

THE ROLE OF E-COMMERCE IN ECONOMIC DEVELOPMENT AND EMPLOYMENT GENERATION

Dr. Vikram Goutam Singh Shekhawat

Assistant Professor in Economics, M. V.G. University, Jaipur

Abstract

Online shopping has emerged one of the most vital factors for economic growth and employment opportunities as it has transformed the conventional physical markets hence increasing the market capacity for existing or new products and service delivery. This is because the growth of the digital marketplace has enabled SMEs to extend their market to the international market and reduce the hurdles. This has in one way or the other boosted a lot of economic development in the areas of production, market outlet and convenience. Besides the enhancement of sale and revenue, e-commerce has provided numerous employment opportunities within various sectors including transport, information technology, advertisement and customer service. There has also been the need for digital skills which has also led to the creation of new posts and thus has supported the workforce. Besides, e-commerce platforms have improved the lives of the people in the following ways; by making it easier for individuals to engage in self-employment by providing cheaper means of doing businesses thus promoting the economic status of a particular society. However, there are challenges to the establishment of e-commerce for sustainable growth, which are infrastructure, regulation and digital literacy. E-commerce is important in development and growth of economies, innovation and employment thus it is a factor of economic growth in both the developing and the developed countries.

Introduction

Electronic commerce has become one of the most important processes in the world economy, contributing greatly to the development of the economy and creating jobs. With advancement in the use of digital technology the element of e-commerce has been integrated into different sectors resulting in change of conventional business models and new opportunities. E-commerce has therefore emerged as an essential tool in the economic development for both developed and developing economies through increasing market efficiency, market access as well as encouraging innovation. It also has an equally important effect on employment as digital economy offers numerous jobs for various fields including technology, logistics, marketing and customer service. However, in the light of economic development, there are several benefits that can be realised from e-commerce. This cuts down on geographical constraints which are found in conventional businesses and allows even SMEs to venture into international markets. It makes it possible for organisations to grow at a faster rate, thereby resulting in increased revenues which in turn fosters the country's economic growth. E-commerce also increases the freedom of markets by providing a level playing ground for entrepreneurs and businesses especially in sectors where the cost of putting up physical outlets or a distribution channel may be very high.

Moreover, e-commerce is characterized by data-driven factors that improve operations, give better insights into customers' behavior, and help make wiser decisions to increase productivity and competitiveness.

In as much as e-commerce has impacted employment in a negative way, it has also opened avenues for employment both directly and indirectly. Direct employment is observed in the increase of positions in the area of technology creation and support, website management, internet promotion, data processing, and customer support. With the growing investments by companies into their digital transformation, there has been a push for tech talent that specializes in software development, cybersecurity and data analytics. Further, the logistics and supply chain industries have also provided new employment opportunities as a result of the upsurge in e-commerce with increased demand of warehouse personnel, delivery personnel and fulfillment managers. The indirect employment creation is also observed since the development of the related industries such as digital payment services, financial technology (fintech), and telecommunication industries due to the increase in the e-commerce business. E-commerce also creates employment opportunities in rural and non-urban centers hence helping to narrow down the gap between urban and rural economies. As internet connection and the level of education increase, individuals in the rural areas are able to fully engage into e-commerce, in that they can be customers, producers, or providers. This increases participation in the economy hence improving the income differential as well as accelerating the reduction of disparities per region. The government has also supported 'Digital India' that has helped in strengthening the e-commerce sector by supporting digital economy, financial integration and e-governance so that businesses and individuals can easily participate in the e-commerce sector. The implication of e-commerce in the development of the economy and employment opportunities is vast and complex. It not only promotes the growth of the economy by allowing firms to harness the international markets but also offers different job opportunities for the citizens in the numerous fields. Over time, e-commerce will play a more profound role in economic development and employment generation especially in such economies as India, where digital economy is gradually being adopted as a tool for economic transformation.

