

# Analyzing the Comparison Between E-Commerce and MSMEs for Students of the College of Vocational Studies at IPB University

**Afnan Zahra<sup>1\*</sup>, Denty Nirwana Bintang<sup>2</sup>, Irma Rasita Gloria Barus<sup>3</sup>,  
Amata Fami<sup>4</sup>**

<sup>1\*,2,3,4</sup> Software Engineering Study Program, College of Vocational Studies, IPB University, Bogor Regency, West Java Province, Indonesia.

**Abstrak.** Konteks ekonomi digital yang berkembang pesat telah mengubah lanskap bisnis global, termasuk di Indonesia. Pemahaman akan preferensi dan keterlibatan generasi muda, terutama mahasiswa, menjadi krusial. Penelitian ini bertujuan untuk membandingkan preferensi dan keterlibatan mahasiswa Sekolah Vokasi IPB University dalam penggunaan E-commerce dan keterlibatan pada Usaha Mikro, Kecil, dan Menengah (UMKM). Penelitian ini menggunakan metode kuantitatif dengan survei yang dilakukan dengan kuesioner kepada 32 mahasiswa untuk mendapatkan perspektif dan pengalaman pribadi mahasiswa terkait perbandingan E-commerce dan UMKM. Data yang dikumpulkan kemudian dianalisis untuk mengidentifikasi perbedaan signifikan antara mahasiswa yang lebih cenderung memakai platform E-commerce dalam kegiatan belanja daring dibandingkan dengan mereka yang lebih memilih berbelanja yang terlibat dalam UMKM. Penelitian ini juga menggali lebih dalam faktor-faktor yang mempengaruhi preferensi mahasiswa dan cara-cara untuk mengoptimalkan potensi keduanya dalam mendorong pertumbuhan ekonomi yang inklusif dan berkelanjutan.

**Kata kunci:** Ekonomi; IPB University; E-Commerce; UMKM; Pengalaman; Berbelanja.

**Abstract.** The rapidly developing digital economic context, including Indonesia, has changed the global business landscape. Understanding the preferences and involvement of the younger generation, especially students, is crucial. This research aims to compare the preferences and involvement of IPB University Vocational School students in the use of E-commerce and involvement in Micro, Small, and Medium Enterprises (MSMEs). This research uses a quantitative method, with a survey conducted using a questionnaire of 32 students to obtain students' perspectives and experiences regarding comparing e-commerce and MSMEs. The data collected was then analyzed to identify significant differences between students who were more likely to use E-commerce platforms for online shopping compared to those who preferred shopping in MSMEs. This research also digs deeper into the factors that influence student preferences and ways to optimize their potential in encouraging inclusive and sustainable economic growth.

**Keywords:** Economic; IPB University; E-Commerce; MSMEs; Experiences; Shopping.

\* Corresponding Author. Email: afnanzahra@apps.ipb.ac.id <sup>1\*</sup>.

## Introduction

In an increasingly digital era, technology-driven economic transformation has had a significant impact on consumer behavior and business patterns around the world. One aspect in the main spotlight is the shift in how consumers make purchases, with E-commerce platforms becoming increasingly dominant in daily shopping activities. On the other hand, the importance of supporting and developing micro, small, and medium enterprises (MSMEs) is also the focus of encouraging local and inclusive economic growth.

MSMEs (Micro *et al.*) are productive businesses owned by individuals or business entities that meet the criteria for micro, small, and medium enterprises. MSMEs are divided into micro, small, and medium enterprises based on the requirements set out in statutory Regulation No. 20 of 2008 (Alfianto *et al.*, 2024). In Indonesia, MSMEs have an essential role in the national economy by significantly contributing to employment and Gross Domestic Product (GDP) (Putra *et al.*, 2023). Meanwhile, the rapid development of technology, primarily e-commerce, has changed the business world significantly. This is because promotion through online media or digital marketing makes it easier to reach consumers by introducing or selling their products, so it helps business people (Karimah *et al.*, 2022). Because the number of social media users is increasing, it can make it easier for MSMEs to market their products. This era also helps MSMEs adapt to technological developments (Yahya *et al.*, 2023).

