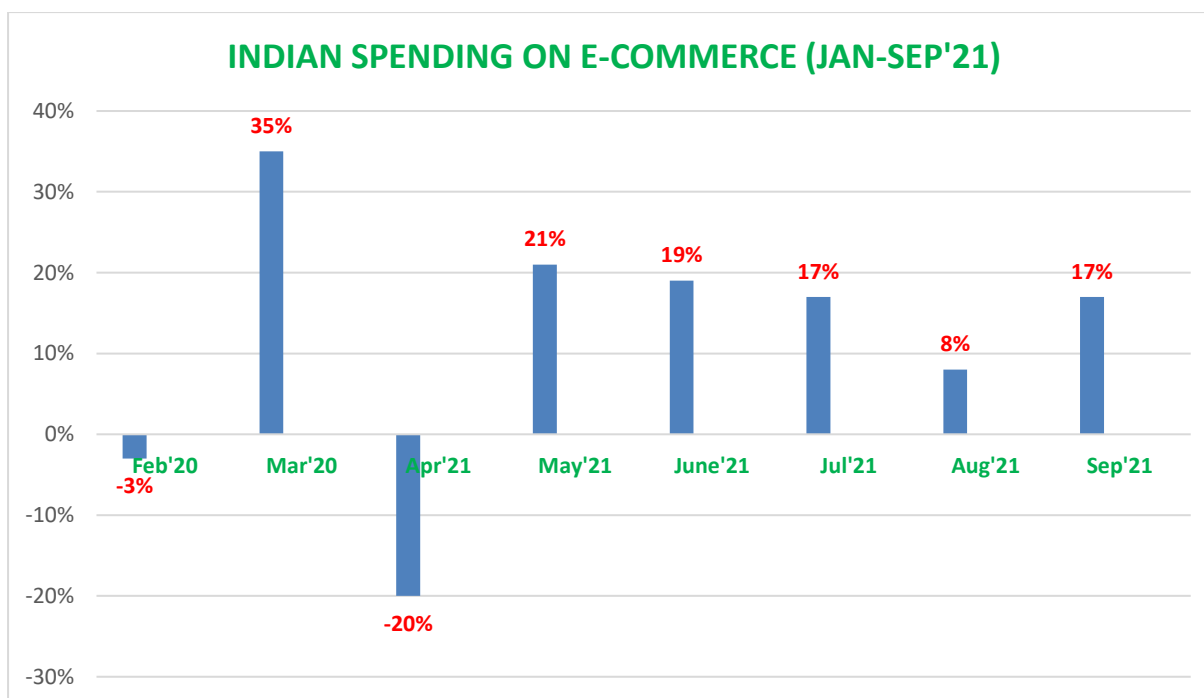
Source: E-Commerce Industry Report 2022, India Brand Equity Foundation

The online India grocery segment is expected to increase from US\$ 3.95 billion in FY21, to US\$ 26.93 billion in 2027 thereby flourishing at 33% CAGR. The country's digital consumer sector will reach an estimated US\$ 1 trillion in 2030, thereby increasing from US\$ 537.5 billion according to 2020 estimates, mostly because of the heavy adoption of digital services such as online Edu tech, transactions, e-commerce. As per Grant Thornton, India's over-all trade in e-commerce is estimated to be at least US\$ 188 billion by the end of the year 2025.

With a revenue of approximately \$50 billion in the year 2020,

the country of India finally won laurels for being the eighth-major market for online transactions digital trade, which is few positions behind France, and at the same time, a couple of positions ahead of Canada.

According to a new report by the consulting firm Red Seer, India's internet economy is expected to grow at a rate of more than 50% year on year in 2021, and to be worth more than \$1 trillion by 2030. This healthy expansion can be attributed to rapidly increasing internet penetration, high-speed internet access, and increased online shopping, digital content consumption, and creation.



Source: E-Commerce Industry Report 2022, India Brand Equity Foundation

Emergence of e-commerce and online transactions in India

The country's total e-commerce business increased by 77% in the year 2020-21 with the highest volume of transactions being recorded from tier 2 and 3 level cities, thereby recording India's maximum level of growth ever. The famous festive season sales for e-commerce recorded a total sales volume of US\$ 9.2 billion which is jump of 23% in comparison to the year 2020.