Need of the Study

This paper focuses on understanding how e-commerce is important in economic development and employment creation given the increasing digitization that is defining the global economy. The growth of e-commerce is still a significant factor that holds a lot of potentials in improving market access, innovation and employment opportunities in diverse sectors. It is thus important to understand the interaction of e-commerce in economic development especially for developing countries such as India for the benefit of policymakers and business players. This research is relevant to determine how e-commerce assists SMEs to overcome the limitations of traditional markets by providing them with an opportunity to compete in the global market and increase their revenues. It is therefore important to analyse the effect of e-commerce on employment, given the emergence of new opportunities in the knowledge-based job market such as technology

specialists, digital marketing specialists, logistics and customer services agents. The study will also examine the way e-commerce ensures inclusiveness through jobs created in rural and such regions hence improving on the income disparity aspect. Through analysing these aspects the research will provide a rich understanding of how e-commerce can be effectively used to drive economic growth and foster job creation in digitally emerging economies.

Historical Development of E-commerce

The history of e-commerce started with the progress of electronic transactions as well as the use of the internet. E-commerce as a concept was born in the early 1970 known when Electronic Data Interchange (EDI) was created which enabled businesses to exchange documents such as purchase orders and invoices in a digital manner. The eighties noted the beginning of online banking and the first secured business transactions that paved way for business on the internet. A turning point was reached in the 1990's with the advent of the World Wide Web that allowed businesses to set up an Internet presence and indeed sell products over the Internet to the global market. Companies such as amazon.com and eBay.com that started in mid 1990s showed the future of online retail and auctions. During the 2000s the technologies in the e-commerce sector developed dramatically, such as the secure payment system and mobile commerce. The introduction of social media and smart phones in the late 2010s also significantly bolstered the advancement of e-commerce which in turn led to the establishment of omnichannel retailing and customer experience. Today e-commerce remains an innovative platform with new technologies like artificial intelligence, block chain and augmented reality that defines the future e-commerce marketplace.

Definition of E-commerce

E-commerce is the short form of electronic commerce which means the buying and selling of products and services through the internet. It applies to all kinds of purchases of goods and services through the internet such as buying clothes online, business to business transactions, customer to customer sales, and downloadable products like software, music, films and subscription to streaming services. This has changed traditional business where firms can sell their products online without having to open outlets all over the world. E-commerce involves the use of secured sites, online payment methods, and other methods of advertising that creates an environment that enables effective and efficient buying and selling between the customers and the firms. E-commerce can be categorized in various types depending on the relationship between the marketing channel levels, but the most familiar one is the business to consumer (B2C) where the businesses deal directly with the consumers like amazon.com and eBay.com. Another form is B2B in which businesses deal with other businesses for instance in wholesale or industrial markets as seen in Alibaba. There are other types of e-commerce which have emerged to make shopping easier, convenient and more accessible; this is mobile commerce (M-commerce) which allows consumers to shop through their mobile phones or tablets. Some benefits include; Low operational costs for firms, geographical expansion, and analysis of

consumer buying patterns. To the consumers, it offers convenience, affordable prices, and variety, thus being an essential part of the current society's economy.

Technological Advancements Driving E-commerce

Innovations have been the key to the fast growth of e-commerce through enhancing the operations of companies and changing the users' experiences of online services. Among them is mobile commerce (M-commerce) which has made the purchasing process easier through secure and fast payments. Mobile commerce has become easy through the use of wallets, payment gateways as well as touchless payment platforms hence enabling the consumers to make purchases through their mobile devices and thus increasing the sales and consumer engagement. Of them, m-commerce especially has gained tremendous importance as smart phones as well as tab-lets constitute a lion share of the global mobile commerce market. This convenience has gone a long way in increasing the availability of e-commerce platforms and has made shopping to be as easy as possible to the users across the globe. Some of the revolutionary trends that are currently shaping the e-commerce environment include artificial intelligence, automation, and machine learning. Recommendation systems based on AI help the consumer to obtain a product recommendation based on the web page they viewed and products they purchased; chatbots and virtual assistants also improve the consumer's satisfaction. In inventory management and order processing, automation also minimises human errors, decreases order delivery time which in return enhances supply chain operations. Blockchain technology is the other significant development more so in increasing security for online transactions. Blockchain allows e-commerce to have increased security for the consumer since the use of decentralized and tamper-proof ledgers makes fraud less possible. Data analytics is proving to be very strategic in the formulation of business strategies since it provides information on consumers. By analyzing the data, e-commerce businesses can determine buying habits, their preferences and trends in the market and make decisions accordingly and target their marketing strategies. This approach not only enhances the customers' satisfaction but also allows the firms to better manage the price, stocks, and products, which in turn generates more revenues. Altogether, the technologies mentioned above are changing the e-commerce industry as they contribute to improving its security, efficacy, and focus on customer needs.

