

## ECONOMIC IMPACT OF E-COMMERCE ON MACROECONOMICS: A REVIEW ON GLOBAL PERSPECTIVE

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### Abstract

E-commerce technology has significantly altered the way that businesses operate and consumers shop, causing a shift from traditional to online shopping that directly affects both consumers and producers. This essay offers a thorough analysis of the macroeconomic effects of e-commerce technology, looking at how it affects important metrics like GDP, employment, trade, and productivity. We examine the potential advantages and difficulties of e-commerce for various stakeholders, including policymakers, businesses, and consumers, using data from a variety of sources. According to the current analysis, e-commerce technology has a significant potential to boost economic growth, boost productivity, and generate new job opportunities. It also brings up some significant difficulties, such as worries about job displacement, privacy and security concerns, and potential detrimental effects on conventional brick-and-mortar businesses. As a result, there is a need for more research to understand the precise factors that influence how e-commerce affects the economies of various regions and nations, as well as its long-term effects on conventional retail businesses and wider societal effects. To better understand how government policies can promote the expansion of e-commerce and guarantee that traditional businesses operate on an even playing field, more research is required. Finally, we stress the importance of further investigation to the potential environmental effects of online shopping and its carbon footprint. Overall, this paper sheds light on the potential advantages and drawbacks of e-commerce technology and emphasizes the significance of decision-makers, companies, and customers in navigating this globally changing landscape.

**Keywords:** E-Commerce, Macroeconomic impact, GDP, Employment.

### **Introduction**

Technology for e-commerce has completely changed how people do business and exchange goods and services. By offering new and inventive ways to reach customers, streamline processes, and cut costs, it is changing the way consumers shop and businesses operate. E-commerce has grown significantly in recent years as a result of the rising popularity of online marketplaces, mobile apps, and other digital platforms and this trend is anticipated to continue in the years to come. E-commerce technology is a driving force behind many macroeconomic trends and developments in addition to being a tool for businesses and consumers. E-commerce technology is fundamentally changing the global economy, impacting everything from GDP growth to employment rates, trade patterns to productivity levels. Therefore, it is crucial to comprehend how E-Commerce technology affects Economic Growth and how different trade arenas and nations around the world are affected. The economic impact of e-commerce technology on macroeconomics will also be thoroughly

reviewed in this article, along with how it affects various international nations and regions. Let's look at how e-commerce technology affects important macroeconomic measures like GDP, employment, trade, and productivity. In doing so, we hope to provide insights into the potential advantages and difficulties of e-commerce technology for various regions and nations as well as advice for decision-makers, companies, and customers to navigate this quickly changing landscape. The literature review of previous studies on the subject is covered in the following sections of the article, along with an explanation of the methodology used to gather and analyze data, present the findings, and discuss the implications of these findings for various stakeholders. In the end, we believe this article will help readers gain a better understanding of the macro effects of e-commerce technology on the economy and how those effects will affect how the global economy develops in the future.

