

# Correlation between Social Media Utilization and the Young Generation's Online Shopping Behavior in Eastern Indonesia

Muhammad Akbar<sup>1</sup>, Alem Febri Sonni<sup>1</sup>, S. Suhasman<sup>2</sup>, Siti Rabiatul Adawiyah<sup>3</sup>, Yusmanizar Ib Herald<sup>4</sup>

<sup>1</sup>Communication Department, Hasanuddin University, Indonesia

<sup>2</sup>Incubator & Start Up Unit, Hasanuddin University, Indonesia

<sup>3</sup>Computer Science, University of Indonesia, Indonesia

<sup>4</sup>Communication Department, Fajar University, Indonesia

Correspondence: Muhammad Akbar, Lecturer at Communication Department, Hasanuddin University, Indonesia.

Received: July 6, 2023	Accepted: August 20, 2023	Online Published: August 29, 2023
doi:10.11114/smc.v11i7.6223	URL: https://doi.org/10	.11114/smc.v11i7.6223

## Abstract

Online shopping is popular among generations Y and Z in Indonesia. This research study evaluated consumer online shopping behavior in Eastern Indonesia, a lower income and lower internet penetration region than western Indonesia. Online study questionnaires were distributed to the region's main cities or provincial capitals to collect profile data on the internet and social media use in the Indonesian society. A total of 613 respondents completed the questionnaires. Correspondence analysis was used to assess the relationship between two categorical variables. Instagram was the most popular social media followed by Facebook, Youtube, Twitter, and TikTok. Most of the respondents used more than one platform. Almost all respondents had shopped online (95.76%) after a product review from mainly consumer reviews and rarely from promotions by influencers. However, online shoppers were still wary of products that did not match their online description.

Keywords: social media, generation y and z, Eastern Indonesia

## 1. Introduction

Digital technology has affected almost all aspects of life. Data from the datareportal.com 2023 show that 212.9 of 276.4 million Indonesian people had accessed the internet by early 2023 (Kemp, 2023) and approximately 167 million of them used social media; 60.4% of the total population were social media users. Furthermore, each Indonesian on average uses the internet for 7 hours 42 minutes each day and social media for 3 hours 18 minutes a day. Thus, each Indonesian spends 13% of their time on social media activities within a 24-hour day, 21% of their active hours on social media activities every day assuming 8 hours of rest time, and one fifth of their daily lives are lived in cyberspace.

Social media offers the benefit of rapid spread information to a broad audience; benefits that have been used by several groups to campaign for their interests such as producers, marketers, and consumers for business interests. Therefore, social networking sites are widely regarded as highly effective advertising platforms (Makhadmeh & Rihani, 2023). Advertisements of various products are now scattered on social media. Manufacturers or marketers offer their products in many ways including flyers and videos. Sometimes producers or marketers employ influencers to endorse certain products.

Extensive penetration of product introduction on social media affects people's shopping patterns. Currently, consumer shopping patterns are shifting from in-store shopping to online shopping on various digital platforms. Theodorou et al. (2023) illustrated that the COVID-19 pandemic immensely altered consumer behavior. Businesses are now familiar with selling products online, while consumers are tasked with making informed decisions about how and where to buy various products from various online stores. Consumers can also purchase a wide variety of products from online stores whenever and wherever they want without leaving their homes.

In 2021 at the height of the COVID-19 pandemic, there were 21 million new digital consumers based on data released by e-Conomy SEA, 2021 published by Google Temasek and Bain & Company. Interestingly, 72% of these new consumers were from non-metropolitan areas (Baijal et al., 2021). Marketers should capitalize on this trend to attract as many buyers as possible.

One of the strategies developed by producers or marketers is endorsement. Endorsement is considered to influence consumer shopping behavior. A study conducted by De Veirman et al. (2017) found that social media endorsements can increase purchasing intentions and positive perceptions of brands among consumers. Consumers perceive endorsements from influencers and celebrities as more credible than traditional advertising. Another study found that celebrity endorsement can positively influence brand image and increase purchase intention when the celebrity was perceived as a good fit for the brand and when the endorsement was perceived as genuine (Mangold & Faulds, 2009).

A study conducted by Cooley & Parks-Yancy (2019) that questioned the effect of information conveyed via social media by celebrities and endorsers on millennial buying decisions, contrasted with findings of previous researchers (Alshurideh, 2022; Freberg et al., 2011; Lim et al., 2017). Celebrities/influencers and endorsers had no influence on respondents' decisions to buy products marketed through social media.

However, recent studies reinforce the findings of previous researchers before Cooley & Parks-Yancy, (2019). Recent studies reiterate that celebrities/influencers and endorsers do have a significant influence on buyers' decisions. Al Kurdi et al. (2021) and Miah et al. (2022), established that endorsement relations and product reviews by celebrities on social media largely influence consumer behavior to buy an endorsed product. Miah et al. (2022) attribute such consumer behavior to a strong endorsement relationship with a high level of trust (credibility) towards these celebrities. Al Kurdi et al. (2021) state that endorsements carried out by endorsers are very effective in influencing potential buyers. Al Kurdi et al. (2021) assessed several endorser characteristics which correlate with the attitudes and desires of buyers towards a product.