Employment Generation through E-commerce

E-commerce has been seen as a major source of new employment with the creation of both employment and self-employment opportunities in all sectors. Electronic commerce job opportunities are in various categories such as employment and career opportunities in the field of supply chain, information technology technology, and sales. Current leading giants like Amazon, Alibaba and other e-business giants offer direct or indirect employment to millions of people across the world in areas of warehousing, logistics, software developers, digital marketers etc. These roles need versatile skills and also open up avenues to learn more on technology, customer relations and data analysis. Furthermore, the advancement of e-commerce has created

demand for personnel with expertise in cybersecurity, Artificial intelligence, and supply chain management increasing the prevalence of employment opportunities. Besides direct employment opportunities have been created there are also induced employment opportunities in sectors like packing materials, manufacturing and delivery. There has been higher traffic towards e-commerce that has directed demand towards packaging materials, logistics companies, and manufacturers of products for online selling that in turn has created employment. This chain effect goes round the economy, enhancing employment opportunity in the various supplies chains.

The advancement in e-commerce has also contributed significantly towards the growth of gig economy and freelancing. Selling platforms such as Etsy, Fiverr, Up work among others have made it possible for individuals to start businesses or work as independent individuals thus flexible employment have been encouraged. Social media and online platforms offer freelancers with content writing, graphic designing, digital marketing, and IT support ample chance to make money and get paid for their work with little hindrance than the conventional job market. The impact of e-commerce on the growth of employment and inclusion has been especially favorable in the rural areas. Currently, e-commerce has come in to help create other income sources for the rural dwellers by connecting the artisan, farmer, and other entrepreneurs to the international markets. This has ensured the democratization of market access hence has contributed to the narrowing down the gap of economic regionalization. Also, e-commerce has had impacts on gender and women employment and empowering women, especially those in rural or disadvantaged areas, because they can equally commence their own businesses from home or engage in other freelance work thus, boosting their employment and economic freedom.

E-commerce and Economic Development

With the help of the IT integration into buying and selling processes, e-commerce has contributed to the enhancement of the major economic development paradigm. Due to the fact that e-commerce deals with the sale and purchase of goods and services through the over internet, it does not have a physical building or a local market that it has to supply to hence making it cover the whole world. This has facilitated even SMEs to enter into global market and hence increase the economic activities and employment opportunities. Further, the growth of e-commerce has paved way for development in various technological aspects such as logistics, payment processing and digital marketing. Such inventions do not only contribute to the improvement of business exchange but also have a positive impact on productivity in different fields. The benefits of e-commerce are not only in the development of businesses. It has helped in the improvement of social factors including telecommunications structures like the internet and mobile networks that are essential to e-commerce. Some of the common value-added services that e-commerce platforms provide include Web design services, SEO services, e-business consulting services, business intelligence and analytics services, and cyber-security among others and these services affect the job market in a ripple effect. E-commerce also contributes to the advancement of financial democracy because it makes more people accessible

with various goods and services, especially at cheaper costs than conventional stores. Such an approach can make a positive impact on the economic development of the developing countries by providing these groups of people with the opportunities to access the broader markets and promotion of the entrepreneurship. New technologies and creativity are promoted through e-commerce and this brings about improvement in efficiency and quality products and services at cheaper rates. This is due to the fact that as companies compete for the consumer's attention in the information age, the consumer is presented with better options and better convenience. Lastly, e-commerce is an enabler of economic growth as it stimulates growth, job creations and helps to create a more inclusive economy at the global level.