### **E-Commerce Growth**

E-commerce has been on the rise since the introduction of the internet in 1991, but its origins can be found in the Berlin Blockade, when goods were ordered and airlifted via telex between 24 June 1948 and 12 May 1949. Since then, e-commerce has assisted countless businesses in expanding, thanks to new technological advancements, increased internet connectivity, and widespread consumer and business adoption. The Boston Computer Exchange, which introduced its first e-commerce platform in 1982, handled the first online transaction (Azamat et al., 2011; Boateng et al., 2008). Internet penetration has a direct impact on the potential growth of e-commerce (Nielsen, 2018). E-commerce has primarily expanded as a result of the rise in mobile device and smartphone usage around the world. People are more adaptable and passive when buying and selling online thanks to mobile devices (Milan et al., 2020). The expansion of the millennial generation's digitally savvy workforce, the widespread use of mobile devices, and ongoing e-commerce technology optimization are forcing changes in the historically slow-moving B2B market's direction and pace. A perfect storm that will propel the growth of B2C businesses is about to hit the nearly \$1 billion B2B e-commerce market (Harrisson et al., 2017). The global retail market has now changed due to e-commerce (Nielsen, 2019). The conclusion is that e-commerce is a thriving and constantly growing business model; due to the rising purchasing power of international consumers, the proliferation of social media users, and the rapidly improving infrastructure and technology, its future is even more competitive than it is now (McKinsey Global Institute, 2019). The analysis of the e-commerce growth trend, particularly since 2015, explains that online shoppers continue to value both the flexibility and range of online shopping. Online retailers will expand their footprint as more people choose to buy and return items locally (Harrisson et al., 2017). E-commerce is currently expanding internationally, with a compound annual growth rate (CAGR) of 15% between 2014 and 2020 and a predicted 25% CAGR between 2020 and 2025. In 2020, nearly 60% of the population will be online, and smartphone penetration has reached almost 42%, according to further analysis of the e-commerce industry. 31% of users are between the ages of 25 and 34, followed by 24% of users between the ages of 35 and 44 and 22% of users between the ages of 18 and 24. Over 70% of global e-commerce activities are now carried out in the Asia-Pacific region thanks to its extensive infrastructure and networking. China alone is responsible for US\$740 billion, but the USA is responsible for more than US\$560 billion (Kerick, 2019). An analysis of online purchases made by international customers (Fig. 2) reveals that consumers make cross-border purchases in all regions. By July 2020, 90% of consumers will visit an online retailer's website; 74% will make an online purchase; and 52% will do so on a mobile device. There is tremendous economic potential in Asia and the Pacific's e-commerce boom. According to UNCTAD's 2017 report, this region dominates the B2C e-commerce market. By 2015, the proportion of

regional e-commerce to the gross domestic product was 4.5%. Small and medium-sized businesses can access international markets and engage in international competition thanks to e-commerce. In developing economies and least developed nations, it has increased economic efficiency and produced a large number of new jobs, giving them the chance to close development gaps and promote inclusivity—whether demographic, economic, geographic, cultural, or linguistic. Additionally, it aids in bridging the urban-rural gap. The Asian e-commerce market is still very diverse, though. According to the UNCTAD e-commerce index 2017, Afghanistan is ranked 132th overall with 17 points, while the Republic of Korea ranks fifth globally with a score of 95.5%. Asia is the region with the fastest-growing e-commerce market, according to a joint study published in 2018 by the Asian Development Bank (ADB) and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). According to UNESCAP and ADB (2019), the region held the lion's share of the global market for business-to-consumer e-commerce. The Global E-Commerce Market Ranking 2019 was released by World Retail Congress (2019), and it evaluated the top 30 e-commerce markets based on a variety of criteria. The USA, UK, China, Japan, and Germany were the top-ranking nations. India came in at number 15 with a CAGR of 19.8% from 2018 to 2022. According to the report, businesses should improve every aspect of online shopping while putting an emphasis on localized payment methods and duty-free returns. The observation of this trend suggests the security and safety of online shoppers.

### Previous Studies

The research paper by Kinjalben Rameshbhai Patel (2023) examined the significance of the e-commerce sector in the modern world. He is attempting to increase mobile startup and advanced penetration in India while also attempting to follow the vertical trend of e-commerce development in India. Since years, government initiatives and policies have contributed to an increase in India's electronic commerce. According to the Demonization Survey, the cashless economy has assumed a much larger role in India, with the Internet and other government initiatives having a big influence. India has made significant progress in the area of e-commerce, but much more needs to be done. We also look at how the unemployment rate and the literacy rate affect the growth of the Indian e-commerce market. The study by Chawla, N., & Kumar, B. (2022) examines the current Indian legal system that safeguards the interests of online consumers. A thorough analysis of the two recently passed laws, the Consumer Protection Act of 2019 and the Consumer Protection (E-commerce) Rules of 2020, as well as a review of the relevant literature support the analysis of 290 online consumers in addressing the study's objectives. Important conclusions include the need for a secure and reliable system for e-business firms, the importance of cash on delivery as a payment method for online purchases, and the fact that trustworthy websites and good customer support services can win over customers. It can be argued that the new rules are robust enough to defend the rights of online shoppers and advance e-commerce in India. Along with elements like security, privacy, warranty, customer service, and website information, laws governing the protection of consumer rights in e-commerce also have an impact on customers' trust. With a strong legal framework and consumer protection measures, expanding e-commerce appears to be promising. The results add to the body of knowledge on e-commerce and the protection of consumer rights by highlighting the crucial elements influencing customer loyalty and trust as well as by providing an insightful viewpoint on e-consumer protection in the Indian context with wider implications.

