

**CONSUMER SHOPPING PREFERENCES AND SOCIAL MEDIA USE DURING  
COVID-19 PANDEMIC**

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**ABSTRACT**

This study empirically investigates the relationship between social media use at home and consumer shopping preferences during Covid-19 pandemic in an emerging country, Indonesia, using survey data. This study focus on popular consumer retail stores including online retail stores such as Tokopedia, Shopee, Lazada and KlikIndomaret, as well as brick-and-mortar retail stores, such as Indomaret, Alfamart, Super Indo, and Transmart. Social media use of popular platforms such as Instagram, Facebook, YouTube, Twitter, Line, and LinkedIn are analyzed. The results of our analysis found that the use of Instagram, Facebook, YouTube, Twitter and LinkedIn at home is associated with consumer shopping preferences at online retail stores such as Tokopedia, Shopee, Lazada, and KlikIndomaret. In addition, our analysis revealed that the use of these social media platforms at home is associated with consumer shopping preferences at brick and mortar retail stores such as Alfamart, Indomaret, and Super Indo. Interestingly, there is no significant association between social media use at home and consumer shopping preferences at Transmart brick-and-mortar stores. Media Richness Theory and Strength of Weak Ties Theory help explain the results of this study. Retail stores need to consider which social media platform is more effective for implementing their marketing strategy. The results of this study can be used as a reference in developing a retail store marketing strategy through social media.

**Keyword:** Social media, Consumer shopping preferences, Media Richness Theory, Strength of Weak Ties Theory, Digital marketing.

**1. INTRODUCTION**

The Covid-19 pandemic has triggered an increase in social media use in an emerging country, Indonesia. The main driving cause is due to the regulation to spend more time indoors, in order to reduce the spread of the corona virus. A survey conducted on 4,734 adolescent and adult participants by the Head of the Department of Mental Health, National Public Hospital of the Medical Faculty, Indonesia University, Kristina Kurniasanti, showed that dependence on the internet increased almost 5 times during this pandemic, reaching 14.4% (almost 10 hours per day) from the previous 3% (2 hours per day)(Puspa, 2020). Zilingo's Business Head of Marketing Service, Tushar Gidwani, stated that consumers became increasingly attached to social media during the pandemic. The time people spend accessing social media is up 70%. The

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number of views on the live platforms Instagram and Facebook increased by 50% followed by an increase in overall Facebook and Instagram usage by 40% (Ekarina, 2020). The Ministry of Communication and Informatics of the Republic of Indonesia (Kemenkominfo) also noted an increase in activity of online shops during the Covid-19 pandemic by 400% from the normal condition (Akbar, 2020). This change in people's "consumer" behavior is the main motivation for conducting this study, which is to examine the association between consumer shopping preferences and the use of various popular and well-known social media platforms such as Instagram, Facebook, YouTube, Twitter, Line, and LinkedIn. McKinsey reports that Indonesians are very enthusiastic about using digital technology and are among the most diligent users of social media such as Facebook, Instagram, Line, Twitter, and YouTube (Das et al., 2018). Statista.com predicts that Social Media Advertising spending in Indonesia will show an annual growth rate (CAGR 2020-2025) of 7.0%, and generate a market volume of US \$ 615 million by 2025 (Statista.com, 2020). This study considers consumer shopping preferences in both online and brick-and-mortar retail stores.

This study aims to analyze the relationship between popular social media platforms and retail stores in order to answer the following questions:

- i. How is the use of popular social media at home associated with shopping preferences with respect to specific, familiar retail stores, including online and physical channels?
- ii. What theories and frameworks can best explain the empirically observed associations?
- iii. What are the implications of social media use and what can firms learn from such social media use?

These empirical questions will be analyzed using survey data and a logistic regression model, which then yields some findings and implications. This research can contribute to the field of social media and consumer behavior research during the Covid-19 pandemic to enrich research insights and its application. The rest of the paper is organized as follows. First, we discuss the theoretical background, review the literature, and propose hypotheses based on prior work in the field. Next, we discuss our data and our model, followed by a discussion of the results and its implications, and the conclusion.

## **2. LITERATURE REVIEW**

Social media refers to the specific consumption of digital media or the Internet that has nothing to do with traditional use of information media, which provide a mechanism for audiences to connect, communicate and interact with each other and their mutual friends via instant messaging or social networking sites (Lee et al., 2018). Social media is changing the way organizations function and develop in many fields. Social media is changing the way firms relate to society, customers and markets (Aral et al., 2013). In addition, social media has also changed the marketing approach, making it easier for businesses to understand consumer behavior and their preferences, enabling firms to predict consumer demand (Hill et al., 2006; Trusov et al., 2010) and enhancing interaction with customers (Alalwan et al., 2017). Many customers now rely on social media to provide feedback and comments about the products and services they use (Kapoor et al., 2018), and to communicate their concerns and needs (Abed et al., 2015). Social media can serve as a useful tool to help firms survive the turmoil in the market (Kietzmann et al., 2011; Kuvykaitė & Piligrimienė, 2013), such as this Covid-19 pandemic situation. Previous

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studies have shown that social media can serve as an effective marketing tool in the retail market (Juditha, 2017; Rapp et al., 2013; Rene, 2018; Vithayathil et al., 2020). Furthermore, this study extends Media Richness Theory and Strength of Weak Ties Theory in new ways, and demonstrates their application in new contexts, specifically social media and consumer shopping behavior.