This research involves IPB University Vocational School students comparing e-commerce and MSMEs to understand how the economy is currently moving. This research aims to dig deeper into the factors that influence student preferences, such as ease of access, price, and confidence in product quality, as well as to identify the advantages and disadvantages of these two sectors. By understanding students' preferences and perceptions of E-commerce and MSMEs, this research also aims to find effective ways to optimize the potential of both to encourage inclusive and sustainable economic growth. In addition, this research can provide strategic

recommendations for e-commerce players and MSMEs to increase their competitiveness in digital and conventional markets and contribute to public policies that support the development of Indonesia's micro and medium economic sectors.

## Research Methodology

In this research they used a quantitative method with a survey using a questionnaire to obtain students' personal perspectives and experiences regarding the comparison of E-commerce and MSMEs. The questionnaire in this study provides answer choices, some are based on E-commerce and MSMEs choices, some are based on the level of agreement such as strongly agree, agree, disagree, and strongly disagree, and from some of these choices respondents are asked to give reasons, but the answer choices adapted to the questions given such as, agree, trustworthy, confident, helpful, efficient, flexible and safe. The data collection process was carried out by distributing a Google Form to 32 respondents taken from the IPB University Vocational School student population who were asked to assess the comparison of E-commerce and MSMEs. Respondents were selected based on active students, namely classes 58, 59 and 60, who have personal views and experiences regarding the use of E-commerce platforms and shopping directly at MSMEs.

## Results and Discussion

The results and discussion of this research will explore the perceptions and experiences of IPB University vocational colleges regarding the comparison of E-commerce and MSMEs. Carrying out a quantitative study through an online questionnaire allows us to gain a broader understanding of student preferences and perceptions in general regarding the comparison of E-commerce and MSMEs in more detail regarding students' views and experiences in using E-commerce platforms and engaging with MSMEs. The following are the survey results comparing E-commerce and MSMEs among IPB University vocational students.

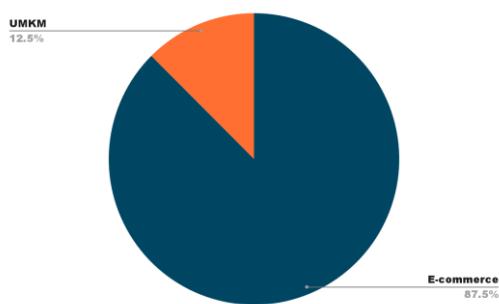


Figure 1. Shopping Preferences

Figure 1 shows that the choice between shopping via an E-Commerce platform or directly from MSMEs (Micro, Small and Medium Enterprises) depends on various factors that reflect individual needs, preferences and values. Each option has advantages and disadvantages that respondents need to consider. After the respondent chooses this option, the respondent is then asked to provide reasons. The survey results showed that many respondents (87.5%) showed a significant level of interest in using E-commerce platforms. This shows that students realize that shopping via the E-Commerce platform offers comfort and convenience because respondents can make transactions from anywhere and at any time without having to go to a physical store. This high level of interest can be used as an important indicator to understand the shift in student preferences towards digital shopping. And the results from the MSMEs option (12.5%) show that respondents very rarely shop through MSMEs due to difficult accessibility and limited operating hours.

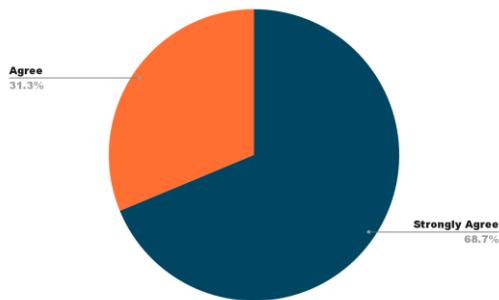


Figure 2. Product Availability

Figure 2 shows that in this increasingly digital era, the role of technology in supporting shopping is becoming increasingly popular. The survey results show that the majority of

respondents "strongly agree" (68.7%) and "agree" (31.3%) because they consider the use of E-commerce platforms to be very efficient in supporting shopping, which is quite popular. This shows that respondents can find almost all types of products they need easily, as well as offering fast delivery services. Therefore, further evaluation is needed to identify obstacles that may be encountered in MSMEs and improve them to increase efficiency in shopping at MSMEs. One solution that can be taken is to produce goods in large quantities, so that consumers are interested in shopping directly at MSMEs.

