

From Hearts to Carts: Understanding the Impact of Comments, Likes, and Share Functions on Consumer Purchase Intentions in a Social Media Landscape

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ABSTRACT:

In recent years, considerable attention has been devoted to studying how social media engagement, encompassing actions such as likes, comments, and shares, shapes consumer purchasing decisions. While previous research acknowledges the significance of social media engagement, there remains a dearth of thorough analysis regarding the explicit effects of likes, comments, and shares on consumer behaviour, particularly in terms of examining how these engagements affect diverse consumer groups. Thus, this study aims to enhance our comprehension of how activities on social networking platforms, such as comments, likes, and shares, impact consumer purchasing decisions. Employing a cross-sectional approach, the study utilized purposive sampling to collect data from Malaysian university students who had previously made purchases through social media platforms like Instagram. A total of 134 valid responses were analyzed. The research outcomes significantly contribute to the existing literature in several respects. Firstly, the study constructed a research framework based on signalling theory to explore how social network activities, such as comments, likes, and shares, influence consumer purchasing decisions. The findings revealed insightful observations, indicating that likes and shares exert a substantial direct influence on purchase decisions within the Instagram ecosystem. However, contrary to expectations, the study found no significant association between comments and consumers' purchasing decisions on Instagram. These discoveries offer valuable insights into the specific impact of different social media engagement metrics on consumer behaviour, particularly within the context of Instagram.

Keywords: social media, like, share, comment, consumer behaviour, purchase decision, Instagram

1. Introduction

Social media is one of the platforms that allows users to communicate and make purchases with other users. Social media is also one of the most frequently used platforms by individuals, with an average usage rate of 5 to 12 hours daily by an individual (Malaysian Communications and Multimedia Commission, 2020). Social media is also widely used worldwide and is an advanced technology at the present time (Appel et al., 2020). In the current era of globalization, many people have started using social media platforms such as Facebook, Instagram, and TikTok. In Malaysia, there are 26.80 million social media

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users, and the most popular social media platforms among users are Facebook, Instagram, and TikTok, where there are approximately 20.25 million users of Facebook, 13.9 million users of Instagram, and 19.3 million users of TikTok out of Malaysia's population of 34.13 million (Kemp, 2023).

Typically, most individuals have an inherent desire to minimize exposure to risks and prioritize safety (Rosli *et al.*, 2020). In making a purchase decision, consumers will seek information related to the product or service they intend to buy. Consumers will search for this information based on their knowledge by conducting memory scanning. Consumers with high information levels have a better understanding of the desired products or services compared to consumers with low information levels. Therefore, marketers should advertise to increase the availability of information about the products or services, aiming to enhance consumers' understanding of the products and increase brand awareness among consumers with limited knowledge about the products or services. As a result, many businesses and sellers have seized this opportunity to market and advertise their products on social media (Nelson-Field *et al.*, 2012). According to ELAydi (2018), marketing activities through social media are highly effective as they can enhance brand equity and market share by introducing new value to their customers compared to traditional marketing media. Advertising through social media is also effective because it not only allows interaction and communication with users and other brands but also has the ability to influence consumer purchasing decisions due to the influence of other users (Ab Hamid & Mahram, 2019). This creates signals that help users make purchasing decisions (Chen, 2020).

Social media serves as a powerful tool for promoting sustainability, driving innovation, fostering collaborations, and raising awareness, all of which align with the goals of SDG 9: Industry, Innovation, and Infrastructure. By promoting innovation, knowledge sharing, entrepreneurship, and collaboration, social media platforms can contribute to SDG 9 by driving industrial and economic growth, fostering technological advancements, and facilitating the development of resilient and inclusive digital infrastructure. The advent of social media has transformed the way interactions occur, leading to a more intricate system involving various actors, including companies, customers, and stakeholders (Larivière *et al.*, 2017). Within this context, popular social media platforms like Twitter, Facebook, and YouTube have gained significant importance as digital technologies, enabling individuals to easily create, share, and exchange information with numerous counterparts (Leonardi & Vaast, 2017).