Through social media platforms a consumer community can be formed, so that they can discuss and share ideas about certain brands, products or services (Culnan et al., 2010). Social media also provides innovation space for firms to develop new methods and techniques for communicating with customers and suppliers (Culnan et al., 2010). Unlike traditional media, managers can use social media to design marketing messages and communicate them with millions of consumers simultaneously (Mangold & Faulds, 2009). Furthermore, through social media, firms can engage customers to achieve organizational goals (Jiang et al., 2014; Martini et al., 2013). Many firms now employ social media to respond to criticism from customers and retailers about their brands and products (Xia, 2013). Consumer preferences and attitudes reflected in product reviews on social media platforms and networks can influence firm value (Luo et al., 2013; Yu et al., 2013). Social media can be operated as a useful tool to help firms maintain a positive image (Kietzmann et al., 2011; Kuvykaitė & Piligrimienė, 2013).

The rapid growth of social media has forced most firms to investigate these platforms to find ways to optimize the benefits of social media for profit and performance (Kaplan & Haenlein, 2010). More than half of social media users engage with at least one retailer social media platform including familiar names such as Facebook, LinkedIn and Twitter (Vithayathil et al., 2020). Retail stores develop e-commerce platforms that rely on Web 2.0 technology, which includes popular social media platforms and social networks to increase revenue and polish business models (Vithayathil et al., 2020). Global Web Index 2019 revealed that e-commerce rates in Indonesia are among the highest in the world, with three-fourths of Indonesian Internet users between the ages of 16 and 64 buying online at least once per month. In addition, Indonesians spend on average just over three hours and twenty minutes per day just on social media. Savvy Indonesian businesses already realize this and increasingly look at how to grow their online presence to engage with audiences, thus building their customer base and revenue (Rupprecht, 2020). Few studies have investigated the impact of different, popular social media platforms on consumer shopping preferences at popular online retail stores and brick-and-mortar stores. This study is based on and is an extension of previous research, which is analyzing the relationship between the use of popular social media platforms and consumer shopping preferences at selected well-known retail brands.

### **3. THEORETICAL BACKGROUND AND HYPOTHESES**

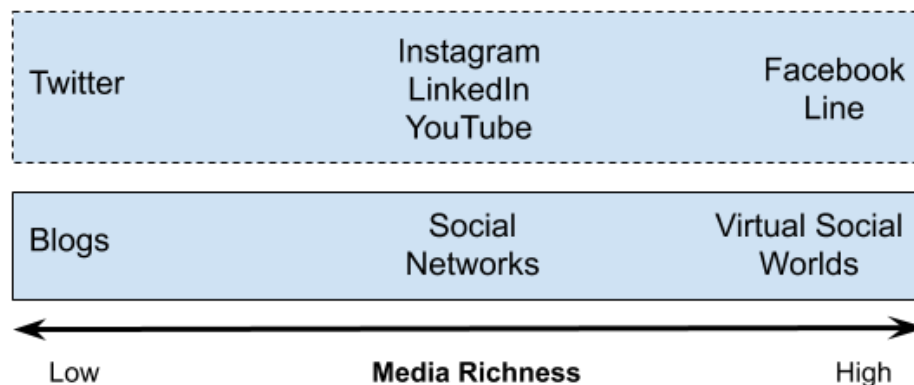
The theory referred to in this study is Media Richness Theory (MRT) to explain computer-mediated communication, and Strength of Weak Ties (SWT) which is adopted from social network analysis. These theories have constructs, such as the richness of media features and the strength of weak relationships, which help explain our empirical results and the association between use of popular social media platforms and consumer shopping behavior. Apart from that, these theories also serve as a foundation for suggestions for practitioners and for future research.

### 3.1. Theoretical background

#### 3.1.1. Media Richness Theory

Media Richness Theory (MRT) is the theory most widely used in the selection of communication media (Bangun & Yulianto, 2014). MRT is a framework used to describe the ability of the communication media to reproduce information. It explains social media use by assessing the suitability of the perfection of a social media and the media's ability to disseminate information that has a certain level of complexity (uncertainty and ambiguity). More highly “richer” media offer higher communicative capabilities, and improve performance to support the dissemination of complex information (Daft & Lengel, 1986). More complex information is better communicated with more refined media (Dennis et al., 2008). Choosing the right communication media can effectively eliminate this uncertainty and ambiguity. For instance, information that is characterized by a high degree of complexity and a wide range of possible interpretations is better communicated through face-to-face media meetings where two parties can clarify any ambiguities that may arise. Media, with a lower level of richness, such as computer-based social media, are more suitable for communicating information that is less complex (Dennis et al., 1999).

Kaplan and Haenlein (2010) provide a framework for assessing media richness (Kaplan & Haenlein, 2010). Their framework shows how the media can differ based on the richness attributes. We have adapted their framework to describe the richness of social media platforms in this study as shown in Figure 1.



**Figure 1.** Social Media overlay on Media Richness adapted from Kaplan and Haenlein (2010).

Based on this framework, Twitter as a microblogging medium has the lowest level of media richness. The social networking platforms such as Instagram, Line, and YouTube have moderate richness. Facebook and LinkedIn, which are social media that have many communication features such as text, audio, to video conferencing, have the highest level of media richness in the series of social media platforms in this study.

### **3.1.2. Strength of Weak Ties (SWT)**

We refer to the theory of Strength of Weak Ties (SWT) (Granovetter, 1973) to understand and explain the use of social media by individuals and their benefits to organizations (Granovetter, 1973). The term "tie" refers to the bond we have with other people. A weak tie is a bond between individuals characterized by a low level of emotional intensity and closeness. In contrast, a strong tie is one that involves a high level of emotional intensity and closeness. SWT points out that bonds between members on social media platforms marked as "weak ties" can provide value to individuals connected through these ties (casual acquaintances) because sometimes these weak ties can provide access to sources of information and opportunities that may difficult to be found in strong ties (close friends).

