

## **Growth Trends of Internet Users and E-commerce in Increasing Economic Growth in Indonesia**

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### **Abstract**

Indonesia as the country with the largest population in Southeast Asia has great potential to increase internet penetration and utilize digital technology to increase economic growth and people's welfare. This study aims to analyze the growth trend of internet and e-commerce users in increasing economic growth in Indonesia. The research method used is qualitative descriptive by collecting secondary data from various sources, such as Report Data, scientific articles, and literature sources related to the research topic. The results of this study indicate that the growth of internet users and the development of e-commerce can be an effective strategy to boost Indonesia's economic growth. The growth of internet users in Indonesia can enhance economic growth through increased consumption, efficiency, job creation, innovation, and investment. Meanwhile, e-commerce also serves as a significant driver of economic growth with the important role of MSMEs in its development.

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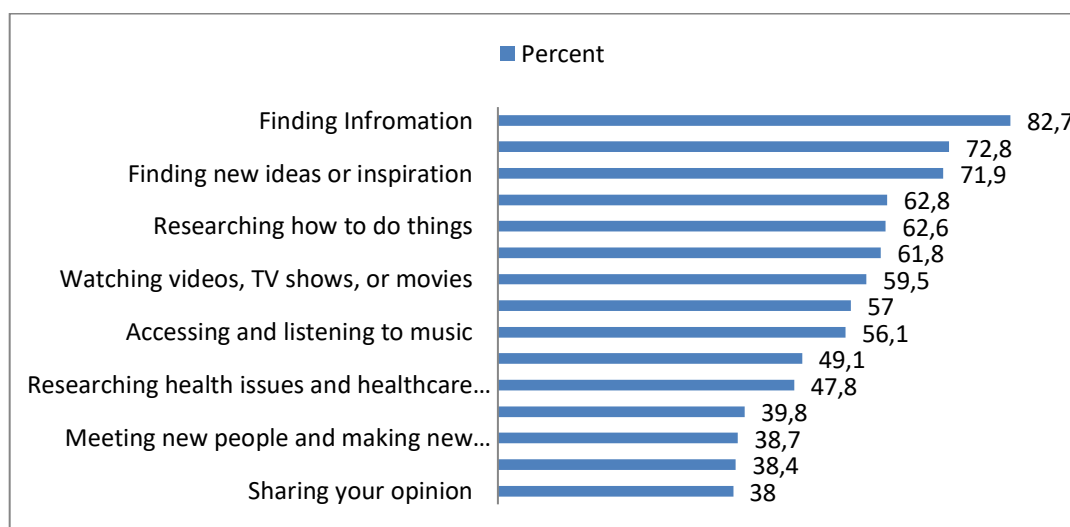
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## INTRODUCTION

Indonesia, as the country with the largest population in Southeast Asia, has a tremendous potential to drive economic growth through increased internet penetration and the utilization of digital technology. Economic growth is one of the important aspects of macroeconomics that describes the dynamics of overall economic change, impacting various aspects of life including society, businesses, and markets (Batubara & Delima, 2023). Economic growth can also be interpreted as a process of long-term growth in per capita output. This means that in the long term, well-being is reflected in the increase of per capita output which in turn provides many alternatives in consuming goods and services, accompanied by an increase in the purchasing power of society (MS, 2017).

In this modern era, the digital economy is one of the most influential factors in boosting the economic growth of a country. Its development aligns with the dynamics of globalization that continues to evolve. Advances in digital technology have played a significant role in transforming the economic landscape as a whole (Abdillah, 2024), thereby opening up great opportunities for economic growth through continuous innovation, producing better and more efficient products, and services (Sabilayanan et al., 2025). According to a report by Google, Temasek, and Bain & Company, the digital economy of Indonesia is valued at 90 billion US dollars in 2024 and is expected to reach 200-360 billion US dollars by 2030 (Google, Temasek, 2024). This indicates significant potential and attractive opportunities in various digital sectors in the future. Thus, Indonesia has a great opportunity to leverage the potential of the digital economy to enhance economic growth and the welfare of its people.