Therefore, consumer shopping behavior can differ from one place to another; an attribute important in conducting a scientific study and building a marketing communication strategy. Generations Y and Z occupy the dominant proportion of the population, especially in Indonesia which is the 4th most populous country in the world. But research on the shopping behavior of generations Y and Z in Indonesia is limited. However, some studies have been conducted to understand the shopping behavior of generations Y and Z in Indonesia. Simangunsong (2018) show that generations Y and Z in Indonesia were more likely to buy Indonesian cosmetic and beauty products online. Moreover, Maharani et al. (2021) illustrated that Generation Z in Indonesia were more likely to buy products related to a healthy and environmentally friendly lifestyle. Additionally, Utamanyu & Darmastuti (2022) posited that the millennial generation (Y) and Generation Z sought information about products and brands to buy on social media and compared their online and offline prices. Furthermore, Santoso & Triwijayati, (2018) demonstrated that Generation Z in Indonesia buy cosmetic and beauty products online with Generation Z making the most skincare purchases seconded by Generation Y.

Helmi et al. (2023) described young consumers in Indonesia as hedonic and impulsive online shoppers who preferred high-quality products. Young consumers are obsessed with new and branded goods, are loyal to certain stores and brands and often have difficulty choosing online stores and products.

There is limited research related to consumer shopping behavior patterns of generations Y and Z in specific regions in Indonesia, especially online shopping behavior patterns and their relationship with digital media. The objective of this study was to investigate the consumer online shopping behavior in the eastern part of Indonesia, which includes major islands like Kalimantan, Nusa Tenggara, Sulawesi, Maluku, and Papua; a region of relatively lower economic status and internet usage when compared to the more developed western regions of Indonesia, such as Java, Sumatra, and Bali. The study population reflects the dominant national population. The results of this study will provide an overview of business processes in digital media in eastern Indonesia.

#### 2. Methods

#### 2.1 Population and Sample

This research study aimed to investigate online shopping consumer behavior in eastern Indonesia. Geographically, areas outside the islands of Sumatra, Java, and Bali (West Region) have lower internet penetration rates; therefore, consumer online shopping behavior in outside the island is likely to differ from that within the islands. Data were collected from consumers from the islands of Kalimantan, Sulawesi, Maluku, Nusa Tenggara, and Papua. Purposive sampling was used to select respondents who lived in the main cities in every province on each island. Participants were randomly identified by utilizing the network in each of these cities. Participant inclusion criteria comprised an age range of 15 to 42 years to recruit generations Y and Z. Participants that had no online shopping experience were ineligible for inclusion. A total of 613 respondents were recruited in this study. All data is used to describe the characteristics of respondents in using social media, specifically related to online shopping behavior. 26 respondents were excluded because these respondents had no online shopping experience. The reduction of the data that is done does not cause a significant change in the proportion of the characteristics of the respondents. Therefore, as many as 587 respondents were left to analyze online shopping profiles.

## 2.2 Data Collection Methods

The study collected primary data and secondary data. Primary data was obtained from online questionnaires. Online surveys were created using Google Forms and distributed online to respondents. The online questionnaire included questions related to the respondent's personal profile, social media profile, and online shopping profile. The respondent's profile included his or her gender, age, and education level. Social media profile-related questions included the type of social media users, the tools used to access social media, the frequency and the purpose of accessing social media accounts. The online shopping profile included queries related to types of goods purchased, the reasons for shopping online, the average monthly spending on online shopping, the reasons for shopping online, as well as things to worry about when shopping online. Secondary data accessed from datareportal.com and bin.com was related to internet usage and social media use by Indonesian people.

## 2.3 Data Analysis

The correspondence analysis method was used to analyze the relationship between two categorical variables. However, if the results of the chi-square test did not show a significant relationship between the two variables, then a descriptive data summary was prepared. The R Studio program was used to perform all statistical tests.

## 3. Results and Discussion

This study enrolled 613 respondents spread across eastern Indonesia including the islands of Kalimantan, Nusa Tenggara, Sulawesi, and Maluku, but excluding the main Indonesian islands Sumatra, Java, and Bali. Our study population was selected from the eastern region to capture patterns of people's behavior in areas considered relatively underdeveloped compared to the islands of Java, Sumatra, and Bali.

## 3.1 Social Media Usage

The study recruited 613 respondents; 216 men and 397 women. A description of the study participants is presented in Table 1. Table 1 shows that most respondents were women aged 20-24 years who had attained high school level education and were currently students earning less than Rp. 1 million.