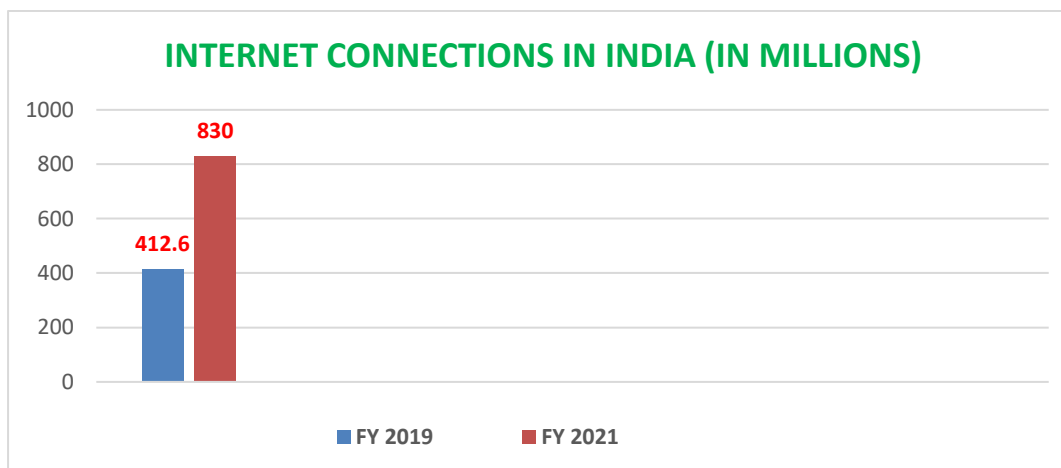
India's e-commerce segment is ranked at the 9th position in across-border growth and this across-border sector is estimated to increase at around 17% by the year 2025, as mentioned by the 'Payoneer Report'. Also, India's digital trade is expected to jump from an estimated 4% of the over-all tables, grocery, clothing and electronic goods retail sector trade in the year 2020 to a double of 8% by the end of 2025.

According to the figures available till June 2021, the Government of India's e-Marketplace (GeM), set up recently, facilitated around 10.36 million of purchase orders amounting to US\$ 33.07 billion or Rs. 258,359 crores.

The Indian consumer sector online economy is projected to hit US\$ 1 trillion market supposedly the end of 2030, thereby expanding from US\$ 85-90 billion in the year 2020, led by active inculcation of digital services like edu-tech, online transactions and e-commerce, all over the country.

Increasing number of internet users

By the end of the year 2021, total amount of active internet networks in India sharply expanded to 831 million, primarily fuelled by the famous "Digital India" regime. Total annual size of usage of wireless form of has increased to 8 times over as compared to the year 2018 and total extent of Internet usage and penetration in India has surged from 4% in 2008 to 46% in the year 2021. Incidentally, India also experiences maximum usage of data globally estimated to be 14.2GB data in a month for a particular person. Not only this, total number of real and active users of data and internet in India is at an impressive number 2 position all around the globe. Indian consumers are also globally one of the largest consumers of data in the world. Incidentally, India also experiences the maximum usage of data per smartphone pegged at a staggering average of around 14.1 GB in a month. Indian digital commerce trade evidently has the promise to increase to US\$20 billion in 2023, at an impressive CAGR of 60%, with a possibly colossal surge to US\$ 70 billion by the year 2030, due to high amount of cell phone upheaval even in the rural areas. Indian internet users are expected to reach from 658 million internet users in 2020 to 900 million by the end of the year 2025, thereby increasing at a CAGR of 45% until 2025.



Source: "E-Commerce Industry Report 2022", India Brand Equity Foundation

India' Online retail vs Total retail

There are numerous opportunities for E-retailers in India to capitalise on the country's rapidly and steadily increasing internet penetration. This retail trade penetration is expected to reach 10.7% by the end of 2024, up from a meagre 4.7% in 2019. Furthermore, the number of online and digital shoppers in the country is expected to reach 221 million by the end of 2025.

Business model in practice for the purpose of E-tailing

Model of the Marketplace

Model of the Marketplace follows the standards as well as procedures of a nil-inventory kind of model. This online transactions model proposes a strong digital platform for clients as well as merchants minus any need for actually storing, safe keeping and warehousing various commodities. These kinds of

efficient marketplaces offer a range of services including speedy shipment, payments, delivery, returns and a host of other services by associating with different logistics companies and financial institutions. The very new and focussed FDI framework in India has allowed 100% FDI in the very profitable E-commerce model under the quick and fast automatic way. In the month of December 2021, the digital giant Amazon India swiftly added an impressive 4.5 lakh additional sellers bringing the total cumulative sellers to around 10 lakhs. It has also been seen that around 90% of the total sellers are local and medium businesses.

Inventory-led Model

These are the models in which buyers select from a variety of websites within a range of products owned by online shopping

companies. The website then manages the entire process from start to finish, beginning with product purchase, warehousing, and finally product dispatch to consumers, as well as returns management.

Growth drivers for e-commerce

Government initiatives such as "Digital India" are constantly motivating and familiarising people with various digital trade techniques. Furthermore, the government's investor-friendly and consumer-friendly FDI policy framework is enticing major players in this sector. In addition, Indian lawmakers have planned a "National E-commerce Policy," which will lay out proper legal guidelines for cross-border data. This means that no data will be given or shared with any foreign government or other foreign agency without prior approval and authorization from the various authorities of the Government of India. Increasing number of people are getting used to E-commerce and online transactions. Whether its investors, buyers or sellers in question, maximum number of people across states are acclimatizing to online transactions.

The land of festivals and occasions, India has added to this the expanding inflow of FDI local investment, and taken the much-needed support from major industrial participants which is also greatly aiding in the emergence of online trade and E-commerce.