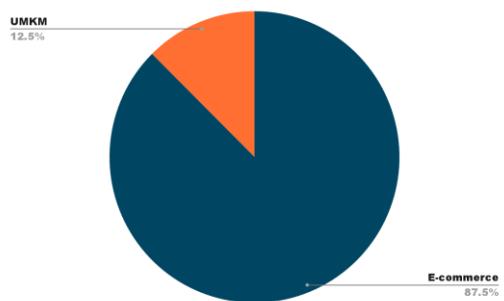


Figure 3. More Affordable Product Prices

According to Kotler and Keller (as cited in Sumaa *et al.*, 2021), price is the amount charged for a product or service, representing the value that consumers exchange for the benefits of owning or using a product (Aningsih *et al.*, 2024). Figure 3 illustrates a price comparison between E-Commerce and MSMEs, highlighting affordability. The survey results indicated that a significant majority of respondents (87.5%) favored E-Commerce for finding products at lower prices, whereas only 12.5% of respondents preferred MSMEs. This trend suggests that students are inclined towards more economical shopping options, primarily due to the budget constraints they frequently encounter. Moreover, E-Commerce platforms facilitate easy price comparisons from various sellers, enhancing their attractiveness to students. This ability to quickly and efficiently compare prices allows students to make more informed purchasing decisions, further solidifying the preference for E-Commerce over MSMEs. The convenience and accessibility of E-Commerce platforms, coupled with the opportunity to find better deals, play a crucial role in shaping students' shopping

behaviors and preferences. This preference underscores the need for MSMEs to adopt competitive pricing strategies and improve their online presence to attract and retain student customers.

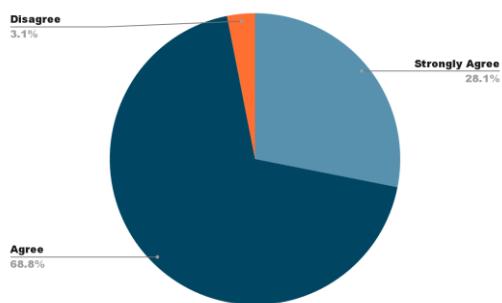


Figure 4. Suitability of E-Commerce and MSMEs Prices with Economic Capabilities

According to Fernandes & Londhe (2015), usually consumer purchasing behavior is influenced by cultural, social, personal, and psychological factors, and these forces are referred to as social influences which include: Role and family influence, Reference group, Social class, Culture, and sub-culture (Mulyati, 2023). In addition to these factors, economic capability also plays an important role in consumer purchasing decisions. Figure 4 displays a price graph for E-commerce and MSMEs products according to economic capabilities, which is also important to assess. In this survey, after the respondent chooses an option, the respondent is then asked to provide a reason. The survey results show that many respondents "agree" (68.8%) and "strongly agree" (28.1%) because E-commerce platforms often have competitive prices and those who shop directly at MSMEs can usually negotiate product prices, and respondents can adjust their economic capabilities in shopping. However, there were also several respondents who "disagree" (3.1%) because some respondents did not fully understand their economic capacity to ensure wise spending and according to the budget. Efforts should be made to evaluate the shopping budget and set maximum limits for each purchase. Take advantage of the price comparison feature in E-Commerce to find the best deals and visit several MSMEs to compare prices and product quality.