Zhao and Rosson (2009) argue that individuals with weak ties easily and quickly build mutual trust. Once mutual trust is established, it is likely that individuals will share important and valuable information (Zhao & Rosson, 2009). Grabowicz et al. (2012) analyzed Twitter's social features. Their analysis shows that Twitter is governed by up-and-coming groups and forms an active environment. They introduce the role of intermediary ties in the transmission of new information. These intermediary ties belong to different groups and work as information intermediaries, as well as disseminating new information to individuals in different groups. Their findings suggest that weak ties, represented by intermediate ties between groups, can transfer new information (Grabowicz et al., 2012).

### **3.2. Hypotheses**

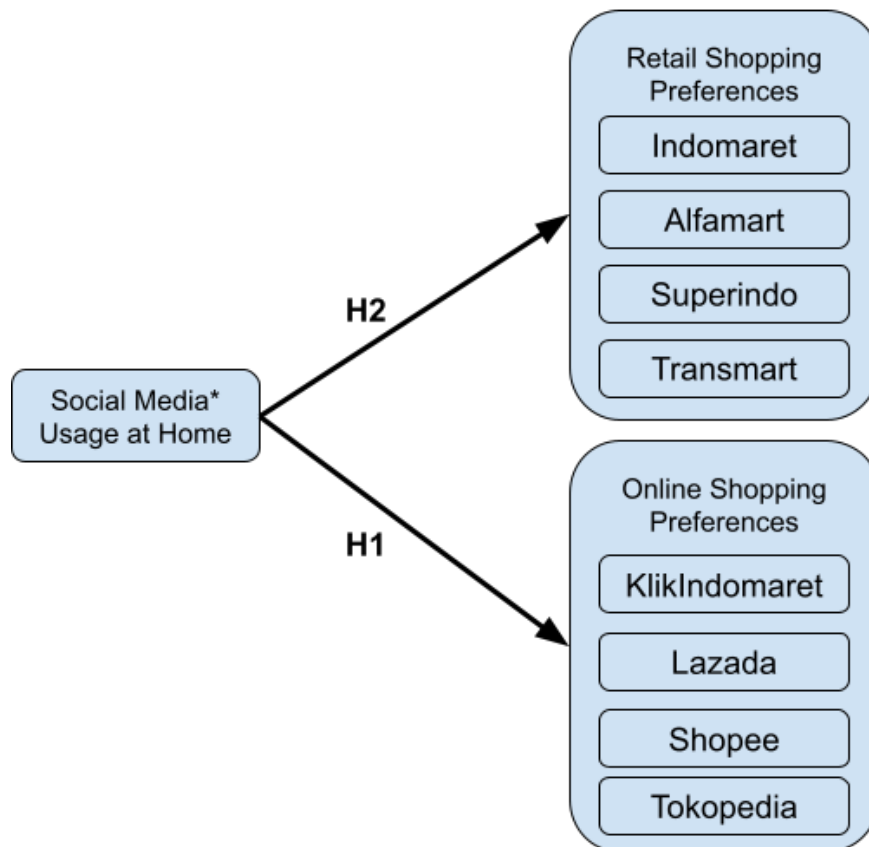
Previous literature has informed us that social media can be an effective marketing tool in the retail market, including shopping at online stores (Kim & Ko, 2012; Rapp et al., 2013). Consumers rely on social media as a source of information that can come from strangers and anonymous users (Sen & Lerman, 2007). Information related to this product and service are shared on social media in the form of reviews. Kim and Ko (2012) argue that social media eases and reduces the costs of retailers to carry out their marketing activities. They show that retailers and luxury brands appearing on social media can significantly enhance their reputation and image (Kim & Ko, 2012).

Rapp et al. (2013) found the contagious effect of social media use that can help retail stores to increase certain performance measures such as consumer loyalty and branding (Rapp et al., 2013). The retail store's initiative to focus its social media on consumers will make the transition from consumer to consumer buying easier and smoother. This usually happens through online purchases when a customer clicks on a link. Jiang et al. (2014) suggest that managers can use discussion content contained in firm-owned social media to understand stakeholder concerns to make the right decisions. The results show that social media can be used to better understand stakeholders reaction to major events affecting firms (Jiang et al., 2014). Previous arguments and literatures lead us to Hypothesis 1:

**H1.** Using social media at home is positively related to shopping at online retail stores Tokopedia, Shopee, Lazada, and KlikIndomaret.

He et al. (2016) recently studied how some firms can use social media to identify the needs of their consumers and then innovate rapidly to meet those needs (He et al., 2016). Such firms are considered to be much more competitive than others. Undercover.co.id posted that firms which successfully use social media channels have loyal customers<sup>1</sup>. Mathur et. al. (2019) found that number of views, likes, comment and replies on YouTube has significant positive impact on consumer purchase intention. It shows that using social media can influence consumer purchase intention (Mathur et al., 2019). These arguments and previous literatures lead us to Hypothesis 2:

**H2.** Using social media at home is positively related to shopping at brick-and-mortar retail stores Indomaret, Alfamart, Super Indo, and Transmart.



**Figure 2.** Research Framework.

\*Social media tested in this study: Instagram, Facebook, YouTube, Twitter, Line, and LinkedIn.

**4. METHODOLOGY**

**4.1. Data collection**

A total of 506 respondents (N = 506) participated in this study by responding to online survey

<sup>1</sup><https://www.undercover.co.id/11-brand-yang-berhasil-menggunakan-sosial-media/>



questions. The survey design uses Likert scale-based questions to operationalize and measure consumer shopping preferences. The survey was distributed randomly to the respondents. Respondents in this survey have answered questions about how often they use social media and this survey was conducted during the month of December 2020, or in the midst of the Covid-19 pandemic.