Social media has also become a potent instrument for advocating sustainability and catalysing constructive transformations (Russo *et al.*, 2022). Social media platforms provide a vast space for individuals and organizations to raise awareness about sustainability issues. By sharing informative content, such as articles, videos, and infographics, social media helps educate a wide audience about environmental challenges, climate change, and sustainable practices. This increased awareness encourages individuals to adopt more sustainable behaviours and make informed choices. Social media facilitates direct and interactive communication between businesses, organizations, and their stakeholders, including customers, employees, and communities. By connecting like-minded individuals and entities, these platforms foster collaboration on projects, campaigns, and initiatives. This collective effort leads to the sharing of best practices,

knowledge exchange, and the development of innovative solutions to sustainability challenges.

Instagram, a popular social media platform, has experienced tremendous growth in recent times (Augustinus & Agnes, 2020). Originally an online photo-sharing application, Instagram was acquired by Facebook in 2012. It provides users with the ability to edit and upload photos and short videos through mobile apps. Users can include captions and utilize hashtags and location-based geotags to categorize their posts, making them discoverable by other users within the app. These posts appear in the Instagram feeds of followers and can also be viewed publicly through tags. In the present day, Instagram serves not only as a personal tool but also as a valuable platform for businesses. Companies can create free business accounts on the photo-sharing app to promote their brand and products. Such accounts grant access to engagement and impression metrics without any additional cost. The utilization of social networking sites and social media platforms like Instagram and Facebook has significantly enhanced the effectiveness of marketing strategies. These platforms not only facilitate the promotion of products and services but also offer abundant opportunities for marketers to establish brand awareness among consumers (Augustinus & Agnes, 2020). Additionally, social media platforms allow users to respond to advertising through functions such as "like," "comment," and "share." Therefore, social media is highly popular and favoured because it offers various functions that facilitate both businesses and customers (Abuhashesh et al., 2019).

Social media engagement (SME), which includes activities like follows, likes, comments, and shares, holds significant importance for brands (Wahid & Gunarto, 2021). This is because SME has the potential to positively impact various aspects of business performance. Research indicates that customers who actively engage with businesses on social media platforms tend to develop stronger relationships with the associated brands compared to those who avoid such interactions (Hudson et al., 2016). Engaged customers can also play a role as co-creators by providing market analysis, suggestions, and contributing to product development (De Vries & Carlson, 2014; Kabadayi & Price, 2014). Additionally, SME can influence brand attitude, brand equity, and purchase intention (Beukeboom et al., 2015), ultimately leading to increased sales for brands (Saboo et al., 2016). These findings highlight that SME can provide brands with both tangible benefits, such as market share, profits, and higher revenues, as well as intangible benefits, such as innovative ideas for product advancement and reviews (Pansari & Kumar, 2017).

Instagram has emerged as a significant medium for retail sales and consumer-to-consumer interaction in recent years. This platform offers various features and functionalities that enable businesses to showcase their products and engage directly with their target audience. Instagram provides a visually-oriented platform where retailers can showcase their products through compelling images and videos. Visual content has proven to be highly effective in capturing users' attention and conveying the value and appeal of products. By utilizing high-quality visuals, businesses can create an attractive and engaging brand image that resonates with their target consumers (Hudson et al., 2016). Besides, Instagram's interactive features, such as likes, comments, and direct messaging, facilitate direct communication between retailers and consumers. Users can engage with brands by liking and commenting on their posts, providing valuable feedback and generating conversations. This interactive nature of Instagram allows businesses to build meaningful

relationships with their customers, fostering trust and loyalty (Beukeboom *et al.*, 2015). Moreover, Instagram's shoppable features, such as product tags and swipe-up links in Stories, have revolutionized the way retail sales are conducted on the platform. Businesses can tag their products in posts, allowing users to explore product details and make purchases directly within the app. This seamless shopping experience eliminates barriers and enhances convenience for consumers, leading to increased sales and conversions (Pansari & Kumar, 2017). In addition, Instagram's algorithmic feed and targeted advertising options enable businesses to reach their desired audience effectively. The platform leverages user data and behaviour to deliver personalized content and ads, ensuring that businesses can showcase their products to the right people at the right time. This targeted approach enhances the efficiency and effectiveness of marketing efforts on Instagram (Saboo *et al.*, 2016).