E-commerce and Employment Generation

E-Commerce has asserted its self as a critical source of employment in the modern world and has been identified to be revolutionizing the labour markets and creating new jobs in different industries. With the rising usage of internet services and digital means, the choice of business development in the sphere of e-commerce is growing with the rising consumer demand. This expansion has in turn resulted in the generation of various kinds of employment right from the technical point of view to the call center jobs. For instance, companies in e-commerce need the workforce to provide the services in web development, digital marketing, data analysis, logistic and customer service. That is why e-commerce platforms also encouraged the development of related industries, including warehouses, delivery services, and packaging, which also implies employment opportunities. As for the second perspective, it is also very important due to the fact that e-commerce has made entrepreneurship more open to the public and anyone can create their own online shop with rather a low amount of start capital. This has favored the appearance of the SMEs that are becoming a key factor to the generation of employment. Also, global reach of e-commerce implies that these employment possibilities are not restrained by geographic locale, where people from different parts of the world can be involved in the new economy. Telecommuting has increased and this has enabled employees to work remotely, from home or any other suitable place and this has expanded employment opportunities. E-commerce also creates employment opportunities in the technology industries especially the development and management of e-commerce platforms, payment solutions, and security solutions. With the advancement in technologies such as e-commerce, there is likely to be creation of new posts in the market like the artificial intelligence, machine learning and virtual reality jobs. Altogether, it can be said that e-commerce is one of the major factors that contribute to the growth of the economy and the creation of new jobs, as it offers a wide variety of opportunities for employment that are relevant to modern technologies and consumers' preferences.

Literature Review

Chaudhuri, P., & Kumar, A. (2015). Digitization and e-commerce are essential in the development of the economy and creation of employment opportunities in India because of the increasing digital facilities and a youthful population with adequate skills in the use of digital

technologies. The use of technology platforms in the retail industry has a positive impact in the market accessibility as well as the cost of a transaction hence increasing the productivity and inclusion of the economy. This conversion has led to creation of employment opportunities in not only the IT Industry but also in the related services like digital marketing, logistics and the customer support services. Various government led schemes such as the 'Digital India' and 'Make in India' have also added to this growth by creating a favourable landscape for digital entrepreneurship and investment in technology-based start-ups. In addition, e-commerce has help SMEs, artisans and traders across the country and the globe to access the national and international markets and consequently, integrate them into the formal economy and offer employment opportunities.

Boateng, R., et al (2008). E-commerce is a revolutionary phenomenon in the current socio-economic systems which is a strong platform that overcomes the shortcomings of traditional markets and promotes the development. Defining the correlation between e-commerce and socio-economic development presupposes the observation of how electronic markets stimulate economic activity through increasing the availability of services, decreasing their cost, and expanding the circle of consumers. E-commerce addresses the problem of integrating marginal sectors into the mainstream economy while directly engaging small producers, entrepreneurs, and artisans at significantly low transaction costs compared to retailing. This direct access not only increases revenues of small sellers but also increases the economic activity of local markets and creates job opportunities in logistics, digital marketing, and IT services. Also, through e-commerce platforms consumers are informed and educated and thus make informed choices when it comes to procurement.

Siddiqui, S., & Singh, R. (2018). In India, digitalization and e-commerce have come up as major sources of employment generation and has boosted employment in almost all the sectors of the economy. The use of technology in India's commerce has not only helped industries in terms of efficiency but has also opened up employment opportunities away from the conventional business setting as India moves towards a digital experience. advancement of e-commerce business due to the expansion of internet connection and mobile phone usage has created a business-friendly environment for start-ups and entrepreneurship resulting in job creation –both direct and indirect.

Gherghina, Ş. C., et al (2021). The effect of Electronic commerce on employment rates in the European Union (EU) countries: a panel data analysis the following paper is aimed at identifying the effect of electronic commerce on the employment rates of the countries in the European Union. E-commerce has changed the conventional platforms of doing business and has opened employment opportunities in logistics sector, digital marketing, information technology and services, and customer relations as well as has supported the growth of entrepreneurship in the region. Due to its ability to break barriers of entry and provide access to the markets for the SMEs, e-commerce has encouraged the growth of SMEs which have boosted employment in various nations. But, digital transformation has also brought the structural shift in the pattern of

employment opportunities. Although there are several new sectors that require enhanced use of technology, several sectors including the traditional retail business have been affected due to the introduction of online business.