	Characteristics	Numbers
		n=613 n (%)
Gender	Male	216 (35)
	Female	397 (65)
Age	15-19 years	139 (23)
	20-24 years	304 (50)
	25-29 years	69 (11)
	30-34 years	49 (8)
	35-42 years	52 (8)
Education	Senior high school	373 (61)
	Bachelor's degree	182 (30)
	Higher than bachelor's degree	58 (9)
Occupation	None	38 (6)
	Student	395 (64)
	Civil servant	58 (9)
	Private employee	74 (12)
	Freelance	20 (3)
	Business oweners	28 (5)
Salary in IDR per	< 1 million (< 66)	410 (67)
month (USD; 1 USD=	1 million – 3 million (66 - 197)	107 (17)
15000 IDR)	3 million – 5 million (198 - 330)	53 (9)
	5 million – 7 million (331 - 463)	24 (4)
	> 7 million IDR (>463)	19 (3)

Table 1. Participants' Demographic Characteristics

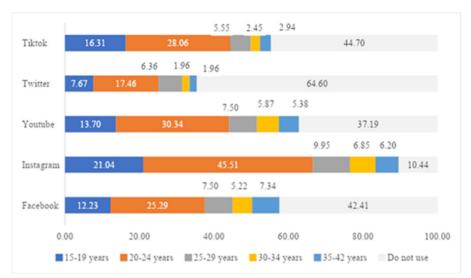


Figure 1. Social media used by study respondents in eastern Indonesia, 2023 year

Figure 1 shows that most respondents used more than one social media platform with Instagram beign the most popular platform (89.66%), followed by YouTube (62.81%), Facebook (57.59%), TikTok (55.30%), and Twitter (35.40%). But TikTok usage is likely to change in the coming years due to the on-going growth of TikTok users. Kemp (2023) reports that in early 2023, TikTok users increased by 19.4% when the previous year. Likesise, Instagram and Facebook usage decreased by 10.1% and 7.7%, respectively, while the YouTube platform usage remained unchanged. Marketers should pay close attention to this dynamic as TikTok may become the future marketing leader.

Respondents commonly used of social media on more than 1 platform especially the generations Y and Z who are more technologically savy (Figure 1).

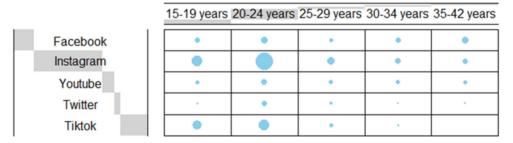


Figure 2. Plot of the contingency table for the most used social media

Figure 2 shows that Instagram was the most used social media platform when compared to Facebook, Youtube, Twitter, and TikTok. Social media users on all platforms were spread across all age groups but persons aged 35-42 years (the millennial generation) widely used Facebook; a popularity that, seems to be closely related to the birth of the platform. The Facebook platform was first introduced in 2004, when the millennials were teenagers, while Instagram was introduced in 2010 when Generation Z was born. The stable use of the YouTube platform across all age groups could be related to its video-focused characteristics. So far, no other platform matches YouTube features; a possible explanation for the steady number of users on YouTube even though it emerged in 2005, a year after Facebook.

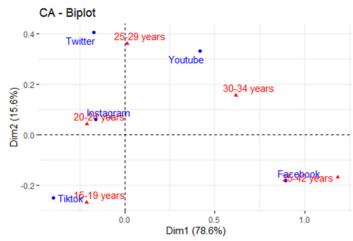


Figure 3. Symmetric plot of the correspondence analysis for the most used social media

Based on the symmetric plot correspondence analysis in Figure 3, 94.2% of the variability can be explained by the two selected components. TikTok is linked to 15-19-year-olds, Instagram to the 20-24-year-olds, Twitter to the 25-29 year-olds, Youtube to the 30-34 year-olds, and Facebook to the 35-42 year-olds. Generation Z, who are teenagers tend to use TikTok and not use Facebook. In contrast, the YouTube platform usage is spread across all age groups. The YouTube platform is an important intersecting point between social media and streaming platforms because YouTube videos can be shared freely and YouTube allows for user interaction where users can seek product information.

### 3.2 Online Shopping Behavior

According to Sneader & Singhal's (2020) study, the COVID-19 pandemic sped up the expansion of e-commerce and distinguished merchants that possessed a solid digital foundation from those who did not. Moreover, buyers preferred simple, hassle-free, and reasonable purchasing options (Sneader & Singhal, 2020). Findings in concurrence with those of Meri et al. (2022) who illustrated that in the middle of COVID-19 pandemic, people used social media often to seek for information, for entertainment, and out of habit.

Almost all the respondents (95.76%) had engaged in online shopping activities with Generation Z (20–24-year-olds) being the most avid online shoppers. (Figure 4).

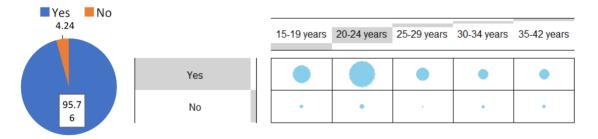


Figure 4. The percentage and plot of the contingency table respondents online shopping experiences

These results illustrate that online shopping has spread widely and evenly in Eastern Indonesia. Online shopping patterns are prevalent among people in megapolitan cities, metropolitan cities, and smaller cities. Thus, producers should consider using product marketing strategies and online platforms; likewise they should address the various problems that are often encountered when using online platforms.