Overall, Instagram has become an essential medium for retail sales and consumer-to-consumer interaction due to its visually appealing format, interactive features, shoppable functionalities, and targeted advertising capabilities. By utilizing Instagram as part of their marketing strategy, businesses can effectively promote their products, engage with customers, and drive sales in a dynamic and engaging social media environment. The research on the influence of social media engagement, such as likes, comments, and share functions, on consumer purchase decisions has gained significant attention in recent years. However, there are still research gaps that warrant further investigation and exploration. There is still a need for more comprehensive and context-specific studies examining the impact of different types of social media engagement on consumer purchase decisions. While previous research has recognized the importance of social media engagement, there is a lack of in-depth analysis regarding the specific effects of likes, comments, and share functions on consumer behaviour (Hudson *et al.*, 2016). Furthermore, there is a gap in examining the role of social media engagement in the context of different consumer segments and prior studies mainly focus on Facebook platform (Mas'Od *et al.*, 2019; Tenenboim, 2022). Future investigations should consider the advantages of exploring alternative social media platforms as well as diverse cultural or national contexts (Tenenboim, 2022). Understanding how social media engagement affects purchase decisions among different demographics, such as age groups, cultural backgrounds, and consumer attitudes, can contribute to a more tailored and targeted marketing approach. Identifying the specific characteristics of consumer segments that are more responsive to social media engagement can inform marketers on how to allocate resources effectively (Pansari & Kumar, 2017). Therefore, the purpose of this study is to better understand social network applications and activities (eg; comments, likes, and shares) that influence consumers' purchase decisions.

2. Literature Review and Hypothesis Development

2.1 Comments and Purchase Decisions

The impact of user comments on consumer purchase decisions in the context of Instagram has been a subject of interest among researchers. Comments play a crucial role as they provide social interactions, opinions, and information that can influence consumer attitudes and behaviours. Kang *et al.* (2022) conducted a study to identify the primary

factors that consumers consider important, examine the relationship between online reviews and purchase decisions based on these factors, and investigate the influence of interactions between online review metrics on purchase decisions. They found that the impact of online reviews on consumer purchase decisions varied across different consumer focus factors. Furthermore, the interaction between online review metrics had a complex impact on purchase decisions. Contrary to expectations, consumers did not always follow positive guidance and make purchase decisions when faced with a large number of positive emotional polarity online reviews.

Furthermore, Chen et al. (2022) conducted a study utilizing eye-tracking to examine how online product reviews influence consumers' purchasing decisions. The findings revealed that consumers, particularly female consumers, paid significantly more attention to negative comments compared to positive comments. Additionally, the study identified a noteworthy association between consumers' visual browsing behaviour and their purchase intention. Furthermore, the research indicated that consumers struggled to distinguish false comments.

Research conducted by Kim and Johnson (2016) explored the effect of user comments on consumer decision-making in online shopping environments. They found that positive comments significantly influenced consumers' purchase intentions and attitudes towards the products. Additionally, negative comments had a stronger impact on purchase intentions than positive comments, highlighting the importance of considering both positive and negative feedback.

These studies provide evidence that comments on Instagram have a significant impact on consumer purchase decisions. Positive comments can enhance consumer trust, influence purchase intention, and shape consumer attitudes towards products or brands. However, it is crucial for future research to delve deeper into the mechanisms underlying the impact of comments, taking into consideration of consumer demographics to obtain a comprehensive understanding of their influence on consumer behaviour. Therefore, it is hypothesized that:

Hypothesis 1: There is a positive relationship between comment posting and consumers' purchase intention.

2.2 Likes and Purchase Decisions

Many The likes function in Instagram, which allows users to express their approval or appreciation for a post, has gained significant attention as a potential influencer of consumer purchase decisions. Research suggests that likes can serve as social cues that influence individuals' attitudes and behaviours towards products or brands. Based on previous studies, it is asserted that the "like" signal motivates users to voluntarily support the advertiser and become one of their fans (Richard & Guppy, 2014). This is because the "like" button allows them to express the message they want to convey in the form of a signal (Sumner et al., 2017). If users want to convey the message that they like and place trust in the product, this message is conveyed through the "like" button (Mas'Od et al., 2019). Mas'Od et al. (2019) also stated that the "like" button can play a role in determining users' purchase intentions and decisions.