Timchuk, O. G., et al (2018). This paper examines the importance of commerce as a catalyst for the development of an innovative economy where technological change is propelled by commercial activity, entrepreneurship, and radical business model innovation. This has a positive effect on e-commerce since startups and small to medium-sized enterprises (SMEs) that are usually at the frontier of embracing new technologies are the ones that are empowered by the open digital platforms. In this way, the e-commerce provides the global market place that enables new technologies and business strategies to be implemented at a much faster pace. This, in turn, leads to competition, which obliges business to seek out new ways of standing out in the market that is becoming progressively more and more saturated. Last but not the least, the e-commerce being based on data provides companies with the insights about the customers and other aspects of the market, which can help to make better decisions regarding the product development, promotion, and relationship with customers.

Sharma, R. L., & Sharma, A. K. (2021). The advancement of technology and e-commerce has drastically shaped the economy of India propelling growth across all segments. With the growth of the digital technologies they play an important role of enabler of economic growth through increasing productivity, decreasing the transaction costs and opening up of new opportunities for business. E-commerce especially has brought about drastic changes in the retail and service sectors in that it provides businesses with a wider market including the export market. This change has benefited the small and medium enterprises (SMEs), the development of the entrepreneurship, and innovation, and employment generation.

Methodology

This researcher uses secondary research analysis to establish the impact of e-commerce on economic development with specific reference to employment generation. Information was gathered from reliable sources including; Trade associations, government reports, academic research and databases including World Bank, Statista, and International Labour Organisation. The data covers such parameters as the volume of e-commerce turnover, its share in GDP, employment in the e-commerce and related industries, and the formation of digital platforms. Secondary data analysis help in analyzing trends which vary in different regions and various industries. The study will also perform an analysis on existing data sets, in order to establish correlations that will show how e-commerce has been positively correlated to economic growth and employment. Analyzing techniques are employed to analyze the data and to test the hypothesis toward the growth of e-commerce and its influence on economy. Such methodology provides broad and accurate understanding of how e-commerce is impacting the economic development and creating employment opportunities on a global level.

Results and Discussion

E-commerce and its effects on economic and social development

Aspect	Impact/Effect	Key Findings
Economic Growth	Increased contribution to GDP	E-commerce contributes to faster economic growth through digital trade
Employment Generation	Creation of new job opportunities in logistics, IT, marketing, etc.	E-commerce platforms create direct and indirect jobs across sectors
Market Expansion	Access to global markets for SMEs	SMEs can sell products internationally through e-commerce platforms
Consumer Empowerment	Wider choice and lower prices for consumers	Digital platforms provide consumers access to various products/services
Digital Innovation	Investment in digital infrastructure and technologies	E-commerce drives the adoption of mobile, fintech, and payment solutions
Supply Chain Optimization	Enhanced efficiency in logistics and supply chain operations	E-commerce improves supply chain management and product delivery
Entrepreneurship Development	Encourages new startups and entrepreneurs	Digital platforms lower barriers to entry, fostering entrepreneurial growth
Regional Economic Development	Growth in less developed regions	E-commerce enables businesses in rural and underdeveloped areas
Skill Development	Development of new digital skills among the workforce	E-commerce requires upskilling in digital marketing, IT, and logistics
Impact on Traditional Retail	Disruption and transformation of traditional retail	Traditional retail businesses adapt to digital channels
Environmental Impact	Mixed effects on environmental sustainability	E-commerce reduces physical store footprints but increases packaging waste
Policy and Regulation	Government policies to support e-commerce growth	Countries developing policies to regulate and support e-commerce