One of the tools to support the existence of a digital economy is certainly the availability of supporting internet access. The internet is a global computer network consisting of various computer devices connected through certain protocols to provide information and offer resources that can be accessed by people around the world (Putri, 2020). With the internet, all information available in this world becomes easily searchable and traceable. The internet has also become the fastest and most up-to-date information tool, as well as the main tool in facilitating rapid transformations and improvements in various aspects of life (Fathimatuzzahra & Dompak, 2024). The ease of internet access also makes knowledge, information, and various media more quickly accessible. Thus, every individual has the capability to develop skills and expertise (Agit et al., 2023).

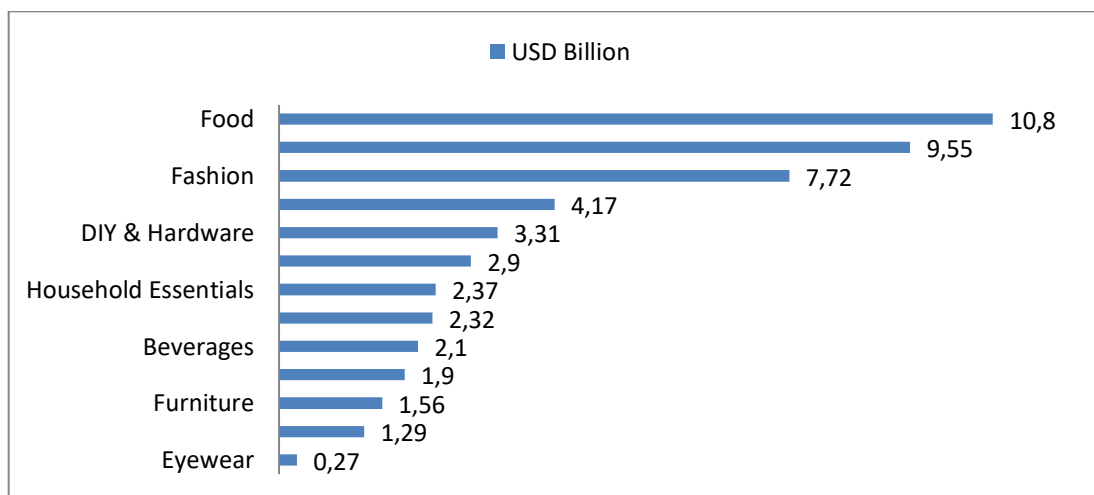


Source: Data Reportal (processed data)

**Figure 1.** Main Reasons for Internet Use in Indonesia Year 2024

The image above shows that, in general, people in Indonesia use the internet for fundamental purposes such as seeking information, communication, and entertainment. Additionally, internet users in Indonesia tend to be more active in seeking ideas, filling their free time, and looking for information related to news and health. Internet usage has brought significant changes to various aspects of life, including communication, business, information, entertainment, education, and more (Gunawan et al., 2020). In the context of economic development, increasing internet access not only reflects progress in digital infrastructure and government policies but also contributes to improving productivity, product efficiency, and innovation in creating new goods. Thus, internet usage indirectly plays a role in driving the economic growth of a country (Ramadhani & Faridatussalam, 2024). Furthermore, research conducted by (Wahab et al., 2020) shows that the number of internet users has a positive and significant impact on economic growth.

Directly, the increase in internet users in Indonesia has become the main catalyst for the growth of e-commerce. The more individuals connected to the internet, the wider the opportunities for businesses to reach consumers and sell products online. E-commerce is all buying and selling activities conducted through electronic media utilizing the existing internet network or digital technology (Sara & Fitryani, 2020). Its development has been rapid, especially since the pandemic, acting as a catalyst in driving digital transformation, particularly for Micro, Small, and Medium Enterprises (MSMEs). Physical restrictions and declining traditional economic activities have forced MSMEs to innovate and adapt to digital technology. Thus, many MSMEs have started to utilize e-commerce platforms to sell their products and services online (Fathoni & Asfiah, 2024). In the context of economic development, e-commerce has become an effective means of facilitating easy and secure transactions, building trust between sellers and buyers, and a suitable instrument for developing individual or business enterprises. With e-commerce, buyers and sellers can easily connect quickly to conduct transactions, and what buyers want can also be quickly responded to by sellers, thus achieving customer satisfaction and increasing profits for sellers (Rehatalanit, 2021).