Victor et al. (2018) list several factors to explain consumer behavior including shopping experience; concerns about the security of personal information, purchasing strategies, and so on (Victor et al., 2018). The present study evaluated several participant-related factors.



Figure 5. The percentage and plot of the contingency table for reasons respondents did not shop online

Few respondents (4.24%) of all ages with a balanced distributed between the Y and Z generations had never shopped online. Their age implies similar digital skills between generations Y and Z.

Respondents who had never had an online shopping experience cited inconveniences with online shopping (46.15%). Respondents aged 15-19 years and 20-24 years reported discomfort with online shopping while those aged 35-42 years (Generation Y) distrusted online shopping. Generation Y were concerned about authenticity and quality of products sold online and were apprehensive buying counterfeit or replica products. Generation Z had become familiarized themselves with online shopping at an earlier stage with negative experiences and instances of fraud heightening their level of distrust. At emergence of online shopping in the 2010s when credible platforms such as Shopee, Lazada, and Tokopedia were not yet well known to the public, online shoppers directly purchased goods from shops that provided these products; an opportunity that was largely exploited by fraudsters who offered online products and asked for advance payment but never delivered the items. Although they both lived through the early phases of online shopping, Generation Y were already adults but generation Z were still too young to be impacted by negative online shopping experiences.

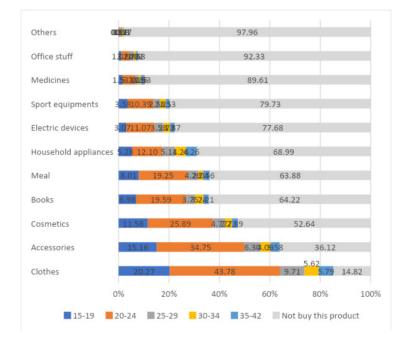


Figure 6. The goods the respondent often buy during online shopping

Based on Figure 6, clothing, and accessories were the most purchased products during online shopping (85.18% and 63.88%, respectively). Retailers in the fields of clothing, accessories, cosmetics, books, and several other products presented in Figure 6 face challenges when vending in-store products. Such challenges may have led to the closure of many lage clothing outlets during the COVID-19 pandemic. Some producers opted to provide a hybrid store that serves in-person shopping as well as online sales with varying results which were possibly related to the high operational costs of in-person shopping stores for rent, employee salaries, and other operational costs. Therefore, vendors intending to provide hybrid shopping experiences ought to carefully evaluate whether the minimum face-to-face transaction volume would rationalize the mixed marketing strategy.

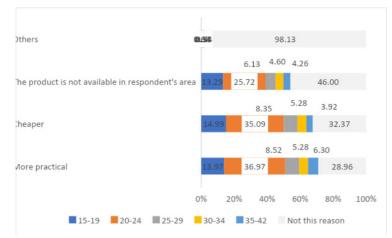


Figure 7. The reasons why the respondents in shopped online stores

Figure 7 illustrates that respondents do online shopping because it is practical (71.04%) and cheaper (67.63%), and it gives them access to products that are not found in their locality. Online shopping offers a vast array of goods, payments can be made on credit, and shoppers usually receive discounted shipping costs. Likewise, Qin et al. (2023) suggest that consumers prefer e-commerce platforms because they can communicate with other consumers who had already used the product before making purchasing decisions (Qin et al., 2023).

Online sales' facilities offer several benefits to consumers because shopping online can be done anywhere and anytime. But consumers cannot fit the products (for instance clothing) or obtain them immediately after a purchase. However, an increasing number of virtual fitting room applications have been developed by many programmers to allow consumers to fit clothing prior to purchase. Moreover, many sellers currently avail express delivery services and have outsourced courier services. Thus, the time it takes to purchase and receive a product from an online store may outpace the time it takes to purchase the product from a physical store.

Online shopping tends to offer lower prices than traditional shopping due to the absence of shop rental costs, fewer employee salaries and a shorter supply chain. For example, for traditional shopping, a clothing product that is sold at the Makassar clothing market will be shipped from the manufacturer's location, sent to Jakarta's Tanah Abang market wholesellers, then sent via couriers to Makassar. Meanwhile, a similar product purchased online is sent directly from producers to consumers in Makassar negating the profit margin at the Tanah Abang market in Jakarta and Makassar.

Online shopping not only provides alternative shopping avenues, but also provides consumers with novel options that are only possible if a consumer visited outlets in different locations. For example, some cosmetic or shoe products only open outlets in several cities for economic reasons. But online shopping has lifted such restrictions allowing the economy to bloom and satisfying consumer expectations in certain areas like eastern Indonesia where producers have limited products and few special outlets exist.