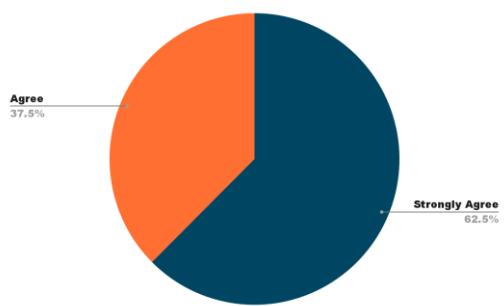


Figure 5. E-Commerce provides more discounts than MSMEs

Figure 5 displays a graph of respondents' answers to the question whether e-commerce provides more price discounts than MSMEs. The survey results show that many respondents tend to "strongly agree" (62.5%) and "agree" (37.5%) that E-commerce provides more price discounts than MSMEs. This shows that E-commerce's ability to optimize the sales process digitally allows them to have more resources and flexibility to provide discounts regularly or on a larger scale than MSMEs.

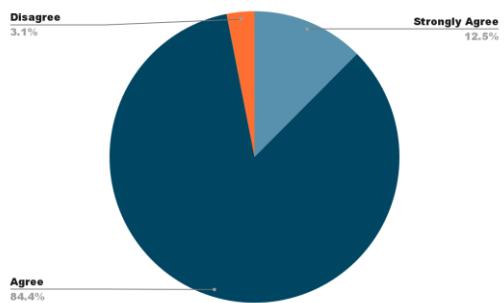


Figure 6. The quality of E-Commerce and MSMEs products matches the price

Purchasing decisions are decisions taken involving perceptions of price, value and quality (Lubis & Hidayat, 2017). Purchasing decisions are a main part of consumer behavior that leads to purchasing products or services (Zed, *et al.*, 2023). Figure 6 In the context of product prices on E-commerce and MSMEs platforms, it is important to know whether they correspond to the quality of the products provided. According to the survey results, the majority of respondents "agree" (84.4%) and "strongly agree" (12.5%) have a positive view of product prices in E-Commerce and MSMEs according to the quality of the products provided. Products in E-Commerce have a wide variety of qualities, from high quality to low quality,

because this platform connects sellers from various places, and product quality can vary greatly. And MSMEs products often stand out because of local quality and craftsmanship which are usually made with greater attention to detail and high-quality materials, making MSMEs products more unique and of high value, MSMEs also have tighter control over their production processes due to the smaller production scale. However, there were several respondents who "disagree" (3.1%) because there are still many E-commerce and MSMEs who sell products that do not match the quality available.

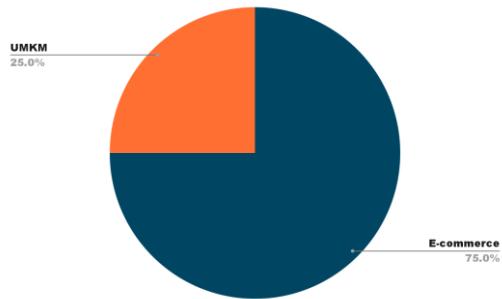


Figure 7. Easier Transaction Process

According to Kalakota (1997), e-commerce is defined as an online shopping activity utilizing the internet network, with transactions conducted through digital money transfers (Handrawan et al., 2021). Figure 7 presents a graphical representation of respondents' preferences for the transaction processes between E-commerce and MSMEs based on their experiences. The survey data reveals that a substantial majority of respondents (75%) prefer the transaction process via E-commerce, while only 25% favor MSMEs. This preference indicates that many respondents find the transaction process through e-commerce platforms to be more convenient and user-friendly compared to MSMEs. One plausible reason for this trend is the busy schedules of students, who often juggle class commitments, assignments, and various other activities. E-commerce provides them with the flexibility to conduct transactions at any time and from any location, eliminating the need to visit a physical store. This convenience factor is a significant advantage, making e-commerce platforms more attractive to students who seek efficiency and time-saving solutions in their shopping experiences. Additionally, the streamlined and

often faster transaction processes available on e-commerce platforms contribute to this preference, as they reduce the complexity and time associated with traditional shopping methods at MSMEs. Therefore, the ability of e-commerce to offer seamless, round-the-clock transaction capabilities significantly influences students' shopping choices, underscoring the importance of convenience in their decision-making process.