As a result, it's critical to comprehend how e-commerce technology will affect the macroeconomics of various regions and nations around the world. This review of the

literature aims to offer a thorough analysis of the existing research on the macroeconomic effects of e-commerce technology. The notion that e-commerce technology can boost economic productivity and efficiency is one of the key ideas in the literature (Aghion et al., 2019). The use of e-commerce technology can increase efficiency and productivity by lowering transaction costs, expanding market access, and enhancing supply chain management (UNCTAD, 2019). E-commerce can also lower costs for businesses and customers, increasing consumer welfare and economic output (McKinsey Global Institute, 2019). The literature also emphasizes how e-commerce technology has affected trade patterns. Through the use of e-commerce technology, businesses and consumers can access new markets and goods, facilitating cross-border trade. On the other hand, it might also bring about issues with taxation, legislation, and intellectual property rights (UNCTAD, 2018).

Numerous studies have recently focused on the effect of e-commerce technology on macroeconomics, particularly on the global economy. According to a review of the literature, e-commerce technology has a big impact on macroeconomic variables like GDP, employment, trade, and productivity.

The notion that e-commerce technology can boost economic productivity and efficiency is one of the key ideas in the literature. For instance, a UNCTAD (2018) study discovered that e-commerce technology can aid in lowering transaction costs, expanding market access, and enhancing supply chain management, which will increase efficiency and productivity. Similar to this, a 2019 McKinsey Global Institute study discovered that e-commerce can lower costs for both consumers and businesses, increasing economic output and improving consumer welfare. The literature on the macroeconomic effects of e-commerce technology is expanding, but there are still gaps and restrictions in the research. For instance, there are gaps in our knowledge of how e-commerce technology affects developing economies because so many studies concentrate on its effects on developed economies. Furthermore, case studies and surveys are frequently used in research, which has limitations in terms of scope and generalizability.

Numerous empirical studies have been carried out to investigate the macroeconomic effects of e-commerce technology. For instance, a Deloitte Access Economics (2018) study discovered that e-commerce can boost competition, resulting in higher productivity and improved consumer welfare. E-commerce can promote greater economic growth, particularly in nations that are developing, according to a 2019 World Bank study. The study discovered that by giving small and medium-sized businesses (SMEs) new opportunities to access international markets, e-commerce can contribute to the reduction of poverty and inequality.

In conclusion, the body of research points to the importance of e-commerce technology for macroeconomic issues like GDP, employment, trade, and productivity. E-commerce technology has the potential to boost productivity and efficiency while lowering costs for both businesses and consumers and facilitating international trade. However, it can also bring about issues with taxes, rules, and intellectual property rights, which can result in job losses in some industries. To fully comprehend the effects of e-commerce technology on various regions and nations and to create efficient policies to manage those effects, more research is required.

The role of e-commerce technology in the global economy has grown, changing how consumers shop and how businesses run. E-commerce has grown to be a sizable economic force as a result of the development of mobile apps, online marketplaces, and other digital platforms (Arora et al., 2016). The effect of e-commerce technology on employment is a further crucial idea. According to some studies, e-commerce technology may result in job losses in some industries, like traditional retail and distribution. However, according to other

reports, e-commerce technology may also result in the creation of new jobs in sectors like marketing, logistics, and technology development (Brynjolfsson and McAfee, 2014).