Therefore, online shopping in eastern Indonesia is likely to expand in the future.

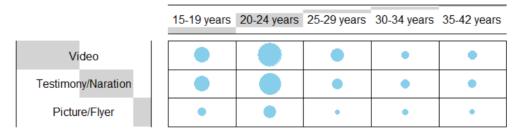


Figure 8. Plot of contingence table for type of information sources

Consumers of all ages preferred the video format to obtain product information, but not pictures or flyers as shown in Figure 8.

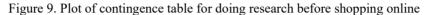
Video was the most popular content in digital communication. The most popular video-sharing media are YouTube and TikTok. Well-prepared videos are easy to interpret. Videos (1) capture attention, (2) engage the viewer, (3) display non-verbal communication, (4) includes all other media formats, (5) present fast and rich content, and (6) reach a broad market. Marketers should focus their attention on creativity in making videos that can attract consumers to buy a product.

Respondents also preferred to obtain product information from testimonials or narratives from product users and influencers especially about products that were easy to visualize and easy to understand such as food products. However, testimonials and narratives are also videos. Thus, video with its various variants is the most effective media for advertising products.

#### 3.3 Product Purchase Decision

The results of the contingency plot analysis presented in Figure 9 show that almost all respondents evaluated product reviews before shopping online indicating that consumers in eastern Indonesia are critical of the products offered and would only buy a product if they believed it was worth buying based on its price and other specifications.

	15-19 years	20-24 years	25-29 years	30-34 years	35-42 years
Yes				•	•
No	•	•	•	•	٠



Likewise, Laczniak & Murphy (2019) showed that generations Z and Y were more likely to buy products that had added value, such as products made of high-quality materials or products that had unique designs (Laczniak & Murphy, 2019).

Consumers in the world of online marketing are critical smart buyers. But in online marketing there is limited space for direct complaints about disappointing products and some buyers resort to expressing their disappointment on various available platforms including media that have no direct relationship with a product they bought with the potential to cause legal problems.

Such complaints can have a big impact especially if the complainant has many social media followers. Alternatively, a complainant with a smaller social media network maybe quoted or his statement reposted on public media by another person with a large following making his her compliant go viral to the point where it is necessary to involve government officials.

Therefore, marketers should be more careful in marketing their products and provide a fast and reliable complaints' facility to dissatisfied consumers to avoid greater losses due to information that is detrimental to product image. Even with limited channels to convey consumer complaints about a product to marketers or manufacturers directly, the provision of features that are responsive, reliable, and friendly, can elevate the positive image of a product. But complaints' services for online shopping ought to be standard and mandatory.

Farki et al. (2016) indicated that online customer reviews (OCR), both reviews and ratings, are related to customer purchase intentions but do no increase customer trust. Therefore, online marketplace companies should focus on reviews and ratings as marketing tools with the potential to increase company revenue.

Another study by Zhu & Zhang (2010) shows a positive relationship between the number of OCR given to a product and consumer confidence in the product. Consumers were more likely to trust OCR over consumers who had had a real experience with the product or service. Moreover, Wibowo (2019) portrayed three aspects of e-service quality (privacy, website design, and compensation) that have a significant impact on a customer's loyalty; an association indirectly influenced by customer satisfaction.

The data in Figure 10 shows that the decision to buy a product is mainly influenced by product reviews from buyers (67.22%). Positive comments from buyers of a product positively affect the image of the product and encourage consumers to buy it. Although Farki et al (2016) showed that customer reviews did not increase customer trust, consumer reviews influence consumer buying decisions which ultimately has a positive correlation with customer trust. Fakli et al (2016) conducted their study six years before the present study. It is possible that there has been a shift in consumer behavior that pays sufficient attention to product reviews and that emerging reviews are increasingly reliable and distinguishable from engineered reviews.

In addition, research conducted by Chen et al. (2022) suggests that practitioners should pay special attention to negative comments and address them immediately through product/service information adjustment tailored to consumer characteristics such as gender because female consumers pay closer attention to negative comments than male consumers (Chen et al., 2022).

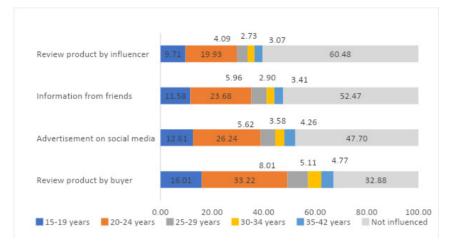
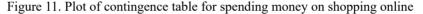


Figure 10. Bar chart for the person/thing influencing the respondent on decision to buy a product online

Figure 10 shows that product reviews from buyers were highly valued, followed by advertisements on social media, information from colleagues, and product reviews conducted by influencers. While many producers rely on influencers, consumers prefer a product review from a previous purchaser of the same item. But Ifeanyichukwu (2016) and Wang & Scheinbaum (2018) pointed out the valuable role of celebrities in promoting a brand and that consumers would find a celebrity endorsement credible when the endorser had a history of using a product or service, and the endorsement is based on personal experience, and not just financial compensation (McCormick, 2016; Permatasari, 2019).