Source of data: Data Reportal (data processed)

**Figure 2.** Product Categories with the Largest Total Spending Value in Indonesian E-Commerce in 2024

Based on the image above, it shows that the high spending figures in various categories, especially food, electronics, and fashion, indicate strong domestic consumption levels. Household consumption is one of the largest components of Indonesia's Gross Domestic Product (GDP). The growth of e-commerce indicates that consumer purchasing power remains robust and even increases, boosting aggregate demand contributing to GDP

growth. According to research conducted by (Budi Dharma et al., 2022), it shows that e-commerce influences economic growth. Likewise, the results of the research conducted by (Sumahir et al., 2022) show that the development of e-commerce provides various benefits, such as expanding sales access, facilitating transactions, discovering new markets, and increasing economies of scale. This will cause all transactions to move faster and can increase sales volume. Supported by an increasingly easier payment system, electronic transactions or e-commerce activities will continue to develop and expand (Theophilia & Wijaya, 2023).

In this context, the growth trend of internet and e-commerce users is very important to understand, because it can provide insight into how the development of the digital economy can improve people's quality of life and increase the country's economic income. Thus, this study aims to understand an in-depth analysis of the growth trend of internet and e-commerce users in increasing economic growth in Indonesia.

## **RESEARCH METHODOLOGY**

The type of research used is qualitative. Qualitative research is an in-depth, flexible, and interactive approach to understanding social phenomena (Haki et al., 2024). For this reason, in this study, a descriptive analysis method will be used that seeks to explain and describe in detail the object of research. The purpose of using such methods is to collect actual and detailed information, identify problems, and make comparisons or evaluations. Thus, qualitative descriptive research only describes the response to a situation, event, or phenomenon that occurs, so there is no need for an explanation between causality relationships and hypothesis tests (Palinggi & Limbongan, 2020). The main data sources in this study are quoted from Data Reportal, scientific articles, and literature sources related to the author's current research topic. The author uses the google scholar database to identify literature that is suitable for the research being done. The data analysis process will begin with the collection of data from various sources, such as Data Reportal, the Central Statistics Agency, scientific articles, and literature sources related to the author's current research topic. After the data is collected, data reduction will be performed to filter out the most relevant information. Next, the presentation of the data will be done in the form of descriptive narratives, tables, or graphs to facilitate understanding. Finally, conclusions will be drawn based on the description of the data presented, providing a comprehensive overview of the phenomenon being studied.

The criteria for data used in this research are as follows: 1) Topic relevance is key, where all data must be directly related to internet user growth, e-commerce development, and its impact on Indonesia's economic growth; 2) Data currency is very important considering the dynamics of this topic, so the data used must be current and up-to-date to provide an accurate depiction of the phenomenon being studied; 3) Source credibility is a top priority, thus data will be sourced from reliable references such as Data Reportal, the Central Statistics Agency, scholarly articles from reputable journals, and related literature from research institutions or international organizations with authority in the digital economy field; 4) Data availability and accessibility are also considered to ensure that relevant data can be accessed within the timeframe and research resources.

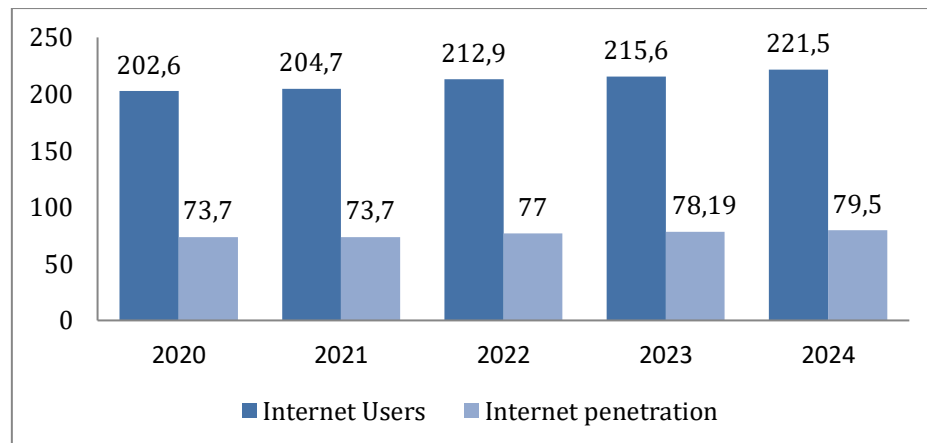
## **RESULTS AND DISCUSSION**

### **Internet Users in Increasing Economic Growth**

The internet has brought convenience in various aspects of life, such as accessing information, communicating, and transacting. In addition, the internet can also increase productivity and economic competitiveness (Wahab et al., 2020). The increase in internet users can be caused by the growth of technology, the availability of devices, accessibility, and the

development of attractive online services, then the existence of economic factors and communication needs also contribute to the increase in internet users (Siregar et al., 2023).