In their study, Lee et al. (2016) aimed to examine the reasons behind endorsing others virtually on social media, specifically focusing on the "like" function on Facebook. The study revealed that the most prevalent motives for liking content were derived from the enjoyment of the content itself and the desire to maintain interpersonal relationships. Furthermore, the study found a correlation between participants' attitudes and behaviours towards liking and their personality traits, such as openness and self-esteem. Participants' perceptions of social norms and ease of use also played a role in their liking behaviours. Furthermore, Wang et al. (2012) in their study discovered that the influence of peers on consumers' purchase intention and attitude is positively significant. Within social media platforms, this peer influence involves interactions among individual consumers regarding products and services through computer-mediated social networks (Dhar & Chang, 2009), including social media platforms like Facebook, Twitter, Instagram, and online forums or communities.

According to Beukeboom et al. (2015), the presence of Facebook likes positively influences consumers' evaluations of brands and their intentions to make purchases. This is attributed to consumers perceiving these likes as indicative of conversational human voice and interactivity with the brands. In the context of the film industry, Ding et al. (2017) establish a positive correlation between the number of prerelease Facebook likes and movie revenues. The authors argue that social media likes serve as effective tools for companies to boost their box office sales, as managing this social metric is easier for practitioners compared to post-consumption metrics like reviews.

Based on past studies, the likes function in social media has been found to have a positive influence on consumer purchase decisions. It is argued that product likes can serve as an informational cue, and consumers do consider the number of product likes when making decisions. Moreover, consumers adapt their behaviour based on the inferences they draw from observing the number of likes received by those products. As consumers associate likes with the perception that other consumers have favourable opinions about products, the quantity of likes a product receives can be seen as a measure of social endorsement, indicating its popularity among consumers. Consequently, products with a higher number of likes are perceived to be more popular, which, in turn, is suggested to increase purchase intention. Therefore, to illuminate more understanding on this relationship, it is hypothesized that:

Hypothesis 2: There is a positive relationship between the number of likes towards consumer's purchase intention

2.3 Share and Purchase Decisions

The share feature in Instagram allows users to disseminate content to their network, potentially influencing their followers' purchase decisions. Understanding the impact of this feature is crucial for marketers aiming to leverage user-generated content for brand promotion and consumer engagement. Kitsios et al. (2022) emphasized the importance of social networking sites in facilitating consumers' ability to share their brand experiences, which serves as a crucial information source for other customers. In their study, Maulid et al. (2022) investigated the influence of social media marketing on the purchasing decisions of Indonesian rail transportation service users operating in a

monopoly market. The findings revealed that the variables of content creation, content sharing, connecting, and community building collectively had a significant and simultaneous impact on the purchase decision.

Furthermore, it is stated that the "share" function allows users to view products they like and share those posts to be seen by other users in their news feeds (Mas'od, Idris, Sulaiman & Ai Chin, 2019). This enables users to become aware of things their friends are interested in based on their shares and increases the visibility of the advertisement to others compared to the "like" and "comment" features. When users frequently view such posts and advertisements, they are motivated and have the intention to purchase (Mas'od, Idris, Sulaiman & Ai Chin, 2019). Richard and Guppy (2014) also have a similar view in which they found a positive association between sharing activities on social media on purchase decisions. Shared content, especially when shared by peers or influential individuals, served as social endorsements that enhanced consumers' perceptions of the brand's credibility and value.

The literature indicates that the share feature in social media has a significant influence on consumer purchase decisions. Shared content acts as a social endorsement, enhancing consumers' perceptions of the brand's credibility, value, and desirability. It fosters consumer engagement, strengthens the consumer-brand connection, and influences perceived social influence and brand trust, ultimately increasing purchase intentions. However, more research is needed to understand this dynamic relationship. Therefore, it is hypothesized that:

Hypothesis 3: There is a positive relationship between sharing postings and consumer's purchase intention.

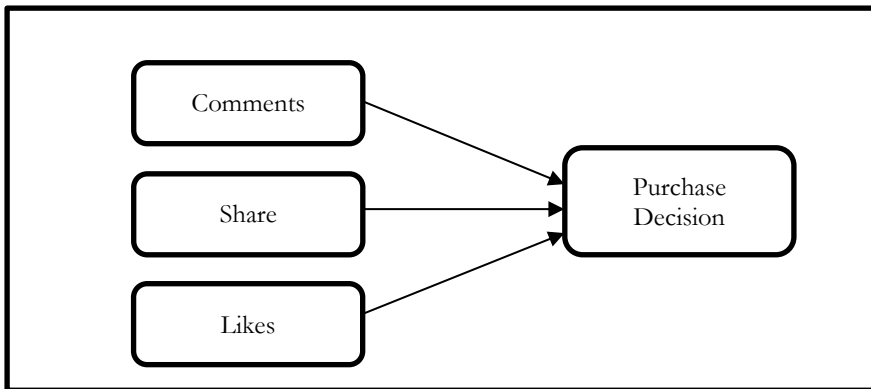
3. Underpinning Theory

The influence of comments, likes, and share features on Instagram on consumer purchase decisions can be explained by signalling theory. Signalling theory suggests that individuals use signals or cues to convey information about themselves or products to others, influencing their perceptions and behaviours (Spence, 1973). In the context of Instagram, comments, likes, and share features act as signals that influence consumer purchase decisions. When consumers see positive comments on a brand or product, it serves as a signal of satisfaction and endorsement. Positive comments signal high product quality and can increase consumer confidence and purchase intentions (Alzate et al., 2021; Floyd et al., 2014). Consumers interpret positive comments as social proof, indicating that others have had a positive experience with the brand or product. Similarly, likes on Instagram posts function as signals of approval and popularity. The act of receiving likes on social media platforms is perceived as a form of social support. The number of likes received, as well as personal satisfaction with those likes, have been found to predict perceptions of social support (Wohn et al., 2016). This suggests that likes play a role beyond mere engagement and can contribute to individuals feeling socially supported. Likes serve as social proof, signalling to other consumers that the brand or product is well-liked and worth considering for purchase.

The share feature on Instagram also plays a role in influencing consumer purchase decisions. When users share branded content, they signal their interest and endorsement

of the brand or product. This sharing behaviour indicates social engagement and involvement, serving as a signal of the brand's value (Chatterjee, 2001). When consumers see others sharing branded content, they interpret it as a positive signal, which can enhance the brand's perceived value and increase purchase intentions. In a nutshell, signalling theory provides a framework for understanding how comments, likes, and share features on Instagram influence consumer purchase decisions. Positive comments signal satisfaction and endorsement likes to serve as indicators of approval and popularity and sharing behaviour signals engagement and brand value. Consumers interpret these signals and use them to make judgments about the brand or product, influencing their purchase intentions. Figure 1 depicted the study's research framework.

Figure 1: Research Framework



4. Methods

This cross-sectional study utilized purposive sampling, also known as judgmental or selective sampling, is a non-probability sampling technique to gather data. Purposive sampling involves intentionally selecting individuals or cases based on specific characteristics or attributes that align with the research objective. The adoption of this sampling method was motivated by its flexibility, not requiring underlying theories or a predetermined number of participants (Etikan, 2016). The target respondents for our research questionnaire survey were Malaysian students. To be included in the sample, respondents needed to meet two main criteria: (1) having previously made a purchase via a social media platform such as Instagram, and (2) university's student who currently residing in Malaysia. We administered a self-administered online survey questionnaire to the target respondents, as this method allowed for swift data collection when fieldwork was not feasible (Hur & Chang, 2020). To assess the comments, likes and shares construct, the study adopted a scale from established literature (Richard & Guppy, 2014). Likewise, an established scale was also adopted from Long and Nga (2020), which measures the consumer's purchase decision. All these measures used a five-point scale ranging from (1) 'strongly disagree' to (5) 'strongly agree' to measure the responses. A total of 134 completed and valid responses were obtained through the online survey and used for subsequent analyses. Table 1 presents the demographic characteristics of the respondents.

5. Results

5.1 Descriptive Analysis

A total of 134 respondents completed the survey. The respondent's demographic profile is presented in Table 1. There were 53 (39.6%) male and 81 (60.4%) female respondents, aged between 15 to 26 years old. The majority of the respondents were Malay (90.3%), whereas the remaining were Chinese (5.2%), Indian (1.5%) and others (3.0%). Most of the respondents were single (96.3%) and the remaining were married (3.7%).

Table 1: Respondent's Demographic Profile

Variable	Category	Frequency	Percent
Gender	Male	53	39.6
	Female	81	60.4
Age	15-26 years old	134	100.0
Race	Malay	121	90.3
	Chinese	7	5.2
	Indian	2	1.5
	Others	4	3.0
Marital Status	Single	129	96.3
	Married	5	3.7

5.2 Common Method Bias

Given that the study utilized single-source data, it was imperative to ensure the absence of bias in the results. To achieve this, prior to the analysis, it was necessary to address the potential influence of common method variance (CMV) as outlined by Mackenzie et al. (2011). In order to ascertain that CMV did not significantly impact the study, a comprehensive collinearity analysis was conducted, following the approach described by Kock (2015). Generally, if the variance inflation factor (VIF) exceeds or equals 3.3, it suggests the presence of CMV in the study. The findings depicted in Table 2 indicate that the VIF values remained below 3.3, indicating that CMV did not pose a substantial issue in the current study.

5.3 Measurement Model Evaluation

The analytical procedure in this study was carried out using a two-staged approach. Initially, the measurement model was assessed to evaluate the reliability and validity of the instruments employed. Subsequently, the structural model was examined to evaluate the hypothesized relationships between the constructs, following the methodology outlined by Anderson and Gerbing (1988). For the reflective constructs, both convergent validity and discriminant validity were assessed. Convergent validity, as described by Hair et al. (2017), is established if certain conditions are met: all indicators must have loadings equal to or greater than the 0.708 thresholds, the ρ_A and composite reliability (CR) must be equal to or greater than the 0.70 thresholds, and the average

variance extracted (AVE) must be equal to or greater than the 0.50 threshold. Only items that fulfilled these criteria were retained for further analysis. The results of the convergent validity assessment for all items are presented in Table 2. The values for loading, rho_A, CR and AVE exceeded their respective threshold values, indicating the convergent validity of all latent variables.

Table 2: Reliability, Convergent Validity and Full Collinearity

Construct	Item	Loading	rho_A	CR	AVE	FC
Share	KGI1	0.850	0.837	0.901	0.752	1.325
	KGI2	0.832				
	KGI3	0.917				
Comment	KMI1	0.739	0.895	0.870	0.691	1.386
	KMI2	0.898				
	KMI3	0.849				
Like	SKI1	0.814	0.916	0.899	0.747	1.271
	SKI2	0.863				
	SKI3	0.914				
Purchase Decision	KP1	0.738	0.846	0.875	0.701	
	KP2	0.874				
	KP3	0.892				

In order to establish discriminant validity, researchers must utilize the heterotrait-monotrait (HTMT) ratio of correlations, as recommended by previous studies (Franke & Sarstedt, 2018). Discriminant validity is confirmed when all HTMT values are equal to or less than 0.85. The findings presented in Table 3 indicate that all HTMT values were below 0.85, signifying the successful establishment of discriminant validity.

Table 3: Discriminant Validity – HTMT

	Comment	Like	Purchase Decision	Share
Comment				
Like	0.497			
Purchase Decision	0.338	0.454		
Share	0.538	0.397	0.617	

5.4 Structural Model Evaluation

In order to evaluate the hypotheses of the study, a bootstrapping procedure with 5,000 samples was employed. The hypotheses were deemed supported if the beta value aligned with the hypothesis direction, the t-value was equal to or greater than 1.645, the p-value was less than or equal to 0.05, and there was no overlap between the lower level (LL) and upper level (UL) of the confidence interval. The outcomes of the hypotheses tested in the study are presented in Table 4, where two hypotheses received support.

Specifically, the findings indicated a positive influence of "like" on purchase decisions, supporting H2 ($\beta=0.246$, $p=0.013$). Similarly, the results demonstrated a positive impact of "share" on purchase decisions, thereby supporting H3 ($\beta=0.422$, $p=0.002$). However, contrary to expectations, no relationship was found between "comment" and the purchase decision, thus H1 was not supported.

Furthermore, the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2) were assessed. The coefficient of determination (R^2) indicates the predictive accuracy of the model, with higher values representing greater explanatory power. In the case of the purchase decision, an R^2 value of 0.325 was observed, indicating that "comment," "like," and "share" collectively accounted for 32.5% of the variance in the purchase decision. Effect size (f^2) demonstrates the statistical significance of the measures, with varying levels of magnitude (Cohen, 1988). Table 4 reveals that "share" had a moderate effect size, "like" had a small effect size, and "comment" had no effect size.