### Methodology

Depending on the topic of the study and the data's availability, different methodologies are used to gather and analyze data on the relationship between macroeconomics and e-commerce technology. Researcher typically combine quantitative and qualitative techniques to assess how e-commerce technology affects macroeconomic variables like GDP, employment, trade, and productivity. National statistics, industry reports, surveys, case studies, and other secondary data sources are used to measure the effect of e-commerce technology on macroeconomic factors. National statistics can be used to track changes in GDP or employment over time. Global or International Monetary Fund (IMF) statistics provide a broad overview of macroeconomic trends. Industry reports, like those from McKinsey or Deloitte, offer more thorough details on particular sectors or industries and can be used to assess how e-commerce technology has affected supply chain management or productivity.

Other popular methods for gathering information on the effects of e-commerce technology include surveys and case studies. Surveys can reveal information about consumer behavior, such as preferences for online shopping or willingness to pay for various goods. Case studies can be used to identify best practices or potential obstacles and can provide in-depth information on the effects of e-commerce technology on particular businesses or industries.

Regression analysis, input-output analysis, and economic modeling are among the analytical methods used to assess how e-commerce technology affects macroeconomic variables. When estimating the effect of e-commerce technology on GDP or employment, regression analysis can be used to account for additional variables like changes in demographics or governmental policy. By determining which industries or sectors are most impacted by changes in e-commerce technology, input-output analysis can be used to assess the impact of e-commerce technology on supply chains. The effects of various scenarios, such as adjustments to taxation or regulation, on macroeconomic factors can be predicted using economic modeling.

The techniques used to gather and examine information on the macroeconomic effects of e-commerce technology have limitations. The scope or accuracy of national statistics may be constrained, especially in developing nations where data may not be as easily accessible. The generalizability of surveys and case studies may be constrained or biased, especially if they are done on a small scale. On top of that, some macroeconomic factors, like social or environmental impacts, might be more challenging to quantify using conventional economic techniques.

Conclusion: Depending on the research question and the data's availability, different methods are used to gather and analyze data on the macroeconomic effects of e-commerce technology. National statistics, industry reports, surveys, and case studies are a few examples of data sources that can shed light on how e-commerce technology affects macroeconomic variables like GDP, employment, trade, and productivity. Regression analysis, input-output analysis, economic modeling, and other analytical techniques can be used to quantify the influence of e-commerce technology on those variables. These techniques do have some drawbacks, and more study is required to fully comprehend the macroeconomic effects of e-commerce technology.

### Findings

A growing body of literature has examined the complex and multifaceted macroeconomic effects of e-commerce technology. Infra presents key findings on the effects of e-commerce technology on macroeconomic variables like GDP, employment, trade, and productivity.

The growth of the GDP is positively correlated with e-commerce technology, according to several studies. For instance, an investigation by the Organisation for Economic Co-operation and Development (OECD) discovered that a 10% increase in e-commerce adoption was connected to a 0.14% increase in GDP growth. E-commerce made up 1.5% of the EU GDP in 2017 according to a different study by the European Commission (European Commission, 2019).

Less is known about how e-commerce technology will affect employment. Despite the fact that e-commerce has caused job losses in some industries, such as traditional retail, it has also generated new positions in others, including customer service, marketing, and logistics. A study found that between 2008 and 2015, 315,000 new jobs were created in the UK as a result of e-commerce.

It has been discovered that e-commerce technology boosts productivity by lowering transaction costs and facilitating information access. According to a McKinsey Global Institute study from 2016, e-commerce could boost advanced economies' productivity by up to 1.5%. The effect of e-commerce on productivity varies by industry, though, and some industries may see a decline in productivity as a result of more intense competition.

The macroeconomic effects of e-commerce technology are significant, with gains in GDP and productivity as well as potential gains in trade and employment. The effect of e-commerce on these variables, however, is complicated and varies by industry and location. To fully comprehend the macroeconomic effects of e-commerce technology and to determine best practices for maximizing its advantages while minimizing its drawbacks, more research is required.

It's important to remember that e-commerce technology has additionally had a big impact on global trade in addition to the findings mentioned above. Cross-border trade has increased as a result of e-commerce's ability to connect companies of all sizes with clients in unfamiliar and distant markets. E-commerce has lowered costs and entry barriers for small and medium-sized businesses (SMEs), enabling them to participate in international trade to a greater extent, according to a World Trade Organization study (World Trade Organization, 2019).