	15-19 years	20-24 years	25-29 years	30-34 years	35-42 years
Less than 0.5 million IDR			٠	٠	٠
0.5 million to 1 million IDR	•	٠	•	•	•
1 million to 2 million IDR		•	•	+	+
2 million to 3 million IDR			•		
More than 3 million IDR					



The data in Figure 11 shows that most online shoppers purchased items costing less than IDR 500,000 (<33 USD) with most transactions made by Generation Z who do not have a stable income as they are still students. There were limited purchases of 1 million IDR (66 USD) spread across all age groups possibly indicating fear of online shopping transactions for high-value products. Consumers may still have doubts about the safety of online shopping; the data in Figure 6 also illustrate that consumers mainly purchased low-priced clothing and accessories as opposed to more expensive electronic and sports products. Online descriptions of items such as clothing and accessories are also more likely to match the actual products.

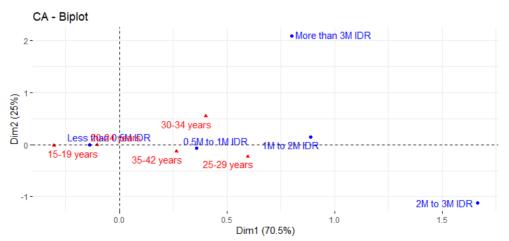


Figure 12. Symmetric plot of the correspondence analysis for spending money on shopping online

Figure 12 shows that persons aged 15-19 years and 20-25 years made transactions of less than IDR 500,000 (<33 USD). Persons aged of 25-29 years, 30-34 years, and 35-42 years made several transactions of different values including 0.5M (33 USD) to 1M IDR (66 USD), and 1M to 2M IDR (132 USD). However, persons 25-29 years and 30-34 years were mainly linked with transactions valued at 2M to 3M IDR (198 USD) and more than 3M IDR (198< USD), respectively. Older consumers made more high value transactions due to their purchasing power and confidence in online transactions. Respondents aged 30-34 years had entered their productive phases and had an adequate steady income. They are also technologically savvy and understand the potential risks that may arise from online shopping and steps to mitigate them; increasing their confidence in making large online transactions. Similar findings have been illustrated in Malaysia by Nawi et al. (2019) who recommended that the government and online businesses focus on Generation Y who more technologically savvy and not persons under the age of 24 years who they tend to avoid large value transactions as they are not familiar with the potential risks of online shopping.

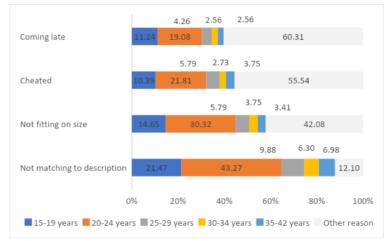


Figure 13. Bar chart for a reason on worried about shopping online

Even after purchasing a product, most respondents were still worried that the product purchased would not match its product description (87.90%) as shown in Figure 13. In addition, they were also worried that the product purchased would not be of the right size, they would be cheated, or the delivery of the purchased goods would delay; likewise the data in Figure 12 demonstrated that most consumers only purchased small quantities limiting their potential losses if the product did not meet their expectations. Online businesses should build reliable visual communication aids so that online image displays match the physical form of the product. Therefore, it is essential that three-dimensional images, flash images, or product videos are presented attractively and realistically.

Consumers were least preoccupied by the fear of being defrauded. Hence the earlier distrust in online business has waned based on recent positive shopping experiences offered by online businesses. Less than half of the respondents had distrust in online shopping.

The present study highlights issues to consider when determining a marketing communication strategy. Consumers reliance on reviews from previous buyers rather than influencers should be noted in preparing promotional and advertising strategies. On the other hand, consumer attitudes and concerns should be addressed to acceleration of online shopping transactions in areas in eastern Indonesia. Accordingly, Voramontri & Klieb (2019) suggests that business people today are faced with challenges in understanding the role of digital media and social media in influencing purchasing decisions.

#### 4. Conclusion

The findings obtained in this study indicate that consumer spending behavior in eastern Indonesia matches that other regions, both in Indonesia and in other countries with Instagram being a common consumer platform. However, most respondents used more than one type of social media platform. Despite internet penetration lagging in eastern Indonesia when compared to western Indonesia, most respondents (95.76%) had an online shopping experience to purchase clothes and accessories. Notably, many online shoppers had done some research before buying a product mainly from product reviews by people who had already purchased it (67.2%), while fewer online shoppers relied on reviews conducted by influencers (39.52%). But most online shoppers worry that the actual product they would receive would differ from the one described online (87.9%), while fewer worry about being deceived ranks third (44.6%) implying increasing trust in online shopping. Marketers should prepare a suitable marketing communication strategy to address the concerns of online shoppers.

## Acknowledgments

Not applicable.