Lastly, predictive relevance (Q^2) was evaluated as a measure of the predictive relevancy of the inner model (Hair et al., 2014). A value of more than zero indicates predictive relevancy, while a value of less than zero suggests a lack of predictive relevancy (Henseler et al., 2015). Table 4 indicates that the Q^2 value for the endogenous construct was significantly above zero, providing clear support for the predictive relevancy of the model.

Table 4: Hypothesis Testing

Hypothesis	Relationship	Beta	SE	T-Value	P-Values	LL	UL	Decision	R^2	Q^2	f^2
H1	Comment → Purchase Decision	0.017	0.103	0.170	0.865	-0.155	0.246	Not Supported	0.325	0.195	0.000
H2	Like → Purchase Decision	0.246	0.100	2.476	0.013	0.042	0.432	Supported			0.071
H3	Share → Purchase Decision	0.422	0.134	3.140	0.002	0.121	0.650	Supported			0.199

6. Discussion

The findings of this research provide a meaningful contribution to the extant literature in a few ways. First, the study developed a research model working on the signalling theory to understand the social network applications and activities (eg; comments, likes, and shares) that influence consumers' purchase decisions. Notably, the findings revealed that there were significant direct effects of like and share on purchase decisions on Instagram (i.e., H2 and H3 were supported). This result supports the research conducted by Antonopoulos et al. (2016), Brettel et al. (2015), and Phua and Ahn (2016), which found a similar association between likes and purchase decisions. The current study further reinforces the notion that the number of likes received on Instagram positively influences users' purchase decisions. Furthermore, as prior studies suggest (Antonopoulos et al., 2016; Mas'Od et al., 2019; Maulid et al., 2022; Richard & Guppy, 2014), users who actively engage in sharing content on social media are more likely to make purchase decisions influenced by the shared content. This aligns with the notion that content sharing plays a vital role in information dissemination and consumer behaviour on social media platforms.

However, contrary to the expectations, the study revealed an insignificant relationship between comments on consumers' purchase decisions on Instagram (i.e., H1 was not supported). This result contradicts the study by Chen *et al.* (2022) and Kim and Johnson (2016), which reported a significant association between comments and purchase decisions. However, it supports the findings of Richard and Guppy (2014), who also identified an insignificant relationship between comments and purchase decisions. The divergent results may be attributed to differences in sample characteristics, research methodologies, or the specific Instagram context examined. Further research is warranted to investigate the underlying factors contributing to this unexpected relationship. It is important to note that the present study focused exclusively on Instagram, and the results may not be generalizable to other social media platforms.

Overall, this study contributes to the existing literature by providing empirical evidence on the relationships between comments, likes, content sharing, and purchase decisions in the context of Instagram. The significant relationships identified between likes and content sharing with purchase decisions emphasize the influential role of user engagement metrics in shaping consumer behaviour. The unexpected finding of an insignificant relationship between comments and purchase decisions challenges prior research, demanding further investigation. Future studies should explore the underlying mechanisms and contextual factors that influence these relationships to provide a more comprehensive understanding of consumer behaviour on Instagram.

Despite the noteworthy findings, this study faced several limitations. Firstly, the study focused its scope exclusively to Instagram users in Malaysia, potentially constraining the generalizability of the findings to broader contexts or populations. Future investigations might broaden the sample diversity to enhance the study's external validity. Besides, it is important to note that the study's reliance on purposive sampling could inadvertently exclude individuals with differing perspectives or experiences, limiting the generalizability of the study findings. While purposive sampling introduces potential bias, future researchers can mitigate this limitation by employing multiple sampling methods or incorporating a broader range of selection criteria to ensure greater representation. Moreover, while the study addresses common method variance and evaluates the measurement model, there remains the possibility of underlying measurement issues that could impact result validity. Subsequent research endeavors could adopt diverse data sources or methods to triangulate findings and mitigate measurement errors. Furthermore, the study predominantly examines user engagement metrics such as likes, comments, and shares, and their direct impact on purchase intentions. Nonetheless, there exist additional pertinent variables or moderators, such as brand trust, product involvement, influencer endorsements and social norms, that could influence the observed associations. Delving into these factors could offer a more holistic understanding of consumer behaviour dynamics on Instagram. Furthermore, the study's utilization of a cross-sectional design constrains the ability to establish causal relationships between user engagement metrics and consumer purchase intentions. Future researchers may consider employing longitudinal or experimental designs could furnish stronger evidence of causality and temporal precedence.