E-commerce's influence on global trade, though, is not without its difficulties. The growth of e-commerce has also increased the sale of counterfeit goods, the infringement of intellectual property rights, and cybercrime, all of which have the potential to reduce the advantages of e-commerce for both consumers and businesses. Additionally, as e-commerce expands, worries have been raised about how it might worsen regional and income inequalities because some businesses may be better positioned to take advantage of the opportunities it presents.

It is crucial to take into account not only the direct effects of e-commerce technology on GDP, employment, trade, and productivity, but also its broader implications for society and the economy in order to fully comprehend its macroeconomic effects. It will be crucial for policymakers, businesses, and other stakeholders to collaborate as e-commerce technology continues to develop and influence the global economy in order to guarantee that the advantages of e-commerce are distributed widely and fairly. The challenges posed by e-commerce may need to be addressed with targeted policies and investments, and efforts may also need to be made to develop the infrastructure and capabilities required to support the continued growth of e-commerce in an ethical and sustainable way.

### **Impact of E-Commerce on Employment**

The term "e-commerce" refers to the buying and selling of goods and services over the internet, and it has significantly changed the job market. On the one hand, it has led to the loss of traditional retail jobs while on the other hand, it has generated new job opportunities in the logistics and technology sectors.

E-commerce has significantly increased demand for technology jobs, which is one of the most important ways it has generated new job opportunities. A greater demand for professionals with expertise in fields like web design, programming, digital marketing, and data analytics has arisen as a result of the growth of e-commerce. As a result, new positions in the technology industry have emerged, including those for e-commerce specialists, web developers, and managers of digital marketing.

The logistics industry is another place where e-commerce has generated new job opportunities. The popularity of online shopping has led to a rise in the need for specialists in supply chain management, order fulfillment, and logistics management. Due to this, new positions in the logistics industry have emerged, including those for delivery drivers, warehouse managers, and fulfillment specialists.

E-commerce expansion has increased sales, but it has also resulted in the loss of traditional retail jobs. Brick-and-mortar stores are experiencing declining sales and decreased foot traffic as more consumers switch to online shopping. As a result, numerous retail stores have closed, costing salespeople, cashiers, and other retail workers their jobs.

E-commerce's effect on employment is frequently seen as a trade-off between job loss and job creation. E-commerce has led to new job opportunities in the logistics and technology industries, but it has also led to the loss of traditional retail jobs. Concerns over how e-commerce will affect the overall employment rate and the need for programs to help displaced workers transition into new jobs have arisen as a result of this.

E-commerce has significantly impacted employment, resulting in the loss of traditional retail jobs while generating new employment opportunities in the logistics and technology sectors. As the e-commerce industry expands, it will probably lead to more job opportunities in automation, artificial intelligence, and data analytics, as well as more job losses in traditional retail positions.

Small and medium-sized businesses (SMEs) have been significantly impacted by e-commerce. E-commerce has, on the one hand, given SMEs access to a global market, boosting their income and competitiveness. Due to the high costs involved in expanding outside of their immediate region, SMEs were frequently only able to serve local markets. But with the growth of e-commerce, SMEs can now reach customers anywhere in the world for comparatively little money.

SMEs now have a platform to market and sell their goods and services through e-commerce without the need for a physical storefront. As a result, overhead costs have decreased and SMEs can now concentrate on their core competencies. E-commerce has also given SMEs the chance to use technology to automate and streamline their processes, lowering costs and increasing efficiency.

E-commerce may favor larger companies, raising concerns that this could make it difficult for smaller companies to compete. Larger businesses frequently have the funding to invest in cutting-edge technology, online marketing, and logistics infrastructure, which can give them an edge over smaller businesses. Additionally, larger corporations may already have strong brand recognition, making it more difficult for smaller companies to draw in customers.