#### **Authors contributions**

Muhammad Akbar and Alem Febri Sonni were responsible for study design and revising. Suhasman Sudirman was responsible for the methodology. Conceptualization was handled by Alem Febri Sonni and Yusmanizar Ib Herald. Suhasman Sudirman and Siti Rabiatul Adawiyah were responsible for data analysis. Alem Febri Sonni, Yusmanizar Ib Herald and Siti Rabiatul Adawiyah were responsible for data collection. Muhammad Akbar, Suhasman Sudirman, Siti Rabiatul Adawiyah drafted the manuscript and Muhammad Akbar revised it. All authors read and approved the final manuscript. All authors contributed equally to the study.

## Funding

Not applicable.

### **Competing interests**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Informed consent

Obtained.

### **Ethics** approval

The Publication Ethics Committee of the Redfame Publishing.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

### Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

### Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

#### Data sharing statement

No additional data are available.

## **Open access**

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).

## Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

#### References

- Al Kurdi, B., Alshurideh, M., Nuseir, M., Aburayya, A., & Salloum, S. A. (2021). The Effects of Subjective Norm on the Intention to Use Social Media Networks: An Exploratory Study Using PLS-SEM and Machine Learning Approach (pp. 581-592). https://doi.org/10.1007/978-3-030-69717-4\_55
- Alshurideh, M. T. (2022). Does Electronic Customer Relationship Management (E-CRM) Affect Service Quality at Private Hospitals in Jordan? Uncertain Supply Chain Management, 10(2), 325-332. https://doi.org/10.5267/j.uscm.2022.1.006
- Baijal A., Cannarsi A., Hoppe F., Chang W., Davis S., & Sipahimalani R. (2021, November 10). e-Conomy SEA 2021. Bain.Com.
- Chen, T., Samaranayake, P., Cen, X., Qi, M., & Lan, Y. C. (2022). The Impact of Online Reviews on Consumers' Purchasing Decisions: Evidence From an Eye-Tracking Study. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.865702
- Cooley, D., & Parks-Yancy, R. (2019). The Effect of Social Media on Perceived Information Credibility and Decision Making. *Journal of Internet Commerce, 18*(3), 249-269. https://doi.org/10.1080/15332861.2019.1595362
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing Through Instagram Influencers: The Impact of Number of Followers and Product Divergence on Brand Attitude. *International Journal of Advertising*, 36(5), 798-828. https://doi.org/10.1080/02650487.2017.1348035
- Farki, A., Baihaqi, I., & Wibawa, B. M. (2016). Pengaruh Online Customer Review dan Rating Terhadap Kepercayaan dan Minat Pembelian pada Online Marketplace di Indonesia. Jurnal Teknik ITS, 5(2). https://doi.org/10.12962/j23373539.v5i2.19671
- Freberg, K., Graham, K., McGaughey, K., & Freberg, L. A. (2011). Who Are the Social Media Influencers? A Study of Public Perceptions of Personality. *Public Relations Review*, 37(1), 90-92. https://doi.org/10.1016/j.pubrev.2010.11.001
- Helmi, A., Komaladewi, R., Sarasi, V., & Yolanda, L. (2023). Characterizing Young Consumer Online Shopping Style: Indonesian Evidence. *Sustainability*, 15(5), 3988. https://doi.org/10.3390/su15053988
- Ifeanyichukwu, C. D. (2016). Effect of Celebrity Endorsements on Consumers Purchase Decision in Nigeria. *International Research Journal of Management, IT & Social Sciences, 3*(9), 103. https://doi.org/10.21744/irjmis.v3i9.261
- Kemp, Simon. (2023, January 26). Digital 2023: Global Overview Report. Datareportal.Com.
- Laczniak, G. R., & Murphy, P. E. (2019). The Role of Normative Marketing Ethics. *Journal of Business Research*, 95, 401-407. https://doi.org/10.1016/j.jbusres.2018.07.036
- Lim, X. J., Mohd Radzol, A. R. bt, Cheah, J.-H. (Jacky), & Wong, M. W. (2017). The Impact of Social Media Influencers on Purchase Intention and the Mediation Effect of Customer Attitude. *Asian Journal of Business Research*, 7(2). https://doi.org/10.14707/ajbr.170035
- Maharani, B. D., Tria, L., Hutami, H., & Isna, K. (2021). Intensi Pembelian Produk Ramah Lingkungan Berdasar Theory of Planned Behaviour. Jurnal Manajemen & Kewirausahaann, 9(2), 182-190.
- Makhadmeh, N., & Rihani, R. (2023). The Effect of Instagram Influencer Ads on Female Students' Purchasing Behavior at Jordanian Universities. *Studies in Media and Communication*, 11(3), 92-105. https://doi.org/10.11114/smc.v11i3.5987
- Mangold, W. G., & Faulds, D. J. (2009). Social media: The New Hybrid Element of The Promotion Mix. *Business Horizons*, 52(4), 357–365. https://doi.org/10.1016/j.bushor.2009.03.002
- McCormick, K. (2016). Celebrity endorsements: Influence of a Product-Endorser Match on Millennials Attitudes and Purchase Intentions. *Journal of Retailing and Consumer Services*, 32, 39-45. https://doi.org/10.1016/j.jretconser.2016.05.012
- Meri, A., Ahmad, S. A., Yusoff, S. M., Zakaria, N. S., Sarjono, F., Maraining, A., & Baco, Z. (2022). Patterns of Social Media Usage among Malaysians During the Covid-19 Pandemic. *Humanities and Social Sciences Letters*, 10(1), 27-35. https://doi.org/10.18488/73.v10i1.2229
- Miah, M. R., Hossain, A., Shikder, R., Saha, T., & Neger, M. (2022). Evaluating the Impact of Social Media on Online Shopping Behavior During COVID-19 Pandemic: A Bangladeshi Consumers' Perspectives. *Heliyon*, 8(9), e10600. https://doi.org/10.1016/j.heliyon.2022.e10600