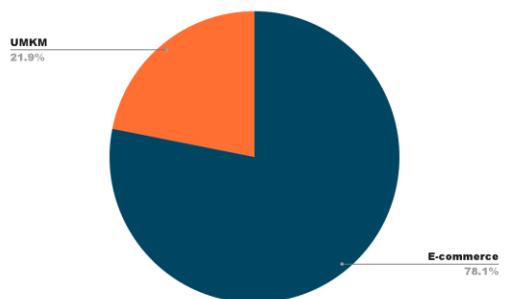


Figure 8. Easier Payment Process

Figure 8 shows how efficient the payment process is between E-commerce platforms or MSMEs. The survey results show that most "E-commerce" respondents (78.1%) consider E-commerce platforms quite efficient in payment. E-commerce platforms generally offer various payment methods, with multiple choices making it easier for consumers to choose the most convenient and fast method. Several respondents chose "MSMEs" (21.9%) because a more personal and responsive experience in the payment process also has value and can provide services more tailored to respondents' needs.

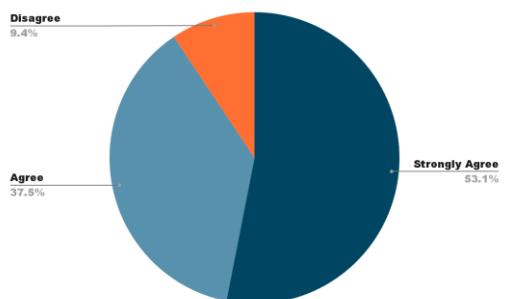


Figure 9. Risks of Security Threats and Privacy of E-Commerce User Data

Figure 9 displays a graph of how much students agree that security and data privacy risks in online transactions are a serious threat to E-Commerce users. The survey results show that

many respondents "strongly agree" (53.1%) and "agree" (37.5%) consider the use of E-commerce platforms to be a risk to the security and privacy of data in online transactions, which could result in identity theft. are often targets of phishing attacks, as fraudsters try to obtain personal information such as credit card numbers, passwords, user finances, and other identifying information. This shows that data security and privacy are very at risk for respondents. However, some respondents "disagree" (9.4%) that respondents who use the internet are more careful in sharing personal and financial information, use strong passwords, and recognize the signs of phishing.

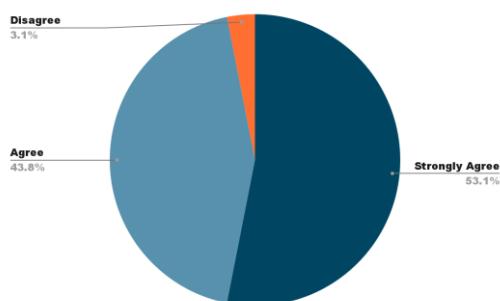


Figure 10. Positive Impact of E-Commerce for MSMEs

Figure 10 shows a graph showing how much students agree that e-commerce has a positive impact on the growth of MSMEs. After the respondent selects the available options, the respondent is then asked to provide reasons. The survey results show that the majority of respondents "strongly agree" (53.1%) and "agree" (43.8%) think that MSMEs can reach customers in various locations without geographical limitations with E-commerce platforms, E-Commerce allows MSMEs to reduce operational costs, E-Commerce platforms also help increase visibility and brand awareness of MSMEs products, E-Commerce also encourages MSMEs to continue to innovate and adapt to new trends and technology. However, some respondents also "disagree" (3.1%) due to the challenges of very tight competition and logistical problems faced by MSMEs when using the E-Commerce platform.