6.1 Theoretical Implications

The findings of this study have several theoretical implications. First, the identification of a significant positive relationship between likes and purchase decisions on Instagram contributes to the existing literature on social media marketing. This supports the theory of social proof (Naeem, 2020), which suggests that when faced with uncertainty about how to behave in a specific situation, individuals tend to observe and emulate the responses of others to guide their own actions (Cialdini, 1984). This indicates that people seek cues from the behaviour of others, leading them to believe that they are acting correctly when they see others behaving in a similar manner. This finding extends our understanding of the role of user engagement metrics in shaping consumer behaviour on social media platforms. Second, the significant relationship between content sharing and purchase decisions extends the information signalling theory to social media marketing, which posits that the more engaging consumers are in an online social community, the more likely it is for them to be influenced by peer consumers' opinions and actions (Cheung et al., 2014). By empirically demonstrating this relationship within the context of Instagram, this study adds to the theoretical understanding of how content sharing drives purchase decisions. Lastly, the unexpected finding of an insignificant relationship between comments and purchase decisions challenges prior research and calls for further investigation. This highlights the need to explore additional factors or underlying mechanisms that may explain the influence of comments on consumer behaviour. The unexpected result prompts researchers to develop new perspectives to better understand the role of comments in social media marketing.

6.2 Managerial Implications

The findings of this study hold important implications for marketers and practitioners in the field of social media marketing. First, the significant relationship between likes and purchase decisions emphasizes the importance of garnering high engagement through likes on Instagram. Marketers should focus on creating content that encourages users to like their posts, as this engagement metric positively influences consumer purchase decisions. Strategies such as creating visually appealing and engaging content, incentivizing users to like posts, and leveraging influencers can help increase likes and subsequently drive purchase intent. Second, the significant relationship between content sharing and purchase decisions highlights the potential of user-generated content in driving consumer behaviour on Instagram. Marketers should encourage users to share their content by developing campaigns or incentives that incentivize sharing. User-generated content can serve as a powerful tool for increasing brand exposure and driving purchase intent among Instagram users. Lastly, the finding of an insignificant relationship between comments and purchase decision suggests that marketers should not overlook the impact of user comments on consumer behaviour. Although the relationship contradicts prior research, it presents an opportunity for marketers to engage with users through comments and foster a sense of community and social support. Encouraging users to leave comments, responding to comments promptly, and facilitating discussions can contribute to positive consumer perceptions and drive purchase decisions. By leveraging the insights from this study, marketers can enhance their social media marketing strategies

on Instagram and effectively utilize user engagement metrics to drive consumer behaviour and increase purchase intent.

7. Conclusion

In conclusion, the study highlights the significant impact of consumer engagement, specifically through likes, shares, and comments, on purchase behaviour in the context of social media platforms, particularly Instagram. The findings suggest that active engagement with content on Instagram can positively influence consumer attitudes and behaviours. By leveraging the power of social media, businesses and sustainability advocates have the opportunity to promote sustainable products and practices, increase consumer awareness, and drive sustainable consumption patterns. Furthermore, the study emphasizes the importance of creating engaging and meaningful content that resonates with consumers and encourages them to actively participate and share sustainable messages within their social networks. By harnessing the potential of social media platforms, we can harness the collective power of consumers to contribute to a more sustainable future.

As revealed by this study, the inconsistency in the relationship between comments and purchase decisions on Instagram may be attributed to several factors. Firstly, differences in sample characteristics across studies could contribute to varying results. Additionally, variations in research methodologies could impact the observed relationship. Moreover, the specific context of Instagram under investigation could play a role in shaping the relationship between comments and purchase decisions. Factors such as the type of products or services being discussed, the nature of the comments (e.g., positive vs. negative), and the overall engagement level on Instagram could influence how comments impact consumer behaviour. Nonetheless, potential moderators or mediators that could help clarify the relationship between comments and purchase intentions include; product involvement, brand trust, influencer endorsement and social norms. Further research is warranted to explore these potential moderators and mediators in greater depth, providing insights into the nuanced dynamics underlying the relationship between comments and purchase intentions on Instagram.

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