Governments and organizations have put in place policies and initiatives aimed at assisting SMEs in the e-commerce sector to allay these worries. For instance, some governments provide tax breaks and grants to SMEs in order to encourage their investment in digital marketing and technology. Organizations like trade associations and e-commerce platforms

also offer training and resources to assist SMEs in enhancing their competitiveness and online presence.

E-commerce has given SMEs new opportunities to reach a global market, but there are worries that it might favor larger businesses. Governments and organizations can help SMEs by putting in place measures to make them more competitive in the e-commerce market.

### **Impact on government revenue**

The way that consumers and businesses conduct business has undergone a significant transformation as a result of e-commerce. The potential decrease in tax revenue is one effect of e-commerce on governmental income. Businesses are required to pay sales tax on their transactions in traditional retail sales. Online sales, however, are not always subject to the same taxes as traditional retail sales, so this is not always the case. This could result in lower tax revenues for the government, which would have a big impact on public programs and services. Governments all over the world are thinking about putting policies into place to make sure that e-commerce platforms pay their fair share of taxes in order to address this issue. For instance, some nations have enacted a tax on digital services that is levied against websites that generate a sizable amount of revenue within their national borders. This tax is intended to make sure that online marketplaces support the tax bases of the nations in which they conduct business.

### **Impact on Consumer behaviour**

Consumers can now shop more conveniently from the comfort of their homes thanks to the revolution that is e-commerce. Customers now have greater accessibility and convenience, and their shopping habits have changed to include more online purchases. However, this change in consumer behavior has also sparked worries about how e-commerce will affect nearby companies and the environment.

Online shopping has increased as a result of e-commerce's accessibility and convenience, which may hurt small local businesses. Traditional brick-and-mortar stores are experiencing declining sales and decreased foot traffic as more consumers switch to online shopping, which can make it challenging for them to compete with online retailers.

E-commerce has an impact on the environment in addition to local businesses. Both packaging waste and transportation emissions have significantly increased as a result of the rise in online shopping. Governments and companies are working to address these problems by enacting legislation to cut down on packaging waste and promote environmentally friendly transportation methods.

### **Impact on Economic Growth**

By boosting productivity, lowering transaction costs, and facilitating international trade, e-commerce has the potential to stimulate economic growth. By eliminating the need for physical storefronts and the associated rent, utility, and labor costs, e-commerce can lower transaction costs. As a result, companies may be able to run more effectively and lower their prices, increasing their revenue and sales.

E-commerce has also made it easier for small and medium-sized businesses to enter the market, which has facilitated global trade. Due to their increased ability to access a global market, businesses are now more profitable and competitive. E-commerce could, however, result in market concentration, lowering competition and innovation. Governments are putting into place policies to encourage competition and innovation in the e-commerce sector to address this problem.



### **Impact on International Trade**

E-commerce has made it easier for small and medium-sized businesses to enter the market, which has facilitated international trade. Businesses can now access a global market, boosting their revenue and competitiveness. E-commerce has made it less expensive and quicker for businesses to do business internationally by facilitating connections with suppliers and customers abroad.

E-commerce's effects on global trade imbalances and developing nations' participation in the global economy, however, have raised some concerns. E-commerce, according to some detractors, may favor larger companies, making it challenging for smaller companies in developing nations to compete. Governments and international organizations are working to promote inclusive and sustainable trade policies that benefit all nations, irrespective of their level of development, in order to address these issues.

### **Impact on Indian Economy**

The development of India's rural areas may be aided by e-commerce (Bhagyashree Milesh Deshpande, 2021). E-commerce is a great platform for building India's infrastructure and employment rates, which benefits the nation's overall economic and social development (Anant, 2019). The economic and social development of India will therefore generally benefit from e-commerce (Renu Nainawat, 2022). According to several studies conducted by the Central Statistics Office (CSO) and International Monetary Fund (IMF), India has one of the world's fastest growing economies. The unprecedented expansion of e-commerce in India has been facilitated by the emergence of retail as a dominant market segment. According to Morgan Stanley, US e-commerce sales for the fiscal year 2019–20 reached \$20 billion, with a projected seven-fold increase over the following two fiscals. And it's anticipated that the e-commerce market will surpass \$150 billion. The main driving forces behind India's e-commerce sector's expansion. The following are the main factors fueling India's e-commerce sector's expansion: 1. Foreign Direct Investment. 2. The Goods and Services Tax. 3. The involvement of specialized businesses in online trading.