After surveying the comparison of e-commerce and MSMEs, we found that e-commerce and

MSMEs have advantages and challenges that influence students' shopping preferences and experiences. E-commerce has significant benefits, allowing students to shop comfortably and conveniently. They can make transactions anywhere and anytime without going to a physical store, find almost all products needed quickly and cheaply, and offer delivery services rapidly. On the other hand, MSMEs offer unique local products and are responsive in the payment process, which also has value and can provide services more tailored to student needs. Even though E-commerce and MSMEs have advantages, both have their challenges. Shopping via E-Commerce often faces challenges related to security and data privacy. Concerns about the risks of identity theft, credit card fraud, and personal data breaches are prohibitive. MSMEs also have their challenges that influence students' shopping preferences and experiences. Limited stock and product variations available at MSMEs can make it difficult for students to find their desired products. E-Commerce and MSMEs can work to overcome existing obstacles and improve the student shopping experience. In the context of Small and Medium Enterprises (SMEs), the development of web-based business application models is a critical factor for increasing competitiveness (Lyonita *et al.*, 2024), where MSMEs have great potential which can be maximized with the integration of technology and appropriate management strategies, while E-Commerce platforms can continue to improve security and user trust.

## Conclusion

The results of comparative research between E-commerce and MSMEs among students at the College of Vocational Studies at IPB University show that E-commerce is more popular as a place to shop compared to MSMEs. E-commerce platforms offer more complete product availability and ease of payment processes. In addition, with the utilization and use of existing internet technology, time flexibility and ease of access make E-commerce a more efficient choice for students who have busy schedules. Meanwhile, MSMEs offers unique local products and a more personalized

shopping experience. However, limitations in stock capacity, payment methods and market reach often pose challenges. By understanding the advantages and challenges of both, E-Commerce and MSMEs can work to overcome existing obstacles and improve the student shopping experience. The right integration of technology and management strategies can help MSMEs compete more effectively, while E-Commerce platforms can continue to improve security and user trust. Support from various parties, including the government and educational institutions, is also very important to help MSMEs develop and compete in this digital era.

## References

Alfianto, Y. D., Angelica, R. B., & Pacific, D. V. (2024). Analisis pentingnya UMKM bagi para remaja, studi kasus: Mahasiswa baru Universitas Indraprasta PGRI Jakarta. *JUPENSAL: Jurnal Pendidikan Universal*, 1(2), 260-270.

Aningsih, R., Broto, B. E., & Melia, Y. (2024). Pengaruh iklan, harga, kualitas produk, dan promosi terhadap minat beli konsumen dalam belanja online di Shopee. *YUME: Journal of Manajemen*, 7(1), 695-706.

Cay, S., & Irnawati, J. (2020). Strategi pemasaran e-commerce untuk meningkatkan volume penjualan (Studi kasus UMKM di Kota Tangerang Selatan). *JURNAL MANDIRI: Ilmu Pengetahuan, Seni, dan Teknologi*, 4(2), 160-170. <https://doi.org/10.33753/mandiri.v4i2.132>

Darmastuti, S., Juned, M., Saraswati, D. P., Utami, R. A. A., & Raharjo, P. (2023). Peluang dan tantangan UMKM di Indonesia dalam perkembangan e-commerce: Studi perbandingan dengan UMKM di negara-negara ASEAN. *Jurnal SOSIO DIALEKTIKA*, 8(1), 42-65. <https://doi.org/10.31942/sd.v8i1.8786>

Febriantoro, W. (2018). Kajian dan strategi pendukung perkembangan e-commerce bagi UMKM di Indonesia. *Jurnal Manajerial*, 3(5), 184-207.

Handayani, N. L. P. (2022). E-commerce sebagai penunjang ekonomi digital di Jawa Tengah. *Jurnal Ilmiah Manajemen, Bisnis dan Kewirausahaan*, 2(1), 9-14.

Handrawan, M. A. R., Setyaningrum, I., & Ariani, M. (2021). Perkembangan dan dampak positif dan negatif e-commerce bagi MSMEs sektor furnitur dan konsumen. *CALYPTRA*, 9(2), 1-12.

Karimah, B. P. H., Priharsari, D., & Tibyani. (2022). Analisis penggunaan e-commerce terhadap bisnis usaha mikro, kecil, dan menengah (MSMEs). *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, 6(3), 1298-1305.