		ecosystems
--	--	------------

Quantitative Indicators of E-Commerce Impact

Aspect	Quantitative Indicator	Data/Statistics
Customer Satisfaction	Average customer satisfaction score in e-commerce sector	The average customer satisfaction score for e-commerce platforms was X/10
Impact on Retail Sector	Percentage decrease in traditional retail store footfall	Footfall in brick-and-mortar retail stores decreased by X% in 2021
Reduction in Operational Costs	Average cost reduction for businesses using e-commerce platforms	Businesses reduced operational costs by X% after transitioning to e-commerce
Supply Chain Efficiency Improvement	Percentage improvement in supply chain efficiency due to e-commerce	Supply chain efficiency improved by X% with the adoption of e-commerce
Mobile E-commerce Growth	Percentage of total e-commerce transactions conducted on mobile devices	X% of e-commerce transactions were made via mobile in 2021
Tax Revenue from E-commerce	Total tax revenue collected from e-commerce businesses	Governments collected \$X billion in taxes from e-commerce platforms in 2021
Environmental Impact Metrics	Reduction or increase in CO2 emissions from e-commerce logistics	E-commerce reduced/increased emissions by X tons due to logistics in 2021

Growth in Digital Literacy	Percentage increase in digital literacy linked to e-commerce engagement	Digital literacy rates increased by X% in regions with high e-commerce usage
-----------------------------------	---	--

Scope of the Study

The subject area of this research includes a critical analysis of the impacts of e-commerce on economic development and employment opportunities. It is now becoming evident that e-commerce plays an incredibly important role in the contemporary economies, accounting for considerable growth due to the improvement of market coverage, decrease in business expenses, and promotion of globalization. This paper seeks to understand the various dimensions of e-commerce in contributing to economic growth in the areas of motivation of economic activities, innovation and employment generation in different fields. Another will focus on how e-commerce has an impact on regional and national economy, especially in the developing countries in terms of market access and support to new businesses. The study will assess the employment impact of the e-commerce platforms as the direct employment in logistics, digital marketing, customer relations besides the indirect employment in support services and supply chain. It is through these dimensions that the study aims at establishing a sound understanding of the impact of e-commerce for employment and economic transformation.

Research problem

As earlier stated, the research problem of this study on the contribution of e-commerce to economic development and employment emanates from the desire to fill the existing gap in the literature on the effects of e-commerce on modern economy and development especially in the developing world. However, there is a lack of information on how e-commerce actually contributes to sustainable development and job creation with the fast growing e-commerce market. Some questions may arise concerning the degree of the SMEs capability to overcome traditional barriers like limited market access and high operational costs with a help of e-commerce and the way these factors are translated into economic growth. Thus, while e-commerce is known to generate new employment and careers in high-tech industries such as technology, logistics, and digital marketing, there is a need to establish how employment generation impacts different parts of the population, especially in the rural and disadvantaged areas. The absence of an extensive study that examines the relationship between digital skills, and the e-commerce growth, infrastructure development, and government policies also shows the importance of the research study. Thus, this research seeks to fill these gaps by exploring the impact of e-commerce on economic development and employment creation with emphasis on its positive impact to sustainable development.

Conclusion

E-commerce is recognized as highly effective tool for economic growth and employment creation which changes the environment of the global economy in particular developing nations. It has helped the firms, especially the SMEs, to be in a position to penetrate the wider market, improve the productivity of their operations and expand hence promoting overall economic development. Globalization has eradicated the geography constraints on business and leveled the playing field enabling new business people to venture into market and compete. E-commerce has become the biggest job provider in the overall world and has provided the employment in the sectors like technology, digital marketing, logistics and customer service. It has also assisted to reduce the economic inequality by providing employment opportunities in the rural and hard to reach regions for more equality of opportunity growth. Measures taken by the government in the direction of promotion of digital infrastructure and financial services have also boosted e-commerce, and subsequently, the economic growth and employment generation. It is clear that for e-commerce to grow more, there must be constant efforts to enhance the people's knowledge in the use of the internet and shopping, increase the coverage of internet, and enhance policies on the innovation of e-commerce. Thus, e-commerce will continue to be an important factor for sustainable development of the economy and creation of new opportunities for employment, thus making the economy more diversified and competitive.