**Foreign Direct Investment (FDI):** The government has set restrictions in some other sectors, despite allowing 100% FDI in many others. One such sector with numerous restrictions is retail. Business-to-business (B2B) e-commerce is allowed FDI up to 100% under automatic routes, but business-to-consumer (B2C) e-commerce is not allowed FDI unless the following conditions are met: A manufacturer may sell goods made in India through e-commerce retail, and b) a single brand retail trading entity that operates through brick-and-mortar stores may engage in retail trading through e-commerce. Even though FDI has been successful in bringing variety to India's online market, their participation is constrained by legal restrictions. This would create a new environment of retail and market collaboration, ensuring the comfort and satisfaction of customers.

**The Goods and Services Tax:** The biggest change to India's indirect tax system will be brought about by the Goods and Services Tax (GST). GST will make India a single, common market with lower compliance costs and a simpler tax structure. By adhering to its motto, "One nation, one tax," it seeks to rationalize the current indirect tax system and create a stable economic environment that is conducive to growth and development. According to the GST model law, it is the E-commerce operator's duty to collect TCS (Tax Collected at Source), also known as source tax, from the seller. The proposal also asks marketplace providers or e-commerce operators to collect tax from sellers and deposit it with the government at a predetermined rate. The success of e-commerce in India would be aided by a uniform tax

structure, which GST aims to achieve. Calculations have become simpler and more uniform as a result of pan-Indian taxation and a uniform tax structure. The maintenance of price uniformity is undoubtedly aided by the application of the same tax to the same good or service across different Indian states.

***Participation of niche businesses in online trading:*** As the advantages of online trading have become more widely known, investments in e-commerce businesses have increased significantly. Many well-established business houses have set up online transaction channels in tandem with offline trading. In the online retail sector, a new company is founded every other day. The foundational components of online trading are specialization and customization. E-commerce businesses have purposefully shifted away from the one-for-all paradigm and are now focused on exclusive goods. Every new business focuses on a specific product or markets to a specific demographic. Consequently, it is preferable to focus on a single area and carry it out to the best of your ability rather than making generalized statements. Customers favor this kind of special treatment and individualized care. Due to niche companies' involvement in online trading, the e-commerce industry is growing and its customer base is expanding daily.

## Conclusion

In summary, e-commerce technology has significantly impacted the global economy by changing how consumers and businesses conduct business. The literature review emphasizes the important macroeconomic effects of e-commerce technology, including its potential to boost output, cut costs, ease international trade, and spur economic expansion. It also prompts questions about the effect of e-commerce technology on employment and the need for additional study to comprehend how it affects various nations and regions.

Further study is necessary to fully realize the potential advantages of e-commerce technology and address its difficulties. First, it is necessary to carry out more thorough studies that examine various nations and regions while taking into account their distinct economic, social, and cultural contexts. Second, the effects of e-commerce technology on particular industries and sectors, like manufacturing, services, and agriculture, require further study. Third, studies can concentrate on how e-commerce technology affects small and medium-sized businesses (SMEs), including how it affects their capacity to compete on the global market and to adopt and use e-commerce technologies.

Future studies should also look at how e-commerce technology affects sustainable development, including how it might help to lower carbon emissions, encourage the use of the circular economy, and build more inclusive and equitable societies. The ethical and social effects of e-commerce technology, including issues like privacy, data protection, and cyber security, also require research.

E-commerce technology has the potential to spur economic expansion and improve consumer welfare, in sum. However, it is impossible to ignore its effect on employment and the need for additional study to comprehend its wider ramifications for society and the economy. To navigate this quickly changing environment and make sure that the advantages of e-commerce technology are shared widely and equitably, while mitigating its potential negative consequences, policymakers, businesses, and consumers should work together.

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