Private and Government initiatives affecting e-commerce in India

"Digital India" and "Bharat Net"

The broadband services of Bharat Net targets to link 3,61,000 villages and tier 2 cities digitally, followed by various states definitely by end of the year 2025. According to the "Economic Survey of year 2021-22", 547k kilometres of optical type fibre cable has been arranged, and over of 174,000 Gram Panchayats have been associated. To add to this, under the aegis of the "Digital India movement", the Government of India has started various self-driven programmes like Bharat Interface for Money (BHIM), Umang, Start-up India Portal, etc which have further fast-tracked the process of digitisation and online transactions.

Draft Policy for E-Commerce

Indian Government's "National E-commerce Draft policy" boosts FDI presence in this important model of the marketplace in E-commerce. Furthermore, the policy reiterates that the FDI policy for online trade sector has been enhanced to guarantee an equal kind of opportunity for every type of participants. As per the given draft, a dedicated and listed entity is required for all the online trade and E-commerce websites and applications so that they can continue their activities and operations in India. In the month of October 2020, thereby changing the "equalisation levy rules of 2016", the Government of India instructed all foreign origin companies and their functioning e-commerce sites and entities in India to possess a permanent account number or PAN. Not only this, it was seen that 2% obligatory tax was made in the 2020-21 financial budget probable goods

sold and/or any kind of delivery of services done through an authorized "non-resident" E-commerce linkage.

A very kind of unique B2B online commerce platform, Udaan connects all kinds of available wholesalers and manufacturers with all the present and available online retailers/sellers. Not only this, the platform also provides various services like logistics, payments and the much-needed technology support. This giant trade platform has retailers/sellers in about 81 Indian cities and makes deliveries to more than 500 Indian cities. The Government of India recently formed a new steering committee to focus on the expansion of the newly formed "government-based e-commerce platform." This one-of-a-kind group, formed solely by the Indian Ministry of Commerce, is poised to provide much-needed guidance for the "Policy for Open Network for Digital Commerce (ONDC)," which is viewed as an effective trade and online trade agent established under the auspices of the Indian Government. The "ONDC" is all set to provide the necessary substructure required to establish the critical space for the products, much like Flipkart and Amazon. In an effort to streamline retailer onboarding on existing trade and online trade sites, India's "Department for Promotion of Industry and Commerce"

4. CONCLUSION

The growth of E-commerce activities is most-certainly India's sunrise sector and is determined to accelerate the Indian economy with the much-needed technology-led push. Needless to say, it has been observed that, if it is not properly regulated and managed, globally active, retail corporations and conglomerates could easily conquer and destroy the incomes and livelihoods of billions of small traders and manufacturers. Nevertheless, for a developing country like India, growth of e-commerce is a jet-propellant of economic growth, and totally essential to help achieve the goal of a \$5 trillion economy and jobs for our enormous populations across the country. This will also fuel the much-needed hike in exports. Growth of online transactions and E-commerce has completely altered how business has progressed in India. In recent times, for instance, it has helped thousands of pandemic-struck micro small and medium enterprises, to rebuild their businesses. Artisans, entrepreneurs, weavers, people involved in agriculture and allied sectors have benefitted from the sharp growth of the online business. In addition to this, various E-commerce platforms such as Flipkart, Amazon, Nykaa and Snapdeal have greatly helped them to reach and conquer new markets by placing their products on a world map. We cannot forget e-commerce's role as an employment generator and its continuous effects on all allied ecosystems, ranging from delivery to warehousing to logistics and most importantly to online payments. Having said this, care should be taken as to not to overburden this sector with needless lengthy regulations, and a focussed and all-inclusive approach should be adopted which keeps the country's and its citizen's interest in mind. At this juncture, India is the now the fourth largest trade and retail market globally, and snowballing fast especially in rural areas and tier 2/3 towns. Not only this, the retail consumers have

become three times than earlier and reached a staggering number of around 1\$ trillion.

REFERENCES

1. Bain & Company. *Unlocking Digital for India: Union Budget 2019–20*. New Delhi: Bain & Company; 2019.
2. Boston Consulting Group, Internet and Mobile Association of India. *India @ Digital Bharat: Creating a \$200 Billion Internet Economy*. Mumbai: Boston Consulting Group; 2015.
3. Boston Consulting Group. *The Connected World: The Internet Economy in the G20—The \$4.2 Trillion Growth Opportunity*. Boston: BCG; 2012.
4. Bilbao-Osorio B, Dutta S, Lanvin B. *The Global Information Technology Report 2013*. Geneva: World Economic Forum; 2013.
5. Blili S, Raymond L. Information technology: Threats and opportunities for small and medium-sized enterprises. *Int J Inf Manag*. 1993;13:439–448.
6. Information Technology & Innovation Foundation. *The Economic Benefits of Information and Communication Technology*. Washington (DC): ITIF; 2013.
7. Jehangir M, Dominic P, Naseebullah, Khan A. Towards digital economy: The development of ICT and e-commerce in Malaysia. *Mod Appl Sci*. 2011;5(2):171–178.

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