References

1. Chaudhuri, P., & Kumar, A. (2015). Role of digitization and e-commerce in indian economic growth: an employment generation perspective. *Research Gate*. December.
2. Boateng, R., Heeks, R., Molla, A., & Hinson, R. (2008). E-commerce and socio-economic development: conceptualizing the link. *Internet Research*, 18(5), 562-594.
3. Siddiqui, S., & Singh, R. (2018). Digitalization and E-Commerce In India: An Employment Generation Initiative. *Intl. J. Adv. Res. Comm & Mgmt*, 4(2), 1-11.
4. Lund, M. J., & McGuire, S. (2005). Institutions and development: Electronic commerce and economic growth. *Organization Studies*, 26(12), 1743-1763.
5. Gherghina, Ş. C., Botezatu, M. A., & Simionescu, L. N. (2021). Exploring the impact of electronic commerce on employment rate: panel data evidence from European Union countries. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(7), 3157-3183.
6. Timchuk, O. G., Gorbachevskaya, E. Y., Nikityuk, L. G., & Evseeva, G. G. (2018). Role of e-commerce in development of innovative economy. *European Proceedings of Social and Behavioural Sciences*, 50.
7. Botelho, A. J. J. (2005). Employment, MSMes and e-commerce: a framework for a research agenda.
8. Volkova, N., Kuzmuk, I., Oliinyk, N., Klymenko, I., & Dankanych, A. (2021). Development trends of the digital economy: E-business, e-commerce.

9. Sharma, R. L., & Sharma, A. K. (2021). Influence of Technology and E-commerce on Economic Growth: Some Evidence from Indian Economy. *Academy of Marketing Studies Journal*, 25(6), 1-10.
10. Zatonatska, T. (2018). Models for analysis of impact of the e-commerce on indicators of economic development of Ukraine, Poland and Austria.
11. Parishev, A., Hristovski, G., Jolakoski, P., & Stojkoski, V. (2020). E-commerce impact on economic growth.
12. Americo, A., & Veronico, A. (2018, January). The effect of e-commerce on employment in retail sector. In *Proceedings of the 2018 International Conference on Advances in Technology, Information and Communication-ATIT* (pp. 1-5).
13. Wahyudi, H., & Sumahir, G. N. (2020). The Effect of Research and Development (R&D) Investment, E-Commerce Company Employee, And E-Commerce Transaction Volume On Economic Growth In Indonesia 2010Q1–2020Q4. *Studi Ilmu Manajemen dan Organisasi*, 1(2), 153-165.
14. Rahmi, S., Fauziati, P., Harahap, E. F., Novianti, N., & Putri, D. (2020). Analysis of e-commerce and E-Entrepreneurship challenges on digital economic development in west Sumatra in supporting national economic GROWTH. *Humanit Soc Sci Rev*, 8(2), 808-814.
15. Karpunina, E. K., Isaeva, E. A., Galieva, G. F., Sobolevskaya, T. G., & Rodin, A. Y. (2019, October). E-commerce as a driver of economic growth in Russia. In *Institute of Scientific Communications Conference* (pp. 1622-1633). Cham: Springer International Publishing.
16. Ridhwan, M. M., Suryahadi, A., Rezki, J. F., & Pekerti, I. S. (2021). *The Labor Market Impact of Covid-19 and The Role of E-Commerce Development: Evidence from Indonesia* (No. WP/10/2021).
17. Xue, X. X., Wang, X. H., & Wu, J. P. (2017). Employment influencing factors of e-commerce service industry. *Journal of Discrete Mathematical Sciences and Cryptography*, 20(6-7), 1399-1403.
18. Joseph, B. (2019). The Roles of Information and Communication Technologies (ICTs) and E-Commerce as Agents of Nigeria's Economic Development: Review of Challenges and Prospects. *Wireless Engineering and Technology*, 10(03), 41.
19. John, V. K., & Vikitset, N. (2019). Impact of B2C E-commerce on small retailers in Thailand: An investigation into profitability, operating efficiency, and employment generation. *Operating Efficiency, and Employment Generation (January 3, 2019)*.