Lyonita, I., Maghfirah, P. D., Mediana, S. P., Saleha, P., Zebua, A., & Nasution, D. P. (2024). Pengaruh penggunaan e-commerce terhadap bisnis UMKM dalam meningkatkan daya saing ekonomi di era digital. *Jurnal Ekonomi Manajemen dan Bisnis*, 1(3), 172-176. <https://doi.org/10.62017/jemb>

Mulyati, S. (2023). Pengaruh transaksi e-commerce dan gaya hidup terhadap perilaku konsumtif mahasiswa. *Jurnal Pendidikan Ekonomi (JURKAMI)*, 8(1), 87-96. <https://doi.org/10.31932/jpe.v8i1.2314>

Nasution, E. Y., Hariani, P., Hasibuan, L. S., & Pradita, W. (2020). Perkembangan transaksi bisnis e-commerce terhadap pertumbuhan ekonomi di Indonesia. *Jurnal Ekonomi dan Ekonomi Syariah*, 3(2), 506-519. <https://doi.org/10.36778/jesya.v3i2.227>

Nugraheni, R. D., Inayah, I., Soesilowati, E. S., Mulyaningsih, Y., Septia, Y., & Darwin. (2023). Niat pertumbuhan dan dampaknya terhadap pertumbuhan usaha UKM di Indonesia. *Jurnal Ekonomi dan*

Pembangunan, 31(2), 163-178. <https://doi.org/10.55981/jep.2023.909>

Piarna, R. (2020). Analisis faktor-faktor yang mempengaruhi niat belanja online mahasiswa Politeknik Negeri Subang. *Jurnal Ilmiah Ilmu dan Teknologi Rekayasa*, 3(1), 9-15.

Putra, S. Z., Harianto, S. T., & Matondang, Y. C. (2023). Analisis pengaruh e-commerce: Studi literatur terhadap pertumbuhan ekonomi UMKM. *Jurnal Ilmiah Sistem Informasi dan Ilmu Komputer*, 3(2), 119-131. <https://doi.org/10.55606/juisik.v3i2.494>

Ramdhani, M. L., Nurleli., & Anandya, A. (2022). Pengaruh literasi keuangan dan penerapan e-commerce terhadap kinerja UMKM. *Jurnal Riset Akutansi (JRA)*, 2(2), 115-122. <https://doi.org/10.29313/jra.v2i2.1331>

Saputri, S. A., Berliana, I., & Nasrida, M. F. (2023). Peran marketplace dalam meningkatkan daya saing UMKM di Indonesia. *Jurnal Inovasi Hasil Penelitian dan Pengembangan*, 3(1), 69-75.

Sarfiah, S. N., Atmaja, H. E., & Verawati, D. M. (2019). UMKM sebagai pilar membangun ekonomi bangsa. *Jurnal REP (Riset Ekonomi Pembangunan)*, 4(2), 137-146. <https://doi.org/10.31002/rep.v4i2.1952>

Sumaa, S., Soegoto, A. S., & Samadi, R. L. (2021). Pengaruh kualitas produk, harga dan iklan media sosial terhadap minat beli di e-commerce Shopee (Studi pada mahasiswa fakultas ekonomi dan bisnis Universitas Sam Ratulangi Manado). *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 9(4), 304-313.

Yahya, L. M., Ulfah, R. D., Amalia, R., & Nisa, M. K. (2023). Analisis faktor yang mempengaruhi minat beli mahasiswa terhadap pembelian produk UMKM. *JURMA: Jurnal Riset Manajemen*, 1(3), 224-232. <https://doi.org/10.54066/jurma.v1i3.622>

Zakiyah, E. F., Kasmo, A. B. P., & Nugroho, L. (2022). Peran dan fungsi usaha mikro kecil dan menengah (UMKM) dalam memitigasi resesi ekonomi global 2023. *Jurnal Cakrawala Ilmiah*, 2(4), 1657-1668.

Zed, E. Z., Ratnaningsih, Y. R., & Kartini, T. M. (2023). Pengaruh online customer review dan online customer rating terhadap keputusan pembelian online di e-commerce pada mahasiswa Universitas Pelita Bangsa Cikarang. *Jurnal Mirai Management*, 8(2), 436-452.