In Indonesia, the growth of internet users also shows its rapid development and brings significant progress impacts, especially for people who utilize information and communication technology (Tatiek Mariyati, 2013). The increase in the number of internet users in Indonesia is also followed by a significant increase in the duration of internet use. In 2024, the average time spent accessing the internet will reach 7 hours and 22 minutes per day, with mobile phone use dominating at 4 hours 38 minutes (Reportal, 2025).



Source: Reportal Data (processed data)

**Figure 3.** Internet Users and Penetration in Indonesia in 2020-2024

Based on the image above, it shows that the number of internet users in Indonesia will reach 221,5 million people in 2024, from the total Indonesian population of 285 million people in 2024. According to the results of the internet penetration survey in Indonesia 2024 published by Data Reportal, the internet penetration rate in Indonesia reached 79,5%, an increase of 1,4% compared to the previous period (Reportal, 2025). Based on gender, internet penetration in Indonesia is mostly used by men at 50,7% and women at 49,1%. Meanwhile, the majority of internet users in Indonesia are Generation Z (born 1997-2012) at 34,40%, followed by the millennial generation (born 1981-1996) at 30,62%. The distribution of internet users by other age groups is the baby boomer generation (born 1946-1964) at 6,58% and the generation before the baby boomer (born before 1945) at 0,24%. In addition, this survey also shows that urban areas are still the area with the largest internet penetration, which is 69,5%, while rural areas are 30,5% (Indonesia, 2024).

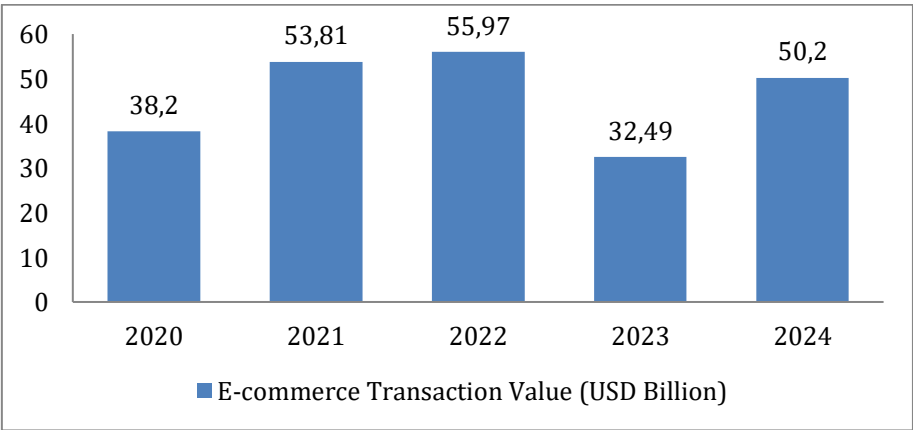
Given the large number of internet users, it is not surprising that the frequency of Indonesian society in conducting transactions online varies quite a bit, with the majority performing online transactions less than 4 times per month at 47.05%, followed by 38.92% who have never engaged in online transactions. This increase in online transactions has a positive impact on Indonesia's economic growth through several mechanisms, such as an increase in consumption and money circulation, efficiency and economic inclusion, the creation of new jobs, innovation and investment, as well as improved economic data. Meanwhile, a small portion of society transacts online more frequently, with 10.31% conducting transactions 5-10 times per month and 3.73% doing so more than 10 times per month (Asosiasi Penyelenggara Jasa Internet Indonesia (APJII), 2024). Thus, the increase in online transactions can be a driver of Indonesia's economic growth.

