



ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

IJDR

International Journal of Development Research

Vol. 14, Issue, 10, pp. 66786-66795, October, 2024

<https://doi.org/10.37118/ijdr.28819.10.2024>



RESEARCH ARTICLE

OPEN ACCESS

THE INFLUENCE OF SOCIAL MEDIA ENGAGEMENT, CUSTOMER PURCHASE BEHAVIOUR, AND PRODUCT PROMOTION ON BUSINESS MARKETING SUSTAINABILITY: EMPIRICAL EVIDENCE FROM INDONESIA

Yulianawati*¹, Muhammad Abdullah Khan² and John Wiredu³

School of Management, Northwestern Polytechnical University, Xi'an Shaanxi, 710072, P.R.C. China

ARTICLE INFO

ArticleHistory:

Received 28th July, 2024

Received in revised form

04th August, 2024

Accepted 29th September, 2024

Published online 30th October, 2024

Key Words:

Social Media Engagement, Customer Purchase Behaviour, Product Promotion, Business Marketing Sustainability, Indonesia

*Corresponding Author: Yulianawati

ABSTRACT

This paper examines the complex interactions between social media engagement (SME), customer purchase behavior (CPB), product promotion (PPR), and business marketing sustainability (BMS). It specifically explores the direct influence of SME on BMS, CPB, and PPR. Additionally, the research evaluates the direct effects of CPB and PPR on BMS and investigates the mediating roles of CPB and PPR in the relationship between SME and BMS. Additionally, the study employed stratified sampling method to gather 460 responses from e-commerce business platforms in Indonesia. The final analysis was conducted using the PLS-SEM model. The study's outcomes are as follows: First, SME has a significant positive effect on BMS, CPB, and PPR. Second, the results indicate that CPB and PPR have a strong direct impact on BMS. Third, the findings reveal that CPB serves as a key mediator in the relationship between SME and BMS. Fourth, the research highlights that PPR also mediates the connection between SME and BMS. These novel insights contribute to the ongoing discussion on SME and its role in promoting CPB, PPR, and BMS. Correspondingly, the study also offers practical recommendations, emphasizing the need to integrate AI-driven marketing strategies to maximize the impact of social media engagement on consumer purchase behavior and business marketing sustainability.

Copyright©2024, Yulianawati et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Yulianawati, Muhammad Abdullah Khan and John Wiredu. 2024. "The Influence of social media engagement, customer purchase behaviour, and product promotion on business marketing Sustainability: Empirical Evidence from Indonesia". International Journal of Development Research, 14, (10), 66786-66795.

INTRODUCTION

The rapid growth of digital platforms has transformed the landscape of business marketing sustainability (BMS), with social media emerging as a key tool for engaging with consumers (Wiredu, 2023; Steward et al., 2019). In this digital age, social media engagement (SME), customer purchase behavior (CPB), and product promotion (PPR) are critical components that influence the sustainability of business marketing strategies. The intersection of these elements has created both opportunities and challenges for businesses aiming to maintain long-term viability in highly competitive markets (Sazili et al., 2023). Misra et al., n.d. (2022) defines SME as the interactions between businesses and consumers on platforms like Facebook, Instagram, and Twitter, encompassing likes, comments, shares, and direct messages. These interactions help businesses build stronger relationships with customers, increase brand awareness, and foster loyalty, which are essential for sustaining long-term marketing efforts. Furthermore, Zhang & Shi, (2022) suggests that consistent engagement helps businesses build trust and credibility with their audience. By responding to customer inquiries, addressing concerns, and participating in meaningful conversations, businesses can position themselves as customer-centric and reliable. A trusted brand is more likely to sustain long-term success, as trust leads to stronger customer loyalty and positive word-of-mouth, both of which are key to marketing sustainability.

Moreso, CPB involves the decisions and actions that lead consumers to buy products or services. Understanding how social media influences this behavior can give businesses valuable insights into consumer preferences and purchasing patterns, enabling them to tailor marketing efforts to meet customer needs more effectively (Sarwar-A Alam et al., 2019). Also, according to Smith & Anderson, (2018) CPB plays a pivotal role in shaping BMS. By understanding and responding to how customers make decisions and interact with products, businesses can craft marketing strategies that not only drive immediate sales but also ensure long-term viability. Thus, analyzing CPB, along with post-purchase feedback, helps businesses identify areas for product improvement or new product development. Customer behavior patterns can reveal gaps in the market or unmet needs, allowing businesses to innovate and stay competitive (Sarah et al., 2021). Additionally, PPR on social media has become a vital strategy for businesses to showcase their offerings, reach broader audiences, and drive sales. Promotions, including discounts, giveaways, and influencer partnerships, can generate immediate interest and long-term engagement, contributing to the overall sustainability of marketing efforts (Huang and Rust 2021). The study by H. Aslam et al., (2021) argues that promotions often encourage customers to actively engage with the brand, whether through social media interactions, website visits, or participation in contests and giveaways. This engagement helps strengthen the relationship between the brand and its customers, creating a sense of community and brand loyalty. High levels of engagement also provide businesses

with valuable customer data that can be used to refine marketing strategies and future promotions (Jain *et al.*, 2022). Customer engagement is key to marketing sustainability because it keeps customers interested in the brand over time. Regularly interacting with customers through promotions helps maintain their interest and ensures they continue to see value in the brand, leading to repeat purchases and long-term loyalty (Abdelsalam *et al.*, 2020). Accordingly, these elements shape the effectiveness and sustainability of business marketing strategies. By examining the influence of social media engagement, customer purchase behavior, and product promotion, this research seeks to provide valuable insights into how businesses can develop sustainable marketing approaches that not only drive short-term success but also ensure long-term growth in a constantly evolving digital environment. Thus, the objective of the study is to examine how the implementation of SME, PPRs, and CPB contribute to enhancing BMS in Indonesia. This research would provide insights into the effectiveness of these strategies in the Indonesian market context, considering the rising consumer awareness of environmental issues and the impact of social media in shaping purchasing decisions and BMS. More so, to achieve the objectives of the study, the following research questions were designed; (1) What is the influence of SME, PPR, and CPB on BMS. (2) How does SME influence PPR and CPB. Lastly, what is the mediation effect of PPR and CPB on the link between SME and BMS.

This article enriches the body of knowledge in social media and business marketing sustainability literature by dissecting how social media engagement, customer purchase behavior, and product promotion stimulate business marketing sustainability. This finding enriches the discussion on the importance of SME and the appropriate mechanisms needed to strengthen BMS. The novelty of this study includes the inclusive assessment of the pathway towards fostering BMS integrating a multi-dimensional framework. The paper exceptionally integrates the domains of SME, CPB, and PPR to expound their collective influence on promoting BMS. Additionally, the study introduces the mediation effect of CPB and PPR, emphasizing the significance of individual awareness and understanding of product development and brand issues in influencing the interplay between SME and BMS. In addition, theoretically, this study broadly investigates the pathway to fostering business marketing sustainability, drawing upon the theory of planned behavior (TPB). Hence, the present study offers enormous practical implications for scholars, stakeholders, and government, providing a roadmap for improving business marketing sustainability among firms in Indonesia. Finally, this research applied the PLS-SEM, which provides an exceptional statistical tool to evaluate a research model's direct, and indirect effects. Aside the introduction, the remainder of the paper is organized as follows: chapter 2 presents the theoretical background and hypothesis development, chapter 3 elucidates the research methodology, chapter 4 presents results and analysis, and finally, chapter 5 presents the conclusion, implications and limitations of the study.

Theoretical Background and Hypothesis Development

Theory of Planned Behavior (TPB): The Theory of Planned Behavior (TPB), developed by Ajzen, is a psychological theory that links beliefs and behavior. It suggests that an individual's intention to engage in a behavior such as purchase behavior is the primary predictor of that behavior (Ajzen, 1991). The TPB posits that three main factors influence behavioral intentions. Hence, the TPB refers to as the individual's positive or negative evaluation of performing the behavior (Anjum *et al.*, 2021). In the context of this study, it would involve consumers' attitudes toward purchasing green products and supporting business marketing sustainability. If consumers perceive green marketing and sustainable practices positively, their intention to purchase such products increases (Paul *et al.*, 2016). Thus, when businesses implement green marketing strategies, they influence consumer attitudes by promoting the environmental benefits of their products. Positive attitudes toward green marketing can increase the likelihood of customers intending to purchase eco-friendly products

(Gholamrezai *et al.*, 2021). Also, social media platforms serve as a space where societal norms are formed and communicated. High levels of engagement, such as shares, likes, and positive comments, can create a social environment that favors green practices, thus encouraging consumers to adopt similar behaviors (Lucarelli *et al.*, 2020). Furthermore, effective product promotion can shape consumer attitudes by highlighting the benefits and value of green products. Promotions like discounts and bundles can also enhance perceived behavioral control by making green products more accessible and affordable (Anjum *et al.*, 2021). When businesses adopt marketing sustainability practices, it positively impacts consumer attitudes by showcasing a commitment to ethical and responsible behavior, making consumers more inclined to support such businesses (Lucarelli *et al.*, 2020). Therefore, the TPB provides a robust framework for understanding how social media engagement, customer purchase behavior, and product promotion influence business marketing sustainability in Indonesia. By applying TPB, the study can analyze how these independent variables shape consumer attitudes, perceived social norms, and perceived control, leading to actual business marketing sustainability.

Social Media Engagement and Business Marketing Sustainability

link: Social media engagement (SME) allows businesses to establish direct communication channels with their audience. Through interactions like comments, likes, shares, and messages, businesses can nurture relationships with both existing and potential customers. Engaged customers are more likely to develop loyalty to the brand, leading to repeat purchases and long-term brand advocacy. This relationship-building helps sustain marketing efforts by creating a dedicated community that supports the brand over time (Huang and Rust 2021). Kaplan and Haenlein (2020) indicated in their study that effective engagement on social media significantly boosts a brand's visibility. Users who interact with a brand's content often share it with their networks, expanding the brand's reach organically. This increased visibility is crucial for maintaining consistent marketing efforts without relying solely on paid advertising. The more a business interacts with its audience, the more it can keep its brand top-of-mind, fostering long-term awareness that contributes to marketing sustainability. Similarly, Jhaveri, Chirputkar, and Ashok (2023) discovered in their research that social media offers businesses real-time feedback on products, services, and campaigns. Engaged customers often provide valuable insights, comments, and suggestions that businesses can use to improve their offerings. This feedback loop allows businesses to adapt quickly to market demands, improving the relevance and effectiveness of their marketing strategies. The ability to respond dynamically to customer needs and preferences helps ensure long-term sustainability by keeping marketing campaigns in line with consumer expectations. Moreover, SME can reduce marketing costs by promoting organic growth through customer interaction and user-generated content (Dwivedi *et al.* 2021). Therefore, when customers engage with a brand's content, they help spread the word within their social circles, essentially acting as brand ambassadors. This form of organic promotion is far more cost-effective than traditional advertising, allowing businesses to sustain marketing efforts without depleting budgets on paid campaigns (Kapoor *et al.* 2017). Hence, the present study contends that SME is essential to the sustainability of business marketing because when businesses effectively engage with their audiences, they create a self-sustaining ecosystem that supports long-term marketing growth and success.

H1: Social media engagement substantially impacts business marketing sustainability

Social Media Engagement and Customer Purchase Behaviour link:

Social media engagement (SME) significantly impacts customer purchase behavior (CPB) by shaping how customers discover, evaluate, and make decisions about products and services. Through platforms like Instagram, Facebook, Twitter, LinkedIn, and TikTok, businesses can directly influence consumers' attitudes, preferences, and purchasing habits (Sarwar-A Alam *et al.*, 2019). Accordingly, the research by Abdelsalam *et al.*, (2020) contends that SME exposes customers to new products and services, often through organic

content, paid advertisements, or influencer partnerships. Engaging content such as posts, videos, and stories can introduce consumers to brands they may not have otherwise encountered. This increased brand awareness is the first step in the purchasing journey. The more frequently customers engage with a brand's content through likes, shares, or comments the more likely they are to consider the brand when making purchase decisions. Thus, when a customer consistently engages with a brand on social media, it creates familiarity, which can lead to trust. Familiarity with a brand makes consumers more likely to include it in their consideration set, thus increasing the chances of making a purchase (Liu, Bao, and Zheng 2019). Furthermore, engagement with customer feedback, reviews, and product discussions on social media can shape purchase behavior by influencing how customers perceive the quality, value, or performance of a product. Positive reviews, whether they appear in comments, posts, or direct recommendations, often act as a validation of the product's benefits (Zhang and Shi 2022). Similarly, when businesses respond to negative feedback with solutions or improved customer service, it shows that the brand values customer satisfaction. This engagement can mitigate the impact of negative reviews and reassure potential buyers that the brand is trustworthy and responsive (Ming *et al.* 2021). Also, engagement on social media can help brands build an emotional connection with their customers. Posts that evoke positive emotions, such as humor, inspiration, or empathy, tend to generate higher engagement, which deepens customers' attachment to the brand. This emotional connection often drives purchase behavior, as customers are more likely to buy from brands they feel personally connected to (Zhang & Shi, 2022). Furthermore, customers who are consistently engaged with a brand on social media are more likely to become loyal. Loyalty stems from repeated positive interactions and shared values between the customer and the brand. Loyal customers tend to make more frequent purchases, are less price-sensitive, and advocate for the brand, which perpetuates the cycle of engagement and purchase behavior (Khokhar *et al.*, 2019). Thus, the current paper posits that SME has a profound influence on CPB by building awareness, trust, and emotional connections, as well as leveraging social proof, personalized offers, and urgency. The interactions that customers have with brands on social media guide their perceptions, shape their preferences, and ultimately drive their purchasing decisions.

H2: Social media engagement significantly influences customer purchase behaviour

Social Media Engagement and Product Promotion link: SME plays a pivotal role in shaping and amplifying product promotion (PPR) efforts for businesses. Through platforms like Instagram, Facebook, Twitter, TikTok, and others, businesses can not only promote their products but also create an interactive environment where customers can engage with promotional content. SME enhances the effectiveness of PPR by boosting visibility, encouraging interaction, and driving conversions (Ismagilova *et al.*, 2020). SME helps amplify the visibility of promotional content, extending its reach beyond a brand's direct followers. When users engage with promotional posts through likes, comments, shares, or retweets the content spreads organically within their networks, increasing the chances of it being seen by a broader audience (de Oliveira Santini *et al.*, 2020). This network effect is particularly powerful because social media algorithms prioritize content with higher engagement. Posts that generate significant interaction are often promoted in users' feeds, ensuring that the promotion reaches more potential customers without the need for additional advertising spend. In this way, SME enhances the reach of PPRs, making them more visible to both current followers and new audiences (Kim, 2023). SME helps build trust during PPRs by fostering two-way communication between the brand and its audience. Instead of simply pushing out promotional messages, businesses can use social media to engage directly with customers, answer their questions, and provide additional product information (Sashi, 2012). Hence, when customers see that a brand is responsive and actively engaging with its audience, it builds credibility. Engaging with user comments or inquiries about the promotion demonstrates transparency and attentiveness, which can

make potential buyers feel more confident in purchasing the promoted product. Trust is a key driver in purchase decisions, and SME facilitates the trust-building process during product promotions (Shantatula *et al.*, 2024).

Likewise, Wiredu *et al.*, (2020) share the view that one of the most effective ways to leverage SME in PPR is through interactive campaigns such as contests, giveaways, or challenges. These types of promotions are designed to encourage high levels of engagement, with users typically required to like, share, comment, or tag friends to participate. Additionally, the virality of such promotions can significantly boost brand visibility, as users who engage with the contest or giveaway often spread the promotional message to their followers. The excitement generated by these campaigns increases overall engagement while simultaneously driving interest in the product being promoted. Contests and giveaways are powerful tools for generating immediate interaction and amplifying PPR efforts (Roxas & Marte, 2022). Moreover, according to Wiredu *et al.*, (2021) user-generated content, which is often a byproduct of social media engagement, plays a crucial role in reinforcing product promotions. When customers share their own experiences with a product, either through reviews, photos, or videos, it acts as social proof, validating the promotion. This type of content can be reposted by the brand or showcased alongside the promotional campaign, adding authenticity to the messaging. Therefore, the study debates that in today's digital landscape, the success of PPRs is closely tied to how effectively businesses can engage with their audience on social media platforms.

H3: Social media engagement positively impacts product promotion

Product Promotion and Business Marketing Sustainability link: Product promotion (PPR) plays a vital role in ensuring BMS by driving awareness, influencing customer behavior, and fostering long-term brand growth. Sustainable marketing focuses on creating strategies that not only generate immediate sales but also ensure the long-term viability of the business. The way businesses promote their products directly affects their ability to maintain consistent growth and market presence (Han & Kim, 2017). Effective PPR increases brand visibility, which is crucial for business sustainability. By regularly promoting products through various channels such as social media, email marketing, traditional advertising, and influencer collaborations businesses can keep their brand top-of-mind for consumers. This consistent visibility helps build brand recognition, ensuring that customers remember the brand when they are ready to make a purchase (Zhou *et al.*, 2018). For BMS, maintaining consistent brand awareness is key to attracting new customers and retaining existing ones. Regular product promotion helps businesses stay relevant in a competitive marketplace and supports ongoing customer engagement (BANICA *et al.*, 2015).

Q. Liu *et al.*, (2020) revealed that one of the primary functions of PPR is to drive sales, which is fundamental to the financial sustainability of any business. Well-executed promotions, such as discounts, limited-time offers, or special bundles, encourage customers to make purchases. These sales provide the necessary revenue to reinvest in future marketing initiatives and business operations (Annunen *et al.*, 2021). When promotions are strategically planned and targeted at the right audience, they generate not only short-term sales boosts but also long-term customer loyalty, which contributes to sustainable revenue growth. This steady income stream allows businesses to continuously fund marketing efforts, research and development, and expansion, all of which are critical to long-term sustainability (Tabiat, 2022). PPRs are a flexible tool that businesses can use to respond to changing market trends and consumer preferences. By analyzing customer data and market insights, businesses can adjust their promotions to reflect current demands whether that's launching eco-friendly products, offering seasonal discounts, or responding to emerging trends (Y. Chawla & Chodak, 2021). This adaptability helps businesses stay relevant and competitive, which is essential for sustainability. In addition, PPRs that align with customer values and market trends can create a deeper connection between the brand and its audience, ensuring that the

brand remains top-of-mind and continues to meet customer expectations over time (Zhou et al., 2018). Consequently, the present study debates that PPR significantly influences BMS by driving sales, building brand loyalty, enhancing market reach, and optimizing marketing efforts. Well-executed promotions not only generate immediate revenue but also help businesses foster long-term relationships with customers, adapt to market trends, and support sustainable growth.

H4: Product promotion positively impacts business marketing sustainability

Customer Purchase Behaviour and Business Marketing Sustainability link

Customer purchase behavior (CPB) provides businesses with valuable insights into consumer preferences, buying patterns, and triggers. By analyzing CPB, companies can identify which products, services, or offers resonate most with specific customer segments. This understanding allows businesses to develop personalized marketing strategies, tailoring their messages, promotions, and product offerings to meet the unique needs and desires of different consumer groups (Zhang & Shi, 2022). A study showed that personalized marketing enhances customer satisfaction and loyalty, which are crucial for sustainable marketing. When consumers feel understood and valued, they are more likely to return for repeat purchases, thus ensuring a consistent revenue stream and reducing the need for aggressive customer acquisition efforts (Singh et al., 2023). Hence, CPB often reveals patterns of brand loyalty, where customers repeatedly choose the same brand for their needs. Loyal customers tend to make more frequent purchases, are less price-sensitive, and are more likely to recommend the brand to others. Nurturing this loyalty is key to long-term marketing sustainability, as it reduces the cost of customer acquisition over time (Huo et al., 2023). Ming et al., (2021) revealed in their research finding that by analyzing the factors that influence repeat purchases such as product quality, customer service, or brand values businesses can enhance their marketing strategies to focus on retaining loyal customers. Marketing to existing customers is significantly more cost-effective than acquiring new ones, and it fosters sustainability by creating a stable customer base. Similarly, by understanding CPB, businesses can eliminate ineffective marketing efforts and focus on strategies that directly drive conversions. For example, if data shows that certain channels or campaigns fail to generate sales, businesses can reallocate their budgets to more successful strategies. This efficiency reduces marketing waste and ensures that resources are spent on high-impact initiatives, enhancing the sustainability of marketing efforts (Chawla, 2020). Hence, the present study argues that CPB is a foundational element in developing sustainable marketing strategies. By understanding and leveraging CPB, businesses can create more targeted, efficient, and adaptive marketing plans that build long-term customer loyalty, maximize revenue, and ensure continuous relevance in the market. Ultimately, businesses that align their marketing strategies with CPB insights are better positioned to sustain growth and profitability over time.

H5: Customer purchase behaviour positively influences business marketing sustainability

Product Promotion Mediates the link between Social Media Engagement and Business Marketing Sustainability link

Product promotion (PPR) acts as a key mediator between social media engagement (SME) and business marketing sustainability (BMS) by converting the interactions and attention generated on social platforms into measurable business outcomes (Nazir et al., 2023). Social media engagement creates awareness and draws attention to a brand, but product promotion is the mechanism that turns that attention into concrete sales opportunities. By offering promotions such as discounts, limited-time offers, or exclusive deals on products highlighted through social media engagement, businesses can leverage the interest generated to drive immediate purchases (Johnson et al., 2022).

PPR helps amplify the engagement generated on social media by incentivizing customers to take further action. For example, businesses can create promotional campaigns that encourage users to share content, tag friends, or participate in contests to receive discounts or win products. This not only increases SME but also creates a viral effect, expanding the promotional reach. This cycle of engagement and promotion boosts brand visibility, customer loyalty, and saleskey elements for BMS efforts (Kusumasondaja's 2018). Furthermore, social media platforms offer businesses the ability to track user behavior and preferences, allowing for more personalized engagement. Promotