

## Research Article

# Social Commerce Adoption: A Consumer's Perspective to an Emergent Frontier

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The mass diffusion of social media has enabled new commercial models in retailing. It heralded the emergence of social commerce, with consumers and retailers interacting and transacting through a multitude of social media. While the organizational benefits of such interactions have attracted much attention, little is known about the consumers' motives. In addressing this limitation, a theoretical model was developed, extending the UTAUT2 framework. The model was then operationalized, and quantitative data collected from 108 Indonesian consumers engaged in social commerce and analyzed using the partial least squares method. The findings point to new dynamics influencing consumer behavior, driven by lifestyle, price value, facilitating conditions, and pragmatisms. Interestingly, social influence was significant yet negative indicating that consumers may be developing a distinct online persona, which is more independent and assertive to normative pressures. The results hold important theoretical and practical implications for the rapidly emerging field of social commerce.

## 1. Introduction

With the rapid adoption of social media such as Facebook, Instagram, and Twitter, a network-focused approach to establishing customer relationships and the electronic marketplaces emerged. Such an approach is grounded in the agency of individuals to interact online and build social rapport for buying and selling. This paved the way to the nascent field of social commerce, defined here as a phenomenon of engagement in commercial information exchange and transaction through Web 2.0 social media technologies and infrastructure. Through a combination of customer-interface activities and social media, this new model differentiates itself through the increased ease of customer engagement and shop accessibility [1, 2]. Additionally, social commerce reduces the barrier to starting businesses, allowing individuals to become microentrepreneurs through leveraging social media platforms for commercial benefit [3]. Consumers also benefit from an increased transparency in communication, achieved through direct communication with the vendors, as well as feedback mechanisms [4] which could be scaffolded for building recognition and trust.

Empirically, this study is aimed at bridging this gap in social commerce adoption research by investigating the adoption of social commerce from a consumer's perspective, in the context of Indonesia which is the most populous country in Southeast Asia. The use of social commerce is prominent in Indonesia. This is spurred by the fact that the country has one of the highest rates of social media usage. It was ranked fifth for daily time spent on social media with over 170 million social media users as of January 2021 [5]. Social media usage in Indonesia is also advancing rapidly, with an increase of 6.3 percent of users between 2020 and 2021 [5], heralding further opportunities for social commerce. Yet, scholarly research on social commerce in Indonesia is still limited to the entrepreneurial perspective [1, 6, 7]. The limitations of social commerce research in Indonesia reflect the ones identified for the Southeast Asian region, so focusing on the Indonesian social commerce consumers can shed an important light on consumer dynamics in social commerce and lead to insightful theoretical and practical contributions [6]. Furthermore, the study by Vatanasakdakul et al. have found that social commerce engagements by Indonesian microenterprises are expected to lead

to a positive increase in purchases and brand recognition. However, while organizational benefits to the revenue and expenditure cycles are well documented, the factors influencing the adoption of social commerce from the consumer's perspective have yet to be adequately investigated. The following research question is therefore proposed, contextualized in Indonesia's social and commercial environment: "What factors affect consumer's adoption of social commerce in the Indonesian retail sector?" In addressing this question, this study proposes an adapted research model based on the UTAUT2 model by Venkatesh et al. [8] for the analysis of technology adoption. We further developed the model and proposed a holistic view of social commerce adoption with technological, social, and economic dimensions. In addition, to fit the study in the context of social commerce adoption, the study incorporates the constructs of lifestyle and prior experience in dealing with social commerce vendors into the model [9, 10].

The paper is structured as follows: the next section presents a contextual literature review. This is followed by the development of the research model and hypotheses. Afterwards, the research method is introduced, followed by an analysis of the results and a discussion of the findings and their implications on social commerce adoption. The paper concludes with a reflection on limitations and future research propositions.

## 2. Literature Review

*2.1. Social Commerce Adoption Review.* Social commerce adoption has been studied from the perspective of the vendors and consumers [1, 7, 11, 12]. The existing social commerce studies share a common factor of analysis when studying this topic—specifically on the technological, social, and economic dimensions. Research into the technological dimension primarily examines social commerce with regard to its benefits towards the organization. Previous studies have highlighted that, when compared to the traditional brick and mortar approach, e-commerce provides a direct communication channel between the vendors and consumers, which can potentially facilitate and ease the shopping process [2, 13]. This is validated by Defiandry et al. and Zhu et al. [1, 7] highlighting how social media as a commercial platform benefits the vendors as it eases access to active users across Asian countries.

From the social perspective, existing literature indicates the importance of a vendor's social agreeability and features which facilitate consumer experience with the vendor such as ratings or direct messaging [2, 13]. Other studies have confirmed the benefits of social media engagement in Asia. These include a positive increase in brand recognition [7] and the vendor's social engagement being a top contributor to the vendor's perceived reliability [14]. In addition to social benefits, the consumer's personal enjoyment of using social commerce has been confirmed to contribute to adoption, indicating the need for vendors to build and maintain a customer-centered experience based on their target demographic [11, 12].

Research into social commerce adoption from the consumer's perspective also explores its economic benefits. Numerous studies have confirmed the prominence and consumer need of price benefit when using social commerce especially in the Asian context [1, 6, 11, 15, 16]. A report by Kemp [5] shows how over 170 million Indonesian residents are active social media users in 2021. In turn, these users would have access to a wider range of prices, allowing consumers to find the most economic price for a certain product or service [17]. From the organizational perspective, studies have shown how social commerce leads to cost reduction due to the elimination of the need to operate brick-and-mortar retail stores, allowing vendors to run with significantly lower costs [18]. Essentially, research into social commerce adoption from the organizational and consumer's perspective shares the consensus that social commerce is selected due to benefits brought by the social media platforms, social effects, and economic benefits. While benefits to consumers have been touched upon in previous literature, a more focused approach is required to further understand the consumer's intrinsic motivations.

*2.2. Social Commerce Adoption in Asia.* Social commerce is experiencing a rapid increase in popularity in Asia [1, 6, 11]. This is strongly influenced by the large social media uptake in the region, with over 69 percent of social media usage in Southeast Asia [5]. This growth has provided opportunities for e-commerce expansion through leveraging social media usage in business operations [3]. A study by Leeraphong and Papisratorn [19] found LINE (an instant communication application) as the most popular social commerce platform in Thailand, with over 69.1 percent adoption rate. While in Indonesia, Facebook, Instagram, LINE, and WhatsApp held the biggest social commerce demographic in 2018 [20]. Amongst these platforms, however, Instagram is considered the most popular with local users [1, 21].

Moreover, research on social commerce in Asia unveils numerous opportunities, including significant reduction in operation cost [15] and an increase in purchases and brand recognition [6]. Research findings by Karjaluoto and Huhtamäki [22] also highlight the potential to improve business operational efficiency, reduce turnaround time, increase transactional speed, access current trends, and access to a wider market and demographic.

Specifically, existing data have indicated the rapid growth of social commerce in Indonesia, with over 170 million social media users in 2021 [5]. Yet, social commerce in Indonesia has attracted limited research attention. Limited studies include Vatanasakdakul et al. [6] which investigated the adoption factors of social commerce from an entrepreneurial perspective, identifying the motivations behind the adoption of social media by local microenterprises. A study by Defiandry et al. [1] also examined the prominence of social commerce in Indonesia, specifically regarding the users of the platform. Furthermore, Harsono and Suryana [23] study the factors affecting the user's use behavior of LINE, a popular social media platform in Indonesia. This study applied the extended Unified Theory of Acceptance

and Use of Technology (UTAUT2) initially proposed by Venkatesh et al. [8] to identify the user's behavioral intention towards LINE. Results from the study show that all variables contribute towards the user's behavior toward LINE with the exception of price value. The study [23] suggests both the importance of the consumer's social environment in social media use but also identifies the suitability of the UTAUT2 model to investigate the motivations behind the use of disruptive technology in Indonesia, particularly in the field of social commerce.

Notwithstanding the contributions of existing literature, several uncertainties remain in the context of Indonesian social commerce adoption. Currently, social commerce adoption studies in Indonesia are limited to entrepreneurial analysis [1, 6, 7], indicating the need to focus on the consumer's side for a more holistic view to adoption motivation.

### 3. Research Methodology

*3.1. Research Model Investigation.* From a theoretical perspective, research into social commerce adoption in Asia has integrated numerous IT adoption theories to contextualize adoption motivations, including the application of the Technology Acceptance Model (TAM) [24], Theory of Reasoned Action (TRA) [25], and the Unified Theory of Acceptance and Use of Technology [26]. The TAM is an information system theory that examines how users come to use a new technology [24]. The TRA model states how individual behavior is heavily influenced by their intention [27]. The application of this theory into social commerce studies identifies motivations in social commerce adoption, which includes increased vendor transparency and monetary benefits [18, 28]. The UTAUT2 model by Venkatesh et al. [8] has also been deployed for studying social commerce adoption. The UTAUT2 model was used to analyze the consumer's behavioral intention in IT adoption, which stands as the best forecaster of actual behavior. UTAUT2 has been used to measure social media popularity in Indonesia [23], the extent in which social commerce vendor characteristics influence consumer's use intention and the importance of an application's characteristics in consumer adoption [12]. Current research integrating IT adoption models into social commerce adoption studies in Asia demonstrates a consensus on the importance of investigating the consumer's intrinsic motivations in studying social commerce use behavior, identifying the need for a more intimate consideration of its adoption from the consumer's perspective.

Amongst IT adoption and user acceptance theories, the Unified Theory of Acceptance and Use of Technology is one of the most applied in the study of technology adoption. Initially proposed by Venkatesh et al. [26], the UTAUT model integrates eight previously established Technology Acceptance Models. Specifically, the factors of performance expectancy, effort expectancy, social influence, and facilitating conditions were well established in the literature as predictors for the user's behavioral intentions and use behavior. As business and applications grew to become more consumer-centric, a new model which considers the consumer's motivations was needed, leading to the development of the

extended Unified Theory of Acceptance and Use of Technology (UTAUT2) [8]. As stated by Venkatesh et al., this model has three primary goals: (1) to identify key constructs contributing to the adoption and use of technology from a general and consumer's perspective, (2) to make alterations in the existing relationships in the original UTAUT model, and (3) to introduce new relationships between constructs originally proposed in UTAUT.

In total, the UTAUT2 has 7 constructs, integrating the factors of hedonic motivation, price value, and habit into the original model. These three new constructs in UTAUT2 analyze adoption from the consumer's perspective in the following ways: (1) hedonic motivation: the amount of enjoyment users get when using the new technology [8], (2) price value: the comparison done by the consumer between the monetary cost of using the new system and its perceived benefits [8], and (3) habit: refers to the learned behavior users have when using the technology, maintaining both a direct and indirect effect in influencing behavioral intention [8].

*3.2. Proposed Model.* To address the research question, this study builds upon the theoretical foundation and recommendations proposed by Defiandry et al. [1] with the implementation of the UTAUT2 model. This study adopts the UTAUT2 model [8], with the lifestyle variable based on the task-technology fit model [29] and the consumer's prior experience, which has been previously studied as a contributing factor to technology adoption [30, 31], further elaborated below. These constructs are integrated into UTAUT2 leading to a theoretical model that consists of three conceptual dimensions, namely, technological, social, and economic. These constructs will lead to attitude and then behavioral intention, which is a further expansion this study applies to the UTAUT2 model. Figure 1 presents the proposed research model.

The technology dimension examines consumer motivation when adopting social commerce. It analyzes the advantages of the technology, the consumer's ability to use the technology, and the support they receive from the platform [8]. The technology dimension consists of the performance expectancy, effort expectancy, and facilitating conditions, taken from the UTAUT2 model.

The social dimension examines the socio-behavioral-related influences that can affect the consumer's motivation and willingness in technology adoption [30]. The social dimension includes social influence, habit, hedonic motivation, lifestyle, and prior experience. The lifestyle variable incorporated in the model indicates how technology adoption is heavily influenced by the fit between the technology and the user's needs. In this study, the lifestyle variable is used to measure the fit between social commerce platforms and the shopping needs of consumers in Indonesia. The second variable integrated into the model is a previous experience. The consumer's prior experience is pivotal in their adoption and use of a platform involving a considerable degree of uncertainty [2]. In social commerce, prior experience is gathered through the consumer's direct experience with the vendor and through the reviews or ratings left by

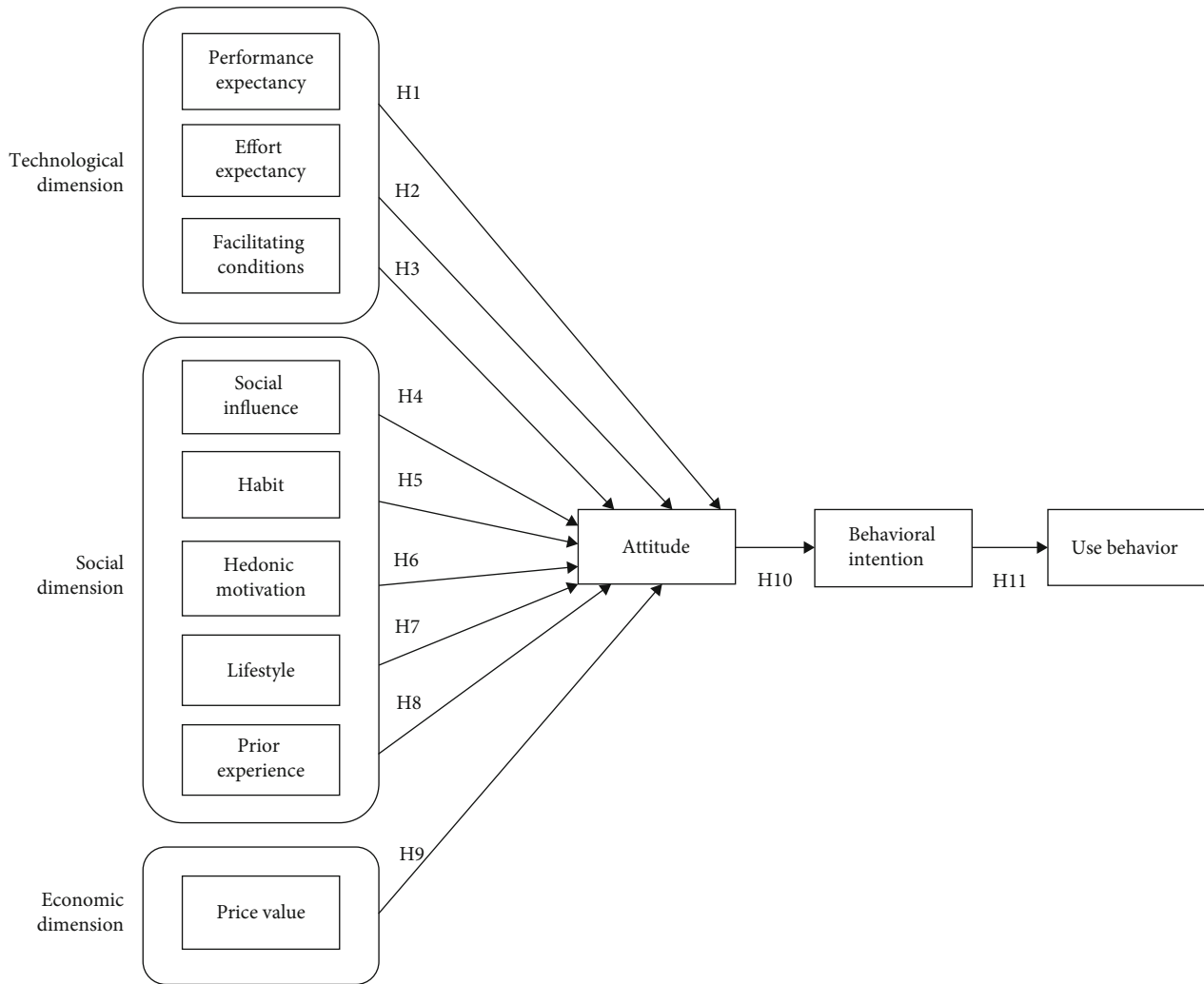


FIGURE 1: Proposed research model.

previous users [32]. In this study, the prior experience construct will be applied to measure the extent in which the consumer's prior experience influences their behavior towards social commerce as a whole.

The economic dimension examines the consumer's perceptions of the financial benefit or loss when adopting a new technology. The construct included in this dimension is price value, referring to the extent that the consumer is affected financially when using social commerce [8]. Previous studies on technology adoption in Asia have indicated economic benefit to be a highly influential factor in the consumer's decision to use social media adoption [15, 17].

**3.3. Hypothesis Development.** In response to the research question, this study adopts the UTAUT2 model to investigate the adoption factors of social commerce in the context of Indonesia's retail industry. Consequently, the following research hypotheses were developed.

**3.3.1. Performance Expectancy.** The performance expectancy construct can be measured by the amount of benefits the consumers perceive in using social media to shop. The more

efficiency social media brings, the more likely customers are to use it as a shopping platform [2]. Social commerce has a multitude of features built in with the goal of facilitating the consumer's shopping process, including product demo, user ratings, and direct customer support [2, 11, 13]. The mentioned features are built in and have the potential to improve the user's attitude and adoption of social commerce [8, 33]. Based on this, the first hypothesis proposed is the following:

*Hypothesis 1.* Performance expectancy will positively influence the consumer's attitude towards social commerce.

**3.3.2. Effort Expectancy.** The effort expectancy construct can be measured by the extent in which consumers perceive social media as an easy or effortless tool to use for shopping [11]. Previous studies have identified that if consumers perceive social commerce as easy or effortless, then they would be more likely to adopt and continue using it [11, 34]. When looking for a new technology to use, consumers are looking for something with the least amount of effort to use, which contributes to the importance of customer engagement and



support in social commerce [8, 12]. Therefore, the second hypothesis is the following:

*Hypothesis 2.* Effort expectancy will positively influence the consumer's attitude towards social commerce.

*3.3.3. Facilitating Conditions.* Facilitating conditions are described as the availability of technological or operational support consumers can get when shopping through social media [35]. This support could be in the form of direct messaging functions, user ratings, and recommendation systems based on the consumer preferences. In social commerce, there is a need for the vendor to maintain strong engagement with their customers to maintain communication and support [11]. The more support consumers have when using the technology, then the more likely they are to adopt and continue to use it [4, 8, 36]. Therefore, the third hypothesis is the following:

*Hypothesis 3.* Facilitating conditions will positively influence the consumer's attitude towards social commerce.

*3.3.4. Social Influence.* Social influence refers to the extent in which the consumer's external social environment influences their behavior towards social commerce [6, 8]. Previous studies have established the role of social influence in social commerce adoption through customer engagement and recommendation systems. Through such systems, consumers receive product information, user reviews, and social elements [6, 34, 35]. The importance of this factor is also established with existing literature indicating the importance of a vendor's social agreeability to maintain positive customer feedback and recommendations [13]. Based on this concept, the fourth hypothesis is the following:

*Hypothesis 4.* Social influence will positively influence the consumer's attitude towards social commerce.

*3.3.5. Habit.* Habit refers to the extent in which the consumer's social media habit and previous experiences are contributing to their drive in using social commerce [8, 12, 37]. It has previously been established that the user's habitual use or enjoyment of the platform will expose them more to social commerce brands, which in turn, will increase their chances in using social commerce [7, 11]. Therefore, the fifth hypothesis is the following:

*Hypothesis 5.* Habit will positively influence the consumer's attitude towards social commerce.

*3.3.6. Hedonic Motivation.* Hedonic motivation refers to the measure of enjoyment users get when using social media as a platform for shopping [8, 11]. Enjoyment has been identified as a contributing factor in social commerce adoption, with vendors aiming to maintain engagement and develop a customer-curated experience for their target demographics [11, 12]. Furthermore, a previous study by Nadeem et al. [38] has also identified consumer engagement to be influential to customer satisfaction and brand loyalty towards social

commerce platforms. Hence, the sixth hypothesis proposes the following:

*Hypothesis 6.* Hedonic motivation will positively influence the consumer's attitude towards social commerce.

*3.3.7. Lifestyle.* The lifestyle construct is one of the two additional constructs added in this study. This construct refers to the degree in which the specific technology fits into the user's lifestyle [19, 35]. Previous literature has established how social commerce is developing to facilitate the consumer's lifestyles. Depending on the vendor's demographic, the shop might focus on specific aspects of the experience, such as group buying or easy price comparisons [9, 11]. In application to this study, this construct is used to measure the fit between the functionalities of social media and the consumer's shopping goals. Thus, the seventh hypothesis is the following:

*Hypothesis 7.* Lifestyle will positively influence the consumer's attitude towards social commerce.

*3.3.8. Prior Experience.* Prior experience is the second construct integrated into the UTAUT2 variable for this study. This construct refers to the user's previous experience with social commerce vendors, which could contribute to the development of trust [39]. Previous studies have established that the consumer's prior experience with the company would positively influence their attitude and trust formation towards social commerce, provided that their experiences were positive [13, 40]. Furthermore, a study by Al-Omouh et al. [16] found that countries with collectivistic values have a significant impact in social commerce adoption, as they are very careful when selecting new technologies to do transactions with, emphasizing the importance of this fact. This study is aimed at measuring the importance of prior experience in dealing with social commerce vendors amongst Indonesian consumers, resulting in the following hypothesis:

*Hypothesis 8.* Prior experience will positively influence the consumer's attitude towards social commerce.

*3.3.9. Price Value.* Previous studies of social commerce in an Asian context have identified a positive relationship between economic benefits and social commerce adoption [8, 11, 16]. Social commerce also presents more options that the consumers can choose from. A study has identified that the motivation in finding the most favorable price for a product is a shared motivation amongst social commerce users [17], highlighting the importance of this factor. In consideration of these results, this study will incorporate this factor as a measure of social commerce adoption. Thus, the ninth hypothesis is as follows:

*Hypothesis 9.* Price value will positively influence the consumer's attitude towards social commerce.

*3.3.10. Attitude.* The Theory of Reasoned Action (TRA) and the Technology Acceptance Model (TAM) highlight the influence of user attitude on behavioral intention, which,

in turn, predicts the use behavior of technology [6, 24, 41]. In previous extensions of the UTAUT2 model, attitude has been found to be amongst the most applied model extensions [42]. Multiple studies have also confirmed a positive influence between attitude and user's intention to adopt a new technology [33, 43, 44]. In the context of this study, attitude is introduced to the UTAUT2 to investigate the extent in which consumer's attitude towards social commerce affects behavioral intention. Attitude is applied as a measure of the consumer's outlook and reaction when using social commerce. Studies have found that if the consumer maintains a positive attitude during their usage, then the more likely they are to adopt and continue using social commerce [8, 11, 13, 26]. Hence, the following hypothesis is proposed:

*Hypothesis 10.* Attitude towards the use of social commerce is a positive predictor for behavioral intention.

*3.3.11. Behavioral Intention and Use Behavior.* The behavioral intention construct has been used as a predictor of use behavior in numerous studies on technology adoption [8, 25]. In line with the original UTAUT2 model, this study also proposes that behavioral intention will have a positive influence on social commerce adoption. Previous studies have also established a positive connection between the consumer's behavioral intention and their overall usage of social commerce [11, 12]. The intention to adoption could lead to more usage and time spent on purchasing behavior on social media platforms by consumers [8, 45]. Following this, the time spent on social commerce per month is applied as a method to measure use behavior. Thus, the eleventh hypothesis states the following:

*Hypothesis 11.* There will be a positive relationship between behavioral intention of Indonesian social commerce users and their use of social media platforms to do retail shopping.

*3.4. Sample and Procedure.* This study adopts a quantitative research method. The quantitative method is applied as it is suitable for testing new theories and research models to be applied to a broad range of participants, which fits the scope of data collection on Indonesian social commerce users [46, 47]. The unit of analysis in this study is social media users in Indonesia who have experience in shopping through social media platforms. The questionnaire developed for this study can be found under Table 1 (survey questionnaire). All the data were collected in the English language. For the main data collection, online survey invitations were sent to a total of 200 users. Data was collected between December 2019 and January 2020.

Participant recruitment used the snowball method, starting with personal connections in Indonesia. Considering there are no definite statistics on the number of social commerce vendors and shoppers in Indonesia, this method was applied with the objective of maximizing the range of backgrounds for the participants and the sample size [48, 49]. We collected a total of 108 valid responses from 200 invitations, giving a 54 percent response rate. One explanation for the lower response rate was that invitations were sent out during

the end of year national holidays in Indonesia, which might have influenced the invitees' time or motivation to complete the questionnaire.

To be considered for the study, potential participants satisfied the following requirements: (1) participants must be at least 18 years old or above; (2) participants must have not lived continuously outside of Indonesia for more than 3 years; (3) participants must be able to read, speak, and write in English; and (4) participants must have had experience in using social media for the purpose of shopping as a consumer.

This research involves gathering quantitative data from human participants through a questionnaire. Consequently, ethics approval has been received before data collection started from the IRB of Carnegie Mellon University to ensure that the study is carried out in an ethical manner (IRB protocol number: IRBSTUDY2019\_0010).

## 4. Results and Data Analysis

### 4.1. Descriptive Analysis

*4.1.1. Descriptive Results.* Table 2 presents the descriptive statistics of the respondents. In terms of the respondent's demographics, the participant pool consists of 52 percent male and 48 percent female, providing a relatively balanced gender distribution. The majority of participants are in the age range of 21-29 (31 percent) and 40-49 (30 percent). There were overall fewer participants in the 50+ (21 percent), 30-39 (14 percent), and 18-20 (4 percent) ranges. In terms of the participant's education level, 60 percent of the respondents held a bachelor's degree, followed by a master's degree (26 percent) and high school (14 percent). Moreover, participants spent an average of 2-3 hours (37 percent) every day on social media, which is in line with studies by Kemp [5], indicating that Indonesians spend an average of 3 hours and 14 minutes every day on social media.

Data collected was compiled and processed using quantitative data analysis software. Specifically, the PLS approach using the SmartPLS software is adopted to generate results for the measurement model and structural model. This technique allows a robust data analysis of high complexity models with a smaller sample size and a large number of independent variables [54, 55]. The sample size could be determined by 10 times the number of a single construct [56], meaning that 120 responses are needed for our research model. Also, Hair et al. [55] indicate how the PLS-SEM method is the most effective when the participants in a study are representative of the sample it is targeting. The sample of social commerce users that took part in this study represents the Indonesian population from varied demographics. When considering our current demographic and sample size, the PLS approach is found to be the most suitable for this research.

*4.1.2. Social Media for General Use.* Study participants were asked which social media platforms they prefer for general use. They were able to identify more than one platform in this question. The results shown in Table 3 that WhatsApp (81 percent) is the most popular social media platform in

TABLE 1: Survey questionnaire.

Construct	Measurement items	References
Performance expectancy	PE1: I find social media useful in my daily life. PE2: using social media helps me accomplish things more quickly. PE3: using social media increases my productivity.	[6, 8, 26, 36, 44, 50]
Effort expectancy (EE)	EE1: learning how to use social media is easy for me. EE2: my interaction with social media is clear and understandable. EE3: I find social media easy to use. EE4: it is easy for me to become skillful at using social media.	[6, 8, 26, 36, 51]
Social influence (SI)	SI1: people who are important to me think that I should use social media. SI2: people who influence my behavior think that I should use social media. SI3: people whose opinions I value prefer that I use social media.	[6, 8, 26, 34, 51]
Price value (PV)	PV1: using social media is reasonably priced. PV2: using social media is a good value for the money. PV3: at the current price, social media provides a good value.	[6, 8, 11]
Facilitating conditions (FC)	FC1: I have the resources necessary to use social media. FC2: I have the knowledge necessary to use social media. FC3: social media is compatible with other technologies I use. FC4: I can get help from others when I have difficulties using social media.	[6, 8, 18, 26, 36]
Lifestyle (LS)	LS1: using social media is compatible with my shopping style. LS2: using social media fits well with the way I like to shop. LS3: using social media fits my lifestyle.	[6, 9, 11, 29, 52]
Hedonic motivation (HM)	HM1: using social media is fun. HM2: using social media is enjoyable. HM3: using social media is very entertaining.	[8, 11]
Habit (H)	H1: using social media has become a habit for me. H2: I am addicted to using social media. H3: I must use social media.	[8, 12, 37, 43]
Attitude (ATT)	ATT1: using social media for shopping is a good idea. ATT2: social media makes shopping more interesting. ATT3: using social media for shopping is fun. ATT4: shopping on social media makes me feel satisfied.	[6, 8, 26, 43]
Behavioral intention (BI)	BI1: I intend to continue using social media for shopping in the future. BI2: I will always try to use social media for shopping in my daily life. BI3: I plan to continue to use social media for shopping frequently.	[6, 8, 12, 26]
Prior experience (PEX)	PEX1: based on my experience with social media vendors in the past, I know that it is honest. PEX2: based on my experience with social media vendors in the past, I know that it cares about the customers. PEX3: based on my experience with social media vendors in the past, I know that it provides good service.	[10, 12, 13, 39, 53]
Use behavior	AvgSocShop: an average amount of time spent (by hours) on shopping via social media platforms per month.	[8, 11, 12, 16, 25, 45]

Indonesia, followed by Instagram (66 percent), Facebook (42 percent), LINE (24 percent), and Twitter (22 percent). These results are in line with the findings from Kemp's [5] report on the local social media usage, which identifies YouTube as the most popular social media platform in Indonesia

(93.8 percent usage), followed by WhatsApp (87.7 percent), Instagram (86.6 percent), and Facebook (85.5%).

4.1.3. *Social Media for Commerce.* Participants were also asked about their preferred social media platforms to shop

TABLE 2: Descriptive statistics of demographic result.

Demographics	Description	Frequency	Percentage
Gender	Male	56	52%
	Female	52	48%
Age	18-20	5	4%
	21-29	33	31%
	30-39	15	14%
	40-49	32	30%
	50+	23	21%
Education	High school	15	14%
	Bachelor's degree	65	60%
	Master's degree	28	26%
Average time spent on social media per day	Less than 2 hours	17	16%
	2-3 hours	40	37%
	4-5 hours	34	31%
	6-7 hours	7	6%
	7+ hours	10	10%

TABLE 3: Descriptive results of social media usage.

Preferred social media	<i>n</i>	Frequency
Facebook	45	42%
Instagram	71	66%
WhatsApp	88	81%
Twitter	24	22%
LINE	26	24%
Other	3	3%

online. As with the previous subsection, participants were able to identify more than one platform in this question. The results show that Instagram (60 percent) is the most popular platform for commerce amongst Indonesian, followed by WhatsApp (39 percent), Facebook (18 percent), LINE (6 percent), and Twitter (2 percent).

The widespread use of Instagram for social commerce could be explained in twofold. Firstly, the accessibility of Instagram allows small businesses to establish their commercial presence with minimum cost and time [57]. Secondly, Instagram users in Indonesia are generally well off, with 69 percent of Instagram users in Indonesia having a college degree and a 1.5 times higher income than the national average [58]. With its high popularity and its financially capable user base, Instagram has become one of the most favorable platforms to start social media businesses.

Furthermore, the findings in Table 4 show a clear difference in social commerce preferences between Indonesia and other regions. On an Asian level, a study by Leeraphong and Papisratorn [19] shows that LINE, a popular social media platform in Asia, is the most preferred platform for social commerce in Thailand, with over 69.1 percent of usage. This shows a significant difference to our findings, with only 6 per-

cent of Indonesians preferring to use LINE for commerce. On an international level, the study findings have shown the popularity of Facebook and Twitter for commerce.

*4.1.4. Product Preferences in Social Commerce.* Study participants were also asked to indicate their preferred categories of items when buying products on social media. Results shown in Table 5 indicated that participants were able to indicate more than one category. A significant portion of respondents indicate that most consumers preferred to purchase items related to fashion (55 percent), food and beverage (44 percent), electronics (32 percent), household items (29 percent), sporting goods (21 percent), grocery (12 percent), and entertainment (5 percent). This result is in line with a study on the online shopping behavior of Indonesians by Simangunsong [59]. His study found that, as of 2018, Indonesian consumers preferred to shop for fashion items (43 percent), followed by food and beverage (35 percent) and technology items (17 percent).

The questionnaire also asked participants to indicate their social commerce behavior. Results from this survey show that Indonesian consumers are more likely to use social media for browsing product or service information (89 percent), followed by product inquiry (52 percent), placing orders (51 percent), payment (36 percent), and after-sales communication (31 percent). Results of this study are in sync with the common purpose of social commerce throughout Asia. As found by Hoppe et al. [32], over 80 percent of Southeast Asian countries use social media like Instagram and LINE in the context of shopping with the goal of researching products or contacting sellers.

The goal of using social commerce of Indonesian users matches that of the western world to a certain extent. Blazquez et al. [60] studied the effects of social commerce on consumer's browsing motivation with a UK demographic. Study results indicate that western consumers are motivated by informational support (54.9 percent), followed by community commitment (26.4 percent) and vendor-consumer trust (7.7 percent), matching Indonesian social commerce behavior to a certain extent. Moreover, Blazquez et al. found that the content of social commerce platforms (48 percent) was the most important in motivating purchase, followed by website confidence (18 percent), consumer privacy (17 percent), and ease of use (17 percent).

*4.2. Evaluating the Measurement Model.* The results shown in Table 6 suggest that the measurement model demonstrates sufficient discriminant validity as suggested by Chin [54]. Chin states that loading values should all be greater than 0.707. Evidently, all loading results with the exception of one item (PE3) were higher than 0.707. However, the value of PE3 is still in the acceptable range, as Chin mentioned that the 0.5 to 0.6 value range is still acceptable during the early stages of scale development. All Cronbach's alpha scales were also above 0.7, meeting the threshold for valid internal consistency. Furthermore, all AVE values exceeded 0.5 for all items, with performance expectancy (PE) being the lowest (0.740) and social influence (SI) being the highest (0.888).



TABLE 4: Descriptive results of preferred social media.

Preferred social media	Medium	<i>n</i>	Frequency
Preferred social media for commerce	Facebook	19	18%
	Instagram	65	60%
	WhatsApp	42	39%
	Twitter	2	2%
	LINE	7	6%
	Other	36	33%
Preferred device for social commerce	Smartphone	92	85%
	Laptop	32	30%
	Tablet	21	19%
	Other	4	4%

TABLE 5: Descriptive result of consumer's social commerce behavior.

Preference	Description	<i>n</i>	Frequency
Preferred industry	Groceries	13	12%
	Fashion	59	55%
	Sporting goods	23	21%
	Household items	31	29%
	Food and beverage	48	44%
	Electronics	35	32%
	Entertainment	5	5%
Social commerce activity	Browsing information about products/services	96	89%
	Product/service inquiry	56	52%
	Placing orders	55	51%
	Payment	39	36%
	Tracking on product/service delivering	32	30%
	After sales communication	33	31%

This study also tested for multicollinearity using the variance inflation factor, with a sample of inner model results shown in Table 6. The results show that the values of the latent variables for measurement and structural models were all less than 3, concluding that there was no multicollinearity problem amongst the predictor constructs [55].

The cross-loading procedure was also applied using SmartPLS. The results indicate good loading amongst construct variables, with each indicator showing higher values compared to its corresponding latent variables. This implies that the loading separates each latent variable, confirming the validity of the results as demonstrated in Table 6. Moreover, Table 7 shows that the square root of AVE is greater than its corresponding diagonal variables, confirming the discriminant validity in this study [61]. In addition, the heterotrait-monotrait ratio (HTMT) values were tested for discriminant validity with a satisfactory result. As shown in

Table 8, the values were less than the threshold of 0.90 [55], thus suitable.

**4.3. Structural Model.** Following the confirmation of the validity of the measurement model, an overview of the structural model result (cross loading values and path coefficients) is presented in Figure 2. The predictive capability of a model can be measured by the values of the dependent variables. The *R*-square of 0.554 (0.503 for *R*-square adjusted value) for the behavioral intention construct indicates that over 55.4 percent of its construct variance is explained.

In the structural model, the path coefficient values indicate the link amongst constructs. All of the variables are connected in a way that resembles the proposed model, with the path coefficient standardized between variables. To generate these values, a bootstrapping analysis procedure was conducted, with the results shown in Table 9. Table 9 presents the statistical outcomes, examining each hypothesis proposed in the model, and Table 10 summarizes the results of each hypothesis. The results can be processed in the context of the three conceptualized dimensions. Starting with the technological dimension, Hypothesis 1 (performance expectancy) and Hypothesis 2 (effort expectancy) were rejected. Hypothesis 1 shows the negative path coefficient of -0.093 and the low *t*-statistic of 0.725 while Hypothesis 2 shows the negative path coefficient of -0.057 and a low *t*-statistic of 0.549.

On the other hand, the acceptance of Hypothesis 3 (facilitating conditions) indicates that the degree of support consumer receive has a significant influence on their attitude towards social commerce. The construct shows a positive path coefficient of 0.295 and a high *t*-statistic of 2.591, making it significant at 0.01 significance level. The acceptance of Hypothesis 6 suggests how Indonesian social commerce consumers actively seek and benefit from operational support, which includes direct communication with the vendor and reviews left by other consumers [6].

With the social dimension, Hypothesis 7 (lifestyle) was accepted. The lifestyle component had the path coefficient of 0.229 and a high *t*-statistic of 2.464, suggesting that the consumer's usage of social media in their daily lives contributes to their adoption of social commerce. Meanwhile, the rejection of Hypothesis 4 (social influence), Hypothesis 5 (habit), Hypothesis 6 (hedonic motivation), and Hypothesis 8 (prior experience) suggests that the consumer's use of social commerce is highly disconnected from their preestablished motivation for social media and their surrounding social environment. The rejected social constructs show low path coefficients, with -0.157 for social influence, 0.026 for hedonic motivation, 0.094 for habit, and 0.068 for prior experience.

On the other hand, the economic dimension had full acceptance with Hypothesis 9 (price value) showing the positive path coefficient of 0.326 and a high *t*-statistic of 2.971, making it significant at 0.01 significance level. Lastly, the attitude construct was also accepted, with the path coefficient of 0.669 and *t*-statistics of 10.973, which validates the effect of the construct on behavioral intention.

TABLE 6: Statistical outcomes of the measurement model descriptive result of social media usage.

Construct and items	PLS loadings	<i>t</i> -statistics	Significant level	Composite reliability	AVE	Cronbach's alpha	VIF
Performance expectancy							
PE1	0.907	5.700	0.01	0.818	0.604	0.740	1.650
PE2	0.738	3.609	0.01				
PE3	0.666	3.077	0.01				
Effort expectancy							
EE1	0.843	19.935	0.01	0.909	0.715	0.867	1.907
EE2	0.813	13.567	0.01				
EE3	0.900	35.419	0.01				
EE4	0.823	20.960	0.01				
Social influence							
SI1	0.876	14.320	0.01	0.930	0.816	0.888	1.718
SI2	0.926	23.265	0.01				
SI3	0.908	14.809	0.01				
Price value							
PV1	0.856	26.624	0.01	0.888	0.725	0.812	2.423
PV2	0.868	26.670	0.01				
PV3	0.830	16.930	0.01				
Facilitating conditions							
FC1	0.843	21.307	0.01	0.885	0.658	0.827	2.572
FC2	0.793	11.659	0.01				
FC3	0.851	24.158	0.01				
FC4	0.753	14.369	0.01				
Lifestyle							
LS1	0.824	13.089	0.01	0.883	0.715	0.807	2.224
LS2	0.870	30.417	0.01				
LS3	0.854	18.313	0.01				
Hedonic motivation							
HM1	0.942	73.849	0.01	0.948	0.860	0.919	2.797
HM2	0.919	21.805	0.01				
HM3	0.921	50.329	0.01				
Habit							
H1	0.832	18.745	0.01	0.882	0.715	0.799	2.221
H2	0.909	37.604	0.01				
H3	0.791	11.473	0.01				
Attitude							
ATT1	0.867	27.244	0.01	0.886	0.662	0.827	2.064
ATT2	0.784	10.864	0.01				
ATT3	0.866	26.545	0.01				
ATT4	0.729	8.615	0.01				
Behavioral intention							
BI1	0.835	31.083	0.01	0.892	0.734	0.822	0.00
BI2	0.885	19.735	0.01				
BI3	0.850	14.921	0.01				

TABLE 6: Continued.

Construct and items	PLS loadings	<i>t</i> -statistics	Significant level	Composite reliability	AVE	Cronbach's alpha	VIF
Prior experience							
PEX1	0.865	8.808	0.01	0.888	0.725	0.813	1.564
PEX2	0.840	7.551	0.01				
PEX3	0.848	10.650	0.01				

## 5. Discussions and Contributions

This section will discuss the results on the basis of the three proposed dimensions, starting with the technological, followed by the social and economic. Based on these results, it is evident that the economic dimension contributes the most towards social commerce adoption amongst Indonesian consumers, followed by the technological and social dimensions.

*5.1. Technological Dimension.* The empirical findings relevant to the technological dimension confirm that social commerce consumers are aware of the limitations of social media platforms for engaging in social commerce. The rejection of Hypothesis 1 (performance expectancy) challenges the previously identified positive effects of ease of shopping experience with social commerce [36, 50]. In fact, social media does not provide a single integrated end-to-end platform for conducting e-commerce transactions. It is often the case that consumers would need to use multiple media channels to conclude their purchase. For instance, a consumer may use a social network to find products and reviews, use another instant messaging tool for communicating with the vendor, use a third tool for payment, etc. This is neither convenient nor efficient, particularly when compared to mature e-commerce platforms [62]. Nonetheless, social commerce capitalizes on the consumers' existing presence and familiarity with such media, contributing to the rejection of Hypothesis 2 (effort expectancy). The results indicate that the value proposition of social commerce lies more on the consumer's intrinsic motivations, whether social or economic, rather than the efficiency of the platform.

With the acceptance of Hypothesis 3 (facilitating conditions), previous social commerce studies in Asia have confirmed the influence of a support system, highlighting its importance on the consumer's decision to use the platform [14]. Studies on social commerce in the region also found that the consumers actively seek ways to optimize their shopping process, whether it is through customer reviews or direct communication with the vendor for assistance [6, 32]. Furthermore, it has also been found that amongst Indonesian consumers, the incentive to purchase is highly influenced by attractiveness and trustworthiness of the vendor's associates [7]. This further highlights the importance of implementing support systems such as endorsements and product recommendations.

A holistic view of the hypothesis results here points out that while social media platforms are not optimal for social commerce, they still satisfy a commercial need from

the consumer's perspective, yet necessitate extra support for consumer's given that communications are dispersed over multiple social media channels.

*5.2. Social Dimension.* The findings on the social dimension brought up numerous points. The accepted construct (lifestyle) indicates how the consumer's perceptions on how social commerce would fit into their shopping lifestyle contribute significantly towards their attitude towards social commerce. The acceptance of Hypothesis 7 (lifestyle) shows how this variable had influence on the consumer's attitude towards social commerce. The acceptance of this hypothesis confirms the integration of social media into consumer's daily lives and identities, which is well established in past studies [1, 6, 7]. In Indonesia and its surrounding Association of Southeast Asian Nation (ASEAN) countries, social media has been found to be a widely used tool for self-representation and entertainment [63]; this study unveils that this lifestyle choice is now extending into the consumer's purchasing behavior. This finding by Salim et al. [63] reinforces this result, highlighting the need for retail industries in Indonesia to provide strong support for their consumer base to match their established lifestyle and shopping needs.

On the other hand, the rejection of Hypothesis 4 (social influence), Hypothesis 5 (habit), and Hypothesis 6 (hedonic motivation) construct in the social dimension indicates that the consumer's use of social commerce is highly disconnected from their social environment, hedonic motivations, and their previously established habits in social media use. Consumers are therefore developing new norms for transacting online, and they are favoring social commerce for necessities such as food and clothing as highlighted in the descriptive statistics. This goes against the ingrained assumptions of social media being predominantly associated with luxury rather than necessity products [64]. Furthermore, this result challenges the findings by Nadeem et al. [38], indicating that consumer engagement increases satisfaction and brand loyalty. This could be explained by the increasing need for global orientation and engagement since the beginning of the COVID-19 pandemic.

The rejection of Hypothesis 4 (social influence) is particularly interesting as the negative path coefficient implies that the construct actually has the inverse effect on social commerce adoption. While previous studies have confirmed the impact of this construct on technology adoption [16, 42, 65, 66], studies that indicate a negative effect of social influence are still very limited. The results of this study suggest that the consumer's attitude towards the new technology might

TABLE 7: Correlation of latent constructs.

	Attitude	Behavioral intention	Effort expectancy	Facilitating conditions	Habit	Hedonic motivation	Lifestyle	Performance expectancy	Price value	Social influence	Prior experience	Use
ATT	0.814											
BI	0.669	0.857										
EE	0.372	0.384	0.845									
FC	0.583	0.485	0.587	0.811								
H	0.442	0.480	0.381	0.379	0.846							
HM	0.511	0.450	0.564	0.599	0.638	0.927						
LS	0.570	0.585	0.393	0.476	0.563	0.566	0.846					
PE	0.268	0.260	0.419	0.523	0.159	0.267	0.391	0.777				
PV	0.574	0.381	0.479	0.597	0.380	0.549	0.456	0.346	0.852			
SI	0.239	0.284	0.38	0.292	0.402	0.445	0.386	0.289	0.518	0.903		
PEX	0.384	0.478	0.441	0.400	0.386	0.387	0.483	0.358	0.375	0.362	0.851	
USE	0.136	0.207	0.060	0.006	0.131	0.053	0.286	0.110	0.120	0.136	0.192	1

TABLE 8: HTMT values.

	ATT	BI	EE	FC	H	HM	LS	PE	PV	SI	PEX
ATT											
BI	0.786										
EE	0.433	0.452									
FC	0.691	0.562	0.706								
H	0.541	0.618	0.452	0.480							
HM	0.583	0.510	0.631	0.680	0.741						
LS	0.669	0.700	0.457	0.564	0.722	0.668					
PE	0.272	0.329	0.494	0.575	0.240	0.256	0.480				
PV	0.694	0.459	0.575	0.728	0.477	0.641	0.557	0.415			
SI	0.271	0.327	0.441	0.340	0.484	0.498	0.447	0.347	0.614		
PEX	0.455	0.590	0.517	0.498	0.481	0.442	0.611	0.488	0.470	0.413	
Use	0.150	0.233	0.065	0.086	0.156	0.054	0.304	0.191	0.136	0.137	0.214

be affected by external influences outside of their social environment. Alalwan et al. [65] argue that in the context of studying new technology adoption, the rejection of the social influence factor can be impacted by the context of use (whether using the technology is mandatory or voluntary), the country's development stage (developing country versus developed country), individual attitude, perception, and skills when in using the technology [65]. This in itself is very interesting and may hint towards a divergence from the previously identified role of social influence on social commerce adoption [34]. It seems that consumers may be developing a distinct online persona, which is more independent and assertive to normative pressures. This indeed warrants further investigation.

Furthermore, while consumers' prior experience with vendors has been found to be influential on their adoption and continued use of social commerce [39, 40], this construct was rejected in the study (Hypothesis 8 prior experience). This suggests that the consumer's past experience does not dictate their future interactions with other social commerce

vendors in the future. It denotes a high degree of consumer pragmatism along with a wide selection of vendors a consumer can choose for engaging in social commerce [17, 40]. This challenges previously established assertions on the importance of prior experience in e-commerce and social commerce [2, 12, 67, 68] which identified that the customer's experience and trust with the platform influences their adoption of social commerce. It is important to note here that social commerce payments are usually made on reliable third-party websites [68] and not on social media platforms, suggesting that interactions within the platform itself are low risk, especially when coupled with privacy assurances for building trust [69].

The study's results therefore suggest that a negative prior experience with a vendor does not impede Indonesian consumers from engaging in social commerce due to their pragmatism and the wide variety of vendors available. Consumers are also developing new norms for transacting online and favoring social commerce for purchasing necessity items.



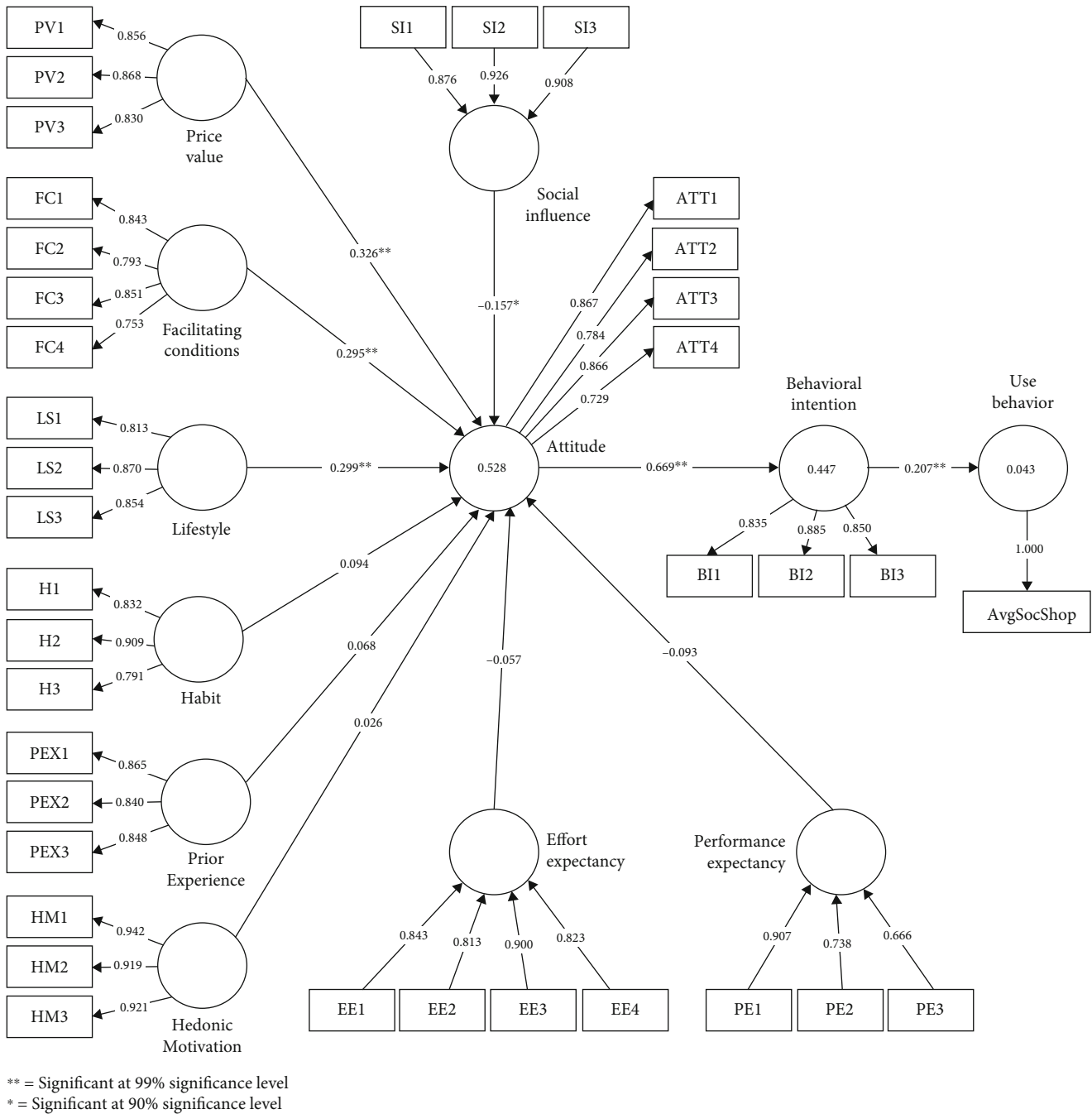


FIGURE 2: Structural model results.

5.3. *Economic Dimension.* As shown through the acceptance of Hypothesis 9 (price value), our results strongly confirm the influence of economic benefit on the consumer’s attitude towards social commerce. Several factors affect the economic dimension, including the high social media population in Indonesia [1, 5], the availability of myriad products and services online leading to higher competition, the potential for a more personalized commercial experience and lower costs [11, 15, 16], and the entrepreneurial fervor for many micro-SMEs in Indonesia [6]. In combination, these factors con-

tribute to dynamic economic incentives for consumers to engage in social commerce, which intensified competition and improved price value. Social commerce could also be contributing to the emergence of network effects which add further value to relationships on social commerce and propagate their value on social media. This could explain, at least in part, the rapid growth of social commerce in Indonesia [17, 18].

Other economic incentives relating to economies of scale (through vendors being able to increase their production

TABLE 9: Summary of path coefficient test.

Construct and items	Actual effect	Path coefficient	Standard deviation	Observed <i>t</i> -statistics	Significance level
Performance expectancy → attitude	-	-0.093	0.129	0.725	Not significant
Effort expectancy → attitude	-	-0.057	0.104	0.549	Not significant
Facilitating conditions → attitude	+	0.295	0.114	2.591	99%
Social influence → attitude	-	-0.157	0.088	1.778	Not significant
Habit → attitude	+	0.094	0.110	0.856	Not significant
Hedonic motivation → attitude	+	0.026	0.117	0.225	Not significant
Lifestyle → attitude	+	0.299	0.121	2.464	99%
Prior experience → attitude	+	0.068	0.113	0.601	Not significant
Price value → attitude	+	0.326	0.110	2.971	99%
Attitude → behavioral intention	+	0.669	0.061	10.973	99%
Behavioral intention → use behavior	+	0.207	0.080	2.592	99%

TABLE 10: Summary of testing results based on the structural model.

Construct	Research hypothesis	Results
Performance expectancy	H1: performance expectancy will positively influence the consumer's attitude towards social commerce.	Reject
Effort expectancy	H2: effort expectancy will positively influence the consumer's attitude towards social commerce.	Reject
Facilitating conditions	H3: facilitating conditions will positively influence the consumer's attitude towards social commerce.	Accept
Social influence	H4: social influence will positively influence the consumer's attitude towards social commerce.	Reject
Habit	H5: habit will positively influence the consumer's attitude towards social commerce.	Reject
Hedonic motivation	H6: hedonic motivation will positively influence the consumer's attitude towards social commerce.	Reject
Lifestyle	H7: lifestyle will positively influence the consumer's attitude towards social commerce.	Accept
Prior experience	H8: prior experience will positively influence the consumer's attitude towards social commerce.	Reject
Price value	H9: price value will positively influence the consumer's attitude towards social commerce.	Accept
Attitude	H10: attitude towards the use of social commerce is a positive predictor for behavioral intention.	Accept
Behavioral intention	H11: there will be a positive relationship between behavioral intention of Indonesian social commerce users and their use of social media platforms to do retail shopping.	Accept

while reducing their cost), ubiquity (with vendors being able publicize and interact with consumers anytime and anywhere), and transparency (especially via the public online reviews that consumers post about vendors) could all be contributing to the consumer's perceived price value of goods and services available through social commerce. These warrant further research.

*5.4. Attitude and Behavioral Intention.* The acceptance of Hypothesis 10 (attitude) validates the connection between attitude and behavioral intention. It indicates that the way consumers view social commerce significantly contributes to their behavioral intention to engage in it. This is in line

with prior studies by Klopping and McKinney [52] that found that the consumer's decision on using a shopping platform is based on their attitude and motivations in accessing it. Furthermore, the acceptance of Hypothesis 11 (behavioral intention) validates the positive relationship between the construct and their use of social media platforms. This can be further confirmed with research findings by Krishnan and Hunt [41], stating that the consumers' positive attitude acts as a significant predictor for positive usage behavior.

In summary, we aimed to investigate the following research question: "What factors affect the consumer's adoption of social commerce in the Indonesian retail sector?" Our

examination uncovered several factors influencing the consumer's adoption of social commerce. In order to answer the research question, we developed the theoretical foundation proposed by Defiandry et al. [1] and operationalized a research model based on UTAUT2. We found evidence to suggest that economic benefit, lifestyle, and facilitating conditions are key factors affecting consumers' attitude and intention to engage in social commerce.

## 6. Contribution

From a theoretical perspective, this study contributes to IT adoption theories through the introduction of a model based on the extended Unified Theory of Acceptance and Use of Technology (UTAUT2) [8] incorporating the experience and lifestyle concept. The factors of performance expectancy, effort expectancy, lifestyle, facilitating conditions, habit, trust, and hedonic motivations were aligned to explain attitude and then behavioral intention. This is because attitude has been identified as a strong predictor of behavior based on the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM) [6, 27, 41], and previous studies which confirm the positive influence between the attitude and the user's intention to adopt new technologies [33, 43, 44]. Furthermore, this study is the first on Indonesian social commerce to address adoption factors using a multidimensional model, specifically through the development of the technological, social, and economic dimensions. Results of this study highlight social and economic dimensions as key motivators for social commerce in Indonesia, emphasizing how Indonesian consumers select a suboptimal shopping platform with the goal of maximizing their economic value. The adapted model was tested and validated and may be deployed for investigating the motivation of social commerce adoption amongst consumers (an understudied area given the primarily organizational focus in present literature) in Asia and beyond.

From a practical perspective, the study contributes to three main social commerce stakeholders—policy makers, vendors, and consumers. Given the rapid adoption of social commerce, particularly in Indonesia, policy makers could heed the results of this study specifically as they relate to facilitating conditions. Policy makers could develop training programs for vendors and consumers on adapting social media for commercial purposes as well as laws and regulations aimed to provide contractual clarity, conflict resolution, and relationship building. Vendors could benefit from the findings by better understanding factors that contribute to their customers' attitude to engage in social commerce in order to improve their competitive positioning. Vendors could, for instance, focus on necessity products and services that align with the lifestyle of a particular market segment and aim to compete using a cost-leadership strategy given the predominant price value orientation of consumers. Consumers could also benefit from the findings by reassessing social motivators for social commerce and the facilitating conditions available with particular vendors and within platforms prior to committing to a purchase.

## 7. Conclusion, Limitations, and Future Research Directions

The aim of this study was to investigate the adoption of social commerce from the Indonesian consumer's perspective, which incorporated further development of the UTAUT2 framework. The findings identified the positive influence of the consumer's lifestyle, price value, and facilitating conditions on the adoption of social commerce. Notwithstanding its theoretical and practical contributions, this study has several limitations, which can be conduits to future research. First, this study focuses solely on the adoption factors of social commerce in the Indonesian retail industry. Thus, the study may be restricted in its applicability to other industries. In addition, this study was limited in terms of the number of participants and response rate (108) that was slightly under the threshold of 120. Considering these limitations, caution is suggested when generalizing this study's conclusions. Future research in this field could extend current findings by recruiting a larger sample size, focusing on a wider variety of industries, and investigating different national contexts.

Future studies can also extend the survey questions through the inclusion of cultural dimensions. While this study has analyzed social commerce adoption from a technological, social, and economic perspective, the differing cultural norms between regions may indeed influence an individual's attitude and social commerce behavior. The integration of the cultural dimension in the model will assist in providing an in-depth explanation on further influential factors in social commerce adoption from the consumer's perspective, a rapidly advancing global phenomenon that deserves corresponding research attention. Furthermore, as the results of this study were collected in early 2020 before the COVID-19 pandemic, the results could also be used as a baseline reference to study changes in consumer behavior towards social commerce.

### Data Availability

The results of the study can be found in the tables attached in the article. The data set used to support the findings of this study is available from the corresponding author upon request.

### Consent

Informed consent was obtained from all subjects involved in the study.

### Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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