This study emphasizes on popular social media platforms in an emerging country, Indonesia, such as: Instagram, Facebook, YouTube, Twitter, Line, and LinkedIn. The survey also includes questions about respondents' shopping preferences at online and brick-and-mortar retail stores. The popular online retail stores analyzed in this study are Tokopedia, Shopee, Lazada, and KlikIndomaret. Meanwhile, leading brick-and-mortar retail stores included in this study are Indomaret, Alfamart, Super Indo, and Transmart. The survey questions combine these specialized social media platforms and popular retail stores. The aim is to measure the hypothesized association between use of popular social media platforms and purchases from retail stores, both online and brick-and-mortar retail stores.

#### **4.2. Data and Model**

Data were processed using statistical software "Stata 15". Logistic regression model specification using the command "Logistic Regression" in the software is used to test the hypothesized association in this study. Examples of survey questions are presented in Appendix A and B. The summary demographics of the respondents are presented in Table 1.

A logistic regression specification was developed to predict the association between social media use at home and consumer shopping preferences in both online and brick-and-mortar retail stores. The model specifications are as follows:

$$\text{Shopping\_Preferences}_i = \beta_0 + \beta_{1i} \text{IG\_H}_i + \beta_{2i} \text{FB\_H}_i + \beta_{3i} \text{YouTube\_H}_i + \beta_{4i} \text{Twitter\_H}_i + \beta_{5i} \text{Line\_H}_i + \beta_{6i} \text{LinkedIn\_H}_i + \varepsilon_i$$

$\beta_0$	=intercept
$\beta_{ji}, j=1,2,\dots,6$	=coefficients
$\text{IG}_{H_i}$	=Instagram use at home
$\text{FB}_{H_i}$	=Facebook use at home
$\text{YouTube}_{H_i}$	=YouTube use at home
$\text{Twitter\_H}_i$	=Twitter use at home
$\text{Line}_{H_i}$	=Line use at home
$\text{LinkedIn\_H}_i$	=LinkedIn use at home
$\varepsilon_i$	=error random variable

**Table 1. Demographics of the subjects.**

Variable		Percentage
Gender	Male	36.6
	Female	63.4
Age	17 – 25 years old	70.2
	26 – 35 years old	14.4
	36 – 45 years old	8.7
	46 – 55 years old	5.3
	56 – 65 years old	1.4
Education	High School	56.1
	Undergraduate Degree	31.4
	Graduate Degree	11.9
	Doctoral Degree	0.6

In the next section, we report the results of our empirical analysis of the logistic regression model using survey data.

## 5. RESULTS AND DISCUSSION

Results from analyzing the survey data described earlier and from testing the aforementioned hypotheses show that the hypotheses are partially supported. Specifically, we tested the hypothesized associations between the use of the popular social media platforms: Instagram, Facebook, YouTube, Twitter, Line, and LinkedIn; and brick-and-mortar retail stores: Indomaret, Alfamart, Super Indo, and Transmart; and online retail stores: Tokopedia, Shopee, Lazada, and KlikIndomaret. We describe our results which show that our hypotheses are partially supported. We note the value of the regression coefficient ( $\beta$ ) and standard error (SE) for significant associations as:  $\beta$  (SE).

### 5.1. Social media use at home and shopping at online stores

The use of Instagram at home is significant and positively associated, 0.437 (0.117), with online shopping at Shopee. This result indicates that an increase of 1-unit scale of Instagram use at home will increase the probability of consumer shopping at online retail store, Shopee by 43.7%, assuming the other independent variables constant. These results support the hypothesis 1 (H1). Shopee's official account on Instagram has 7 million followers and this large user base is strategically utilized by Shopee to interact with them and get information about their shopping behavior. For instance, followers of Shopee's Instagram account can keep up to date with any marketing information such as give away, quizzes, flash sales, discounts, and more. Based on MRT, Instagram is a social networking platform with mid-level media excellence. Instagram users who have weak ties can also interact with each other through the comments section, Instagram Story, Instagram Live, and Instagram Direct Message, so they can exchange new



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information about products and services available at Shopee.

The use of Facebook at home is significant and positively related, 0.405 (0.139), to online shopping on Lazada, but negatively related to online shopping at Shopee, -0.316 (0.139). This result indicates that an increase of 1-unit scale of Facebook use at home, will increase the probability of consumer to shop at Lazada's online retail store by 40.5%, and at the same time will decrease the probability of consumer to shop at Shopee's online retail store by 31.6%, holding the other independent variables constant. These results partly support and partly contradict the hypothesis 1 (H1). The negative association between Facebook use at home and online shopping at Shopee does not support our hypothesis. When viewed from the number of "likes" and followers on the official Facebook page of each firm at the moment, Lazada is indeed superior in terms of popularity than Shopee, that is with the number of "likes" reaching 30,424,349, while Shopee is only 19,819,082 likes. The number of Lazada's followers reached 30,612,530, while Shopee is 20,235,617 followers only. Facebook and its association with consumer products varies depending on how the retail store utilizes it (Vithayathil et al., 2020).

The use of YouTube at home is significant and negatively associated, -0.474 (0.256), with online shopping at KlikIndomaret. This result indicates that an increase of 1-unit scale of YouTube use at home, will decrease the probability of consumer to shop at online retail store, KlikIndomaret, by 47.4%, assuming the other independent variables constant. This result does not support hypothesis 1 (H1) and contradicts with it. Furthermore, this result also contradicts the positive association between using YouTube at home and shopping at Indomaret brick-and-mortar stores, which KlikIndomaret is Indomaret's online shop platform. McKinsey & Company survey stated that 73% of Indonesians preferred to shop at physical stores during the Covid-19 pandemic<sup>2</sup>.