In the Solow-Swan economic growth theory, technological advancement is one of the important factors influencing economic growth. In this context, internet users can be seen as

part of technological advancement that can affect economic growth. If a country has good internet access, it will enhance the potential for economic growth by improving efficiency, productivity, and innovation. As more people use the internet, there are also more business opportunities that can be utilized. The significant growth of internet users in recent years has had a positive impact on economic growth. With more and more people using the internet, there are also more business opportunities that can be utilized. This is in accordance with the statement made by (Ramadhani & Faridatussalam, 2024) that internet users can increase economic growth because many people have used the internet to interact and make transactions digitally. This technological development opens up new business opportunities for business actors, especially companies that use the internet as the main means (Simangunsong & Rozaini, 2023). Thus, access to goods and services has become easier and faster thanks to the help of technology that facilitates two-way transactions, thus driving economic growth by changing the way people work and regulating the flow of information and ideas. In addition, the internet empowers businesses through fundamental transformations in the virtual value chain at different levels and types of businesses, and influences the processes of designing, production, product distribution, and consumer outreach (Mohamed & Nageye, 2022).

**E-commerce in Increasing Economic Growth**

In recent years, the e-commerce sector has experienced significant growth, driven by increased internet access, smartphone use, and wider adoption of information technology in society (Hayati et al., 2024). Purchasing, selling, and marketing activities become more productive when e-commerce is used, as it facilitates transactions, lowers costs, and speeds up the transaction process (Sary & Shilvana, 2024). In addition, e-commerce as a means of buying and selling that can be accessed by anyone, without age or background restrictions, has opened up opportunities for various groups, including adults and the elderly, to make transactions online (Garini et al., 2022). This shows that e-commerce is a real example of how the development of information and communication technology can affect the economy, by allowing the transaction of goods and services between producers or sellers and consumers to take place easily and quickly through internet-based network technology (Simangunsong & Rozaini, 2023).



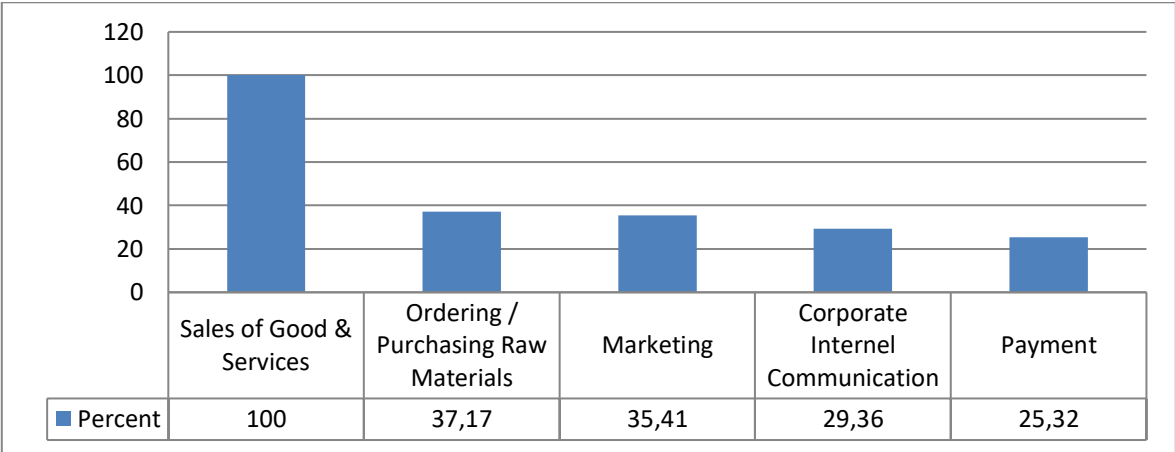
Source: Reportal Data (processed data)

**Figure 4.** Value of E-commerce Transactions in Indonesia in 2020-2024

Based on figure 4, it shows that transactions through e-commerce experienced a significant increase from 2020 to 2022, indicating stable and positive growth in the e-commerce industry. However, in 2023, the value of e-commerce transactions has decreased significantly with a value of USD 32,49 billion. This decline may be due to several factors, such as changes

in consumer behavior, increased competition, or changes in government policies. However, in 2024, the value of e-commerce transactions will again experience a significant increase with a value of USD 50,2 billion. This increase shows that the e-commerce industry still has great growth potential and can recover from the previous decline.