- Nawi, N. C., Mamun, A. Al, Hamsani, N. H. B., & Muhayiddin, M. N. bin. (2019). Effect of Consumer Demographics and Risk Factors on Online Purchase Behaviour in Malaysia. *Societies*, 9(1), 10. https://doi.org/10.3390/soc9010010
- Permatasari, B. (2019). Pengaruh Daya Tarik, Kepercayaan, dan Keahlian Celebrity Endorser terhadap Keputusan Pembelian. *Technobiz : International Journal of Business, 2*(2), 76. https://doi.org/10.33365/tb.v3i2.446
- Qin, C., Zeng, X., Liang, S., & Zhang, K. (2023). Do Live Streaming and Online Consumer Reviews Jointly Affect Purchase Intention? Sustainability, 15(8), 6992. https://doi.org/10.3390/su15086992
- Santoso, G., & Triwijayati, A. (2018). Gaya Pengambilan Keputusan Pembelian Pakaian Secara Online pada Generasi Z Indonesia. Jurnal Ilmu Keluarga Dan Konsumen, 11(3), 231-242. https://doi.org/10.24156/jikk.2018.11.3.231
- Simangunsong, E. (2018). Generation-Z Buying Behaviour in Indonesia: Opportunities for Retail Businesses. *Mix: Jurnal Ilmiah Manajemen, 8*(2), 243. https://doi.org/10.22441/mix.2018.v8i2.004
- Sneader K., & Singhal S. (2020, March 23). Beyond Coronavirus: The Path to the Next Normal. Mckinsey.Com.
- Stella., & Lady. (2022) Analisis Faktor yang Mempengaruhi Purchase Intention Produk Kecantikan Lokal Indonesia dengan Patriotic Brand Image sebagai Variabel Intervening di Generasi Y dan Z Indonesia. Open Jurnal Systems, 17(5), 885-900.
- Theodorou, A., Hatzithomas, L., Fotiadis, T., Diamantidis, A., & Gasteratos, A. (2023). The Impact of the COVID-19 Pandemic on Online Consumer Behavior: Applying the Theory of Planned Behavior. Sustainability, 15(3), 2545. https://doi.org/10.3390/su15032545
- Utamanyu, R. A., & Darmastuti, R. (2022). Budaya Belanja Online Generasi Z dan Generasi Milenial di Jawa Tengah (Studi Kasus Produk Kecantikan di Online Shop Beauty by ASAME). *Scriptura*, *12*(1), 58-71. https://doi.org/10.9744/scriptura.12.1.58-71
- Victor, V., Joy Thoppan, J., Jeyakumar Nathan, R., & Farkas Maria, F. (2018). Factors Influencing Consumer Behavior and Prospective Purchase Decisions in a Dynamic Pricing Environment-An Exploratory Factor Analysis Approach. *Social Sciences*, 7(9), 153. https://doi.org/10.3390/socsci7090153
- Voramontri, D., & Klieb, L. (2019). Impact of Social Media on Consumer Behavior. International Journal of Information and Decision Sciences, 11(3), 209. https://doi.org/10.1504/IJIDS.2019.101994
- Wang, S. W., & Scheinbaum, A. C. (2018). Enhancing Brand Credibility Via Celebrity Endorsement. Journal of Advertising Research, 58(1), 16-32. https://doi.org/10.2501/JAR-2017-042
- Wibowo, H. A. (2019). The Mediating Role of E-Satisfaction on the Effect of E-Service Quality Dimensions on E-Loyalty: A Lesson from Bukalapak.Com Indonesia. *Humanities and Social Sciences Letters*, 7(4), 199-208. https://doi.org/10.18488/journal.73.2019.74.199.208
- Zhu, F., & Zhang, X. (Michael). (2010). Impact of Online Consumer Reviews on Sales: The Moderating Role of Product and Consumer Characteristics. *Journal of Marketing*, 74(2), 133-148. https://doi.org/10.1509/jmkg.74.2.133