The use of Twitter at home is significant and negatively related, -0.404 (0.193), to online shopping on Lazada. This result indicates that an increase of 1-unit scale of Twitter use at home will decrease the probability of consumer shop at online retail store, Lazada, by 40.4%, holding the other independent variables constant. This finding suggests that those who use Twitter may not have a focus on shopping for retail consumer products at online stores like Lazada. Users of this platform tend to use it for other purposes, such as searching for the latest news. The Reuters Institute Digital News Report 2020 states that trust and engagement with traditional news sources is decreasing, especially among young people. Increasingly, they are moving to various platforms, including social media. About 12 percent of people in the world use Twitter as their main news source, and this platform is the market leader (Listiyani, 2020).

The use of LinkedIn at home is significant and positively related to online shopping at Tokopedia, 0.546 (0.152) and KlikIndomaret 0.751 (0.297). These results indicate that an increase of 1-unit scale of LinkedIn use at home will increase the probability of consumer to shop at the online retail store, Tokopedia, by 54.6%, and KlikIndomaret, by 75.1%, assuming the other independent variables constant. These findings support hypothesis 1 (H1). LinkedIn is a social networking platform specifically designed for users with career interests and professional networking. The strength of weak ties of LinkedIn users will enable digital word of mouth for professional products who may not be familiar on a strong network of ties. Therefore, the results

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<sup>2</sup><https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-indonesian-consumer-sentiment-during-the-coronavirus-crisis> (Slide 20)

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of this empirical analysis show that Tokopedia and KlikIndomaret can be the preferred shopping destinations for LinkedIn members who have busy professional activities. In other words, social media such as LinkedIn offers a platform for retailers and advertisers to promote products that are suitable for professionals.

### **5.2. Social media use at home and shopping at brick-and-mortar stores**

The use of Instagram at home is significant and positively related, 0.354 (0.091), to shopping at the brick-and-mortar retail store, Alfamart. This result indicates that an increase of 1-unit scale of Instagram use at home will increase the probability of consumer to shop at the Alfamart brick-and-mortar retail store by 35.4%, assuming the other independent variables constant. This finding supports hypothesis 2 (H2), and is also in line with the results of the Dentsu Aegis survey which showed that Gen-Z's perception of a brand increased by 42% when the brand used Instagram to build engagement with its consumers (Ekarina, 2020). Instagram is a completely visual platform. The main purpose of Instagram is to enable users to share images, photos, or videos with their audience. Therefore, the results of our empirical analysis suggest that Alfamart may be the preferred shopping destination for Instagram audiences in an emerging country, Indonesia. Alfamart's official account on Instagram has a number of followers up to 2.3 million users, and is actively used to promote their various products and services until it has reached 12,992 posts at this time.

The use of Facebook at home is significant and negatively associated, -0.371 (0.14), with shopping at brick-and-mortar store, Super Indo. This result indicates that an increase of 1-unit scale of Facebook use at home will decrease the probability of consumers to shop at brick-and-mortar store, Super Indo, by 37.1%, holding all other independent variables constant. This result does not support hypothesis 2 (H2) and even contradicts it. This shows that users who use Facebook at home are less likely to shop at Super Indo. The explanation for this negative association is that based on MRT, Facebook is a social media platform with high media richness as it offers impeccable features, such as personal video calls and group video calls. Therefore, while Facebook may be suitable for voice chat and video chat with friends and family, it may not be the right platform to focus on exchanging product information targeted for purchases at brick-and-mortar retail stores, Super Indo. Social media users usually post their questions and concerns on the platform for quick answers and benefits when they are interested in making a purchase. Media, which has a high level of richness "feature", sometimes actually makes the process more complex (Vithayathil et al., 2020). Therefore, Super Indo can choose other social media that has a lower level of media richness which may be more effective and suitable for its advertising campaign.

The use of YouTube at home is significant and positively related, 0.278 (0.177), to shop at brick-and-mortar retail store, Indomaret. This result indicates that an increase of 1-unit scale of Instagram use at home will increase the probability of consumers to shop at brick-and-mortar retail store, Indomaret, by 27.8%, assuming the other independent variables constant. This finding supports hypothesis 2 (H2). Media Richness Theory (MRT) informs us that YouTube is a social media platform with a medium level of media richness, which might help its users with weak ties to communicate and exchange information about Indomaret products. Users can better communicate their descriptions, reviews and actions regarding Indomaret products through free and feature-rich video sharing platforms such as YouTube. For example, they can watch live or

recorded video, join a live chat, give a like, share, comment, and upload their own videos. The YouTube video service can be accessed via PCs, laptops, tablets and smartphones which makes it more flexible. Currently the Indomaret account already has 79,100 subscribers with the number of uploads on YouTube reaching 1,405 videos.

The use of Line at home is significant and positively related, 0.385 (0.13), to shopping at brick-and-mortar retail store, Super Indo. This result indicates that an increase of 1-unit scale of Line use at home will increase the probability of consumers to shop at the brick-and-mortar retail store, Super Indo, by 38.5%, holding the other independent variables constant. This finding supports hypothesis 2 (H2) and at the same time contradict to the result of the analysis between Facebook use at home and shopping at brick-and-mortar retail store, Super Indo. Media Richness Theory (MRT) informs us that Line is a social media platform of medium richness, which can help users with weak ties to communicate and exchange information about products. The rational explanation is that Line has the Line@ feature which is specifically for firms and business people. This feature can be used to distribute coupons and promotional campaigns directly to all Line contact lists. The difference is, the level of privacy on Line is relatively higher than Facebook, because it requires "two-way opt-in". This means that you have to add or accept contacts before you can exchange messages. This feature can be a filter with whom we can interact, so that it can prevent unwanted things<sup>3</sup>.

Interestingly, there was no significant association between shopping at brick-and-mortar retail store, Transmart, and use of any social media platforms in this study. A possible explanation is that Transmart is the new brand name of Carrefour Indonesia since 2014, which is still in the process of rebuilding their brand equity when compared to competitors whose brands are older. In addition, Transmart is also known to experience debt problems to one of its creditors, which may affect their business activities<sup>4</sup>.

The results are summarized in compact form in Figure 3. The “+” entry denotes positive and significant association whereas the “-” entry denotes a negative and significant association.

**Table 2. Results for social media use at home and shopping preferences at online retail stores.**

Social Media	Dependent Variable	$\beta$	SE	z	p-value
Instagram	Tokopedia	0.069	0.094	0.74	0.46
	Shopee	0.437	0.117	3.75	0.000***
	Lazada	0.22	0.172	1.28	0.199
	KlikIndomaret	-0.241	0.303	-0.8	0.426
Facebook	Tokopedia	-0.088	0.082	-1.07	0.283
	Shopee	-0.316	0.099	-3.18	0.001***
	Lazada	0.405	0.139	2.91	0.004***

<sup>3</sup><https://dailysocial.id/post/line-resmi-hadir-untuk-pelaku-bisnis-indonesia>;

<https://versus.com/id/facebook-messenger-vs-line>

<sup>4</sup><https://bisnis.tempo.co/read/1393759/tak-mampu-bayar-utang-perusahaan-retail-milik-chairul-tanjung-digugat-pkpu/full&view=ok>

	KlikIndomaret	0.081	0.208	0.39	0.696
YouTube	Tokopedia	0.082	0.106	0.77	0.44
	Shopee	-0.011	0.139	-0.08	0.939
	Lazada	0.3	0.185	1.62	0.105
	KlikIndomaret	-0.314	0.151	-2.08	0.037**
Twitter	Tokopedia	-0.024	0.084	-0.29	0.774
	Shopee	0.158	0.124	1.28	0.202
	Lazada	-0.404	0.193	-2.1	0.036**
	KlikIndomaret	-0.22	0.228	-0.96	0.335
Line	Tokopedia	-0.137	0.126	-1.09	0.277
	Shopee	0.008	0.155	0.05	0.959
	Lazada	-0.305	0.367	-0.83	0.406
	KlikIndomaret	-0.13	0.279	-0.47	0.641
LinkedIn	Tokopedia	0.546	0.152	3.6	0.000***
	Shopee	-0.246	0.155	-1.55	0.121
	Lazada	-1.234	0.647	-1.91	0.057*
	KlikIndomaret	0.751	0.297	2.53	0.011**

\*  $p \leq 0.1$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ .

**Table 3. Results for social media use at home and shopping preferences at brick and mortar retail stores.**

Social Media	Dependent Variable	$\beta$	SE	z	p-value
Instagram	Indomaret	0.077	0.098	0.78	0.435
	Alfamart	0.354	0.091	3.89	0.000***
	Super Indo	0.037	0.138	0.27	0.788
	Transmart	0.288	0.208	1.39	0.166
Facebook	Indomaret	-0.021	0.085	-0.25	0.803
	Alfamart	-0.151	0.078	-1.94	0.052*
	Super Indo	-0.371	0.14	-2.66	0.008***
	Transmart	0.071	0.15	0.47	0.637
YouTube	Indomaret	0.278	0.117	2.39	0.017**
	Alfamart	0.089	0.102	0.87	0.385
	Super Indo	-0.169	0.141	-1.19	0.232
	Transmart	0.043	0.157	0.28	0.782
Twitter	Indomaret	0.095	0.089	1.06	0.288
	Alfamart	0.025	0.079	0.31	0.755

	Super Indo	0.096	0.112	0.86	0.391
	Transmart	0.082	0.137	0.60	0.55
Line	Indomaret	0.071	0.13	0.55	0.585
	Alfamart	-0.071	0.114	-0.62	0.533
	Super Indo	0.385	0.13	2.96	0.003***
	Transmart	0.273	0.16	1.71	0.088*
LinkedIn	Indomaret	0.173	0.16	1.08	0.281
	Alfamart	0.185	0.136	1.36	0.173
	Super Indo	0.247	0.17	1.45	0.146
	Transmart	0.286	0.261	1.10	0.272

\*  $p \leq 0.1$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.01$ .

		Instagram	Facebook	YouTube	Twitter	Line	LinkedIn
<b>Indomaret</b>	b&m			+			
<b>Alfamart</b>	b&m	+					
<b>Super Indo</b>	b&m		-			+	
<b>Transmart</b>	b&m						
<b>Tokopedia</b>	online						+
<b>Shopee</b>	online	+	-				
<b>Lazada</b>	online		+		-		
<b>KlikIndomaret</b>	online			-			+

**Figure 3.** Summary of results for social media use at home and shopping preferences.

## 6. CONCLUSION

This study is expected to provide new insights for retail stores to create and maintain relationships with customers, as well as obtain information about their behavior and preferences through popular social media platforms. Social media and communication skills are effective tools that enable retail stores to get to know customers and develop marketing strategies, especially in this time of the Covid-19 pandemic. Retail stores can use the results of this study as a reference to effectively organize and disseminate their product marketing activities through social media in order to gain an edge in the competitive retail industry. Social media is also playing an increasingly large role during the Covid-19 pandemic, particularly in evaluating and determining consumer shopping preferences.

We examined the relationship between using popular social media platforms and consumer shopping preferences at popular retail stores during the Covid-19 pandemic. The results of this study, which are based on a logistic regression model, show that choosing social media that matches the quality of the richness of certain media features can be important for retail stores because it affects marketing and sales effectiveness. For instance, using certain social media platforms, such as Instagram, YouTube, and Line, can be effective in increasing

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product sales for brick-and-mortar retail stores, such as Alfamart, Indomaret, and Super Indo. Social media platforms with a high degree of media richness, such as Facebook, can produce negative results for some brick-and-mortar and online retail stores, such as Super Indo and Shopee. However, LinkedIn, which also has a high level of media richness, can provide positive benefits for several brick-and-mortar and online retail stores, such as Tokopedia and KlikIndomaret.

Sometimes, social media with a high degree of media richness such as Facebook and LinkedIn actually make the process of searching for reviews and answers more complex, thus negatively affecting the retail store's sales. Popular retail stores, both brick-and-mortar and online, can sometimes benefit more from utilizing intermediate degree of richness social media platforms, such as Instagram, YouTube, and Line, which has feature photo and video sharing, chat, private video calls, and live broadcasts, which can be used effectively to improve the quality of customer service. Choosing the right social media platform is one of the important factors related to retail store profits, especially in this pandemic time.

## **7. LIMITATIONS AND FUTURE RESEARCH**

The limitations of this study are: first, it does not include other social media that are outside popular social media, such as Instagram, Facebook, YouTube, Twitter, Line, and LinkedIn in the analysis. The reason for choosing these social medias above is because of its popularity in Indonesia and the availability feature for advertising space. Second, data collection through self-reported surveys, which has its own limitations. This study did not investigate the specific individual relationships between specific retail stores and social media platforms. Third, negative comments and reviews published and shared on popular social media platforms can have a negative impact on consumer shopping preferences. This study did not analyze the effect of negative social media comments on retail stores. Future research could investigate this area to measure the impact of negative reviews on the shopping preferences of social media users to purchase from popular retail stores.

Future research may extend this study to investigate the linkages between other types of social media, outside the popular platforms in this analysis. Various marketing campaigns can be investigated in subsequent research. Finally, researchers can investigate other dimensions of social media use, such as platform quality and length of use, to analyze how these factors influence sales.

### **Appendix A. Examples of social media use questions**

(The rest of the questions follow the same pattern. The complete survey will be provided upon request.)

Q1. Rate your weekly use of Instagram at Home

1 Very Low or None

2 Low

3 Moderate

4 High

5 Very High or Always

### **Appendix B. Examples of shopping preferences questions**



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(The rest of the questions follow the same pattern. The complete survey will be provided upon request.)

Q1. What are your frequent online shopping stores? (Check all that apply)

- Tokopedia
- Shopee
- Lazada
- KlikIndomaret

Q2. What are your frequent brick-and-mortar shopping stores? (Check all that apply)

- Alfamart
- Indomaret
- Super Indo
- Transmart

## REFERENCES

- Abed, S. S., Dwivedi, Y. K., & Williams, M. D. (2015). Social media as a bridge to e-commerce adoption in SMEs: A systematic literature review. *The Marketing Review*. <https://doi.org/10.1362/146934715x14267608178686>
- Akbar, C. (2020, July 7). Penggunaan Internet Melejit, Kominfo: Telekomunikasi Seperti Oksigen Saat Pandemi. *Tempo.Co*. <https://bisnis.tempo.co/read/1362189/penggunaan-internet-melejit-kominfo-telekomunikasi-seperti-oksigen-saat-pandemi>
- Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. In *Telematics and Informatics*. <https://doi.org/10.1016/j.tele.2017.05.008>
- Aral, S., Dellarocas, C., & Godes, D. (2013). Social media and business transformation: A Framework for research. *Information Systems Research*. <https://doi.org/10.1287/isre.1120.0470>
- Bangun, N., & Yulianto, A. S. (2014). HUBUNGAN MEDIA RICHNESS TERHADAP USER TRUST DAN PERSEPSI TANGGUNG JAWAB SOSIAL PERUSAHAAN DENGAN SENSITIVITAS LINGKUNGAN INDUSTRI SEBAGAI VARIABEL MODERATING. *Jurnal Akuntansi*, XVIII(01), 151–165. <https://media.neliti.com/media/publications/73929-ID-hubungan-media-richness-terhadap-user-tr.pdf>
- Culnan, M. J., McHugh, P. J., & Zubillaga, J. I. (2010). How large U.S. companies can use twitter and other social media to gain business value. *MIS Quarterly Executive*.
- Daft, R. L., & Lengel, R. H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*. <https://doi.org/10.1287/mnsc.32.5.554>
- Das, K., Tamhane, T., Vatterott, B., Wibowo, P., & Wintels, S. (2018). The Digital Archipelago: How Online Commerce is Driving Indonesia's Economic Development. *McKinsey & Company*, August, 1–72. [www.mckinsey.com/featured-insights/asia-pacific/the-digital-archipelago-how-online-](http://www.mckinsey.com/featured-insights/asia-pacific/the-digital-archipelago-how-online-)
- Dennis, A. R., Fuller, R. M., & Valacich, J. S. (2008). Media, tasks, and communication processes: A theory of media synchronicity. In *MIS Quarterly: Management Information Systems*. <https://doi.org/10.2307/25148857>
- Dennis, A. R., Kinney, S. T., & Hung, Y. T. C. (1999). Gender differences in the effects of

- 
- media richness. *Small Group Research*. <https://doi.org/10.1177/104649649903000402>
- Ekarina. (2020, November 10). Media Sosial Jadi Referensi Konsumen Membeli Produk Selama Pandemi. *Katadata.Co.Id*. <https://katadata.co.id/ekarina/brand/5faa6013a3980/media-sosial-jadi-referensi-konsumen-membeli-produk-selama-pandemi>
- Grabowicz, P. A., Ramasco, J. J., Moro, E., Pujol, J. M., & Eguiluz, V. M. (2012). Social features of online networks: The strength of intermediary ties in online social media. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0029358>
- Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*. <https://doi.org/10.1086/225469>
- He, W., Chen, Y., Tian, X., & Chong, D. (2016). Actionable social media competitive analytics for understanding customer experiences. *Journal of Computer Information Systems*, 56(2), 145–155. <https://doi.org/10.1080/08874417.2016.1117377>
- Hill, S., Provost, F., & Volinsky, C. (2006). Network-based marketing: Identifying likely adopters via consumer networks. *Statistical Science*. <https://doi.org/10.1214/088342306000000222>
- Jiang, S., Chen, H., Nunamaker, J. F., & Zimbra, D. (2014). Analyzing firm-specific social media and market: A stakeholder-based event analysis framework. *Decision Support Systems*. <https://doi.org/10.1016/j.dss.2014.08.001>
- Juditha, C. (2017). Memahami Struktur Jaringan Media Sosial Sebagai Cara Strategis Periklanan Di Era Ekonomi Digital. *Journal Pekommas*, 2(1), 99. <https://doi.org/10.30818/jpkm.2017.2020110>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P., Dwivedi, Y. K., & Nerur, S. (2018). Advances in Social Media Research: Past, Present and Future. *Information Systems Frontiers*. <https://doi.org/10.1007/s10796-017-9810-y>
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*. <https://doi.org/10.1016/j.bushor.2011.01.005>
- Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2011.10.014>
- Kuvykaitė, R., & Piligrimienė, Ž. (2013). COMMUNICATION IN SOCIAL MEDIA FOR COMPANY'S IMAGE FORMATION. *ECONOMICS AND MANAGEMENT*. <https://doi.org/10.5755/j01.em.18.2.4651>
- Lee, J. W., Becker, K., & Potluri, R. M. (2018). Antecedents of Corporate Adoption of Social Media and the Role of the Technology Acceptance Model in the Path. *SSRN Electronic Journal*, 3(June). <https://doi.org/10.2139/ssrn.3089058>
- Listiyani, Di. (2020, June 17). Saingi Twitter, Instagram Jadi Sumber Berita Populer untuk Kaum Muda. <https://www.inews.id/>. <https://www.inews.id/techno/internet/saingi-twitter-instagram-jadi-sumber-berita-populer-untuk-kaum-muda>
- Luo, X., Zhang, J., & Duan, W. (2013). Social media and firm equity value. *Information Systems Research*. <https://doi.org/10.1287/isre.1120.0462>
-

- 
- Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*. <https://doi.org/10.1016/j.bushor.2009.03.002>
- Martini, A., Massa, S., & Testa, S. (2013). The firm, the platform and the customer: A “double mangle” interpretation of social media for innovation. *Information and Organization*. <https://doi.org/10.1016/j.infoandorg.2013.07.001>
- Mathur, G., khandelwal, A., & Mittal, R. (2019). Antecedents to Purchase Intention – A Perceptual Study About “YouTube” Videos. *SSRN Electronic Journal*, 1402–1409. <https://doi.org/10.2139/ssrn.3323763>
- Puspa, A. (2020, August 5). Pandemi, Ketergantungan terhadap Internet Meningkatkan 5 Kali Lipat. *Media Indonesia*. <https://mediaindonesia.com/read/detail/334163-pandemi-ketergantungan-terhadap-internet-meningkat-5-kali-lipat>
- Rapp, A., Beitelspacher, L. S., Grewal, D., & Hughes, D. E. (2013). Understanding social media effects across seller, retailer, and consumer interactions. *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/s11747-013-0326-9>
- Rene, C. (2018). *3 Signs Retail Brands Need a Media Monitoring Tool in 2019*. <https://mention.com/en/blog/retail-media-monitoring-tool/>
- Rupprecht, D. (2020). *THE RISE OF SOCIAL MEDIA IN INDONESIA*. <https://www.incify.co/the-rise-of-social-media-in-indonesia/>
- Sen, S., & Lerman, D. (2007). Why are you telling me this? An examination into negative consumer reviews on the web. *Journal of Interactive Marketing*. <https://doi.org/10.1002/dir.20090>
- Statista.com. (2020). *Social Media Advertising in Indonesia*. <https://www.statista.com/outlook/220/120/social-media-advertising/indonesia>
- Trusov, M., Bodapati, A. V., & Bucklin, R. E. (2010). Determining influential users in internet social networks. *Journal of Marketing Research*. <https://doi.org/10.1509/jmkr.47.4.643>
- Vithayathil, J., Dadgar, M., & Osiri, J. K. (2020). Social media use and consumer shopping preferences. *International Journal of Information Management*, 54(October 2019), 102117. <https://doi.org/10.1016/j.ijinfomgt.2020.102117>
- Xia, L. (2013). Effects of companies’ responses to consumer criticism in social media. *International Journal of Electronic Commerce*. <https://doi.org/10.2753/JEC1086-4415170403>
- Yu, Y., Duan, W., & Cao, Q. (2013). The impact of social and conventional media on firm equity value: A sentiment analysis approach. *Decision Support Systems*. <https://doi.org/10.1016/j.dss.2012.12.028>
- Zhao, D., & Rosson, M. B. (2009). How and why people Twitter: The role that micro-blogging plays in informal communication at work. *GROUP’09 - Proceedings of the 2009 ACM SIGCHI International Conference on Supporting Group Work*. <https://doi.org/10.1145/1531674.1531710>