This increase in the value of e-commerce transactions is in line with the benefits of e-commerce which can help Micro, Small, and Medium Enterprises (MSMEs) in improving the quality of better information, and placing a wider market position in society so as to open up business opportunities that have more potential to increase revenue and earn profits (Aprilyan et al., 2022). Data (Statistik, 2025) shows that e-commerce businesses based on business scale are dominated by MSMEs at 99.93%, while Large Enterprises account for only 0.07%. This indicates that MSMEs play a very important role in the development of e-commerce in Indonesia and can be a main driver of economic growth in the future.



Source: Central Statistics Agency (processed data)

**Figure 5.** Percentage of E-commerce Businesses According to the Utilization of Internet Services

Based on the image above, it shows that with the internet as the main vehicle for sales, e-commerce businesses can reach a much wider market, unhindered by physical limitations. This allows for an increase in the volume of transactions and sales, which directly contributes to economic growth. Additionally, the use of the internet for ordering or purchasing raw materials, marketing, internal company communication, and payments indicates that e-commerce utilizes technology to automate and streamline business processes. This efficiency can reduce operational costs, improve profit margins, and ultimately encourage investment and business expansion. Therefore, it can be concluded that the use of the internet in the operations of e-commerce businesses has a significant impact on economic growth.

The use of the internet in the operations of e-commerce businesses has become an important part of enhancing business efficiency and effectiveness. According to data obtained from the Central Bureau of Statistics, the internet is used as the main means to facilitate the rapid sale of goods and services, holding the top position with a percentage of 100%. Additionally, the internet is also used for ordering or purchasing raw materials at 37.17%, marketing goods and services through social media and marketplaces at 35.41%, internal company communication at 29.26%, and payments using electronic systems at 25.32% (Statistik, 2025). Thus, the internet has become an essential part of e-commerce operations, allowing them to improve efficiency and effectiveness in various aspects of business.

The advantages of e-commerce, such as expanding sales access, ease of transactions, and discovering new markets, can realize economies of scale that will reduce production costs but at the same time increase economic growth (Sumahir et al., 2022). According to research



conducted by (Ayu, 2023), it shows that the value of e-commerce transactions has a significant effect on short-term and long-term economic growth, because information and communication technology is increasingly developing in the era of digitalization which has led to new habits of people in transacting, especially in e-commerce. Seeing this great potential, e-commerce can be developed both in the short and long term, but the government's participation in the development and support of the growth of e-commerce transactions is very important to maximize its potential (Sabrina et al., 2023). In addition, the development of e-commerce can also encourage the regional economy to become more equitable through a large capital turnover in the region, thereby accelerating economic growth (Theophilia & Wijaya, 2023). The large transaction value of the e-commerce sector also affects the derivatives sector, especially the logistics services sector, thereby increasing the demand for labor in the sector (Widagdo & Rofik, 2019). Meanwhile, another study by (Lestari & Fajar, 2022) showed that ease of use, business expectations, and social influence have a positive influence on behavioral intentions in the use of e-commerce in Indonesia.

## **CONCLUSION, LIMITATION AND SUGGESTIONS**

### **Conclusion**

Based on the results and discussions in this study, it can be concluded that the growth of internet users in Indonesia can boost economic growth through various mechanisms, namely increased consumption and circulation of money, economic efficiency and inclusion, creation of new jobs, innovation and investment, as well as better economic data. Good internet access can enhance the potential for economic growth by improving efficiency, productivity, and innovation. Meanwhile, e-commerce has become one of the fastest-growing sectors in the digital economy, with significant transaction value and great growth potential. MSMEs play a very important role in the development of e-commerce in Indonesia and can be a major driver of economic growth in the future. With the ability to increase transaction volumes and sales, reduce operational costs, and improve profit margins, e-commerce can be a significant driver of economic growth.

### **Limitation**

This study only uses descriptive qualitative methods, so data analysis only focuses on the description and interpretation of secondary data without using statistical or quantitative analysis. In addition, this study only focuses on the growth trend of internet and e-commerce users in increasing economic growth in Indonesia, so it does not discuss other related aspects.

### **Suggestion**

Further research can consider using more comprehensive research methods and collecting primary data to obtain more accurate and in-depth results on the impact of the growth of internet and e-commerce users on economic growth in Indonesia. Further research can also expand the scope of research by including other variables related to economic growth, such as government policies, digital infrastructure, and socioeconomic factors. Thus, further research can provide more comprehensive and accurate results on the role of internet and e-commerce user growth in increasing economic growth in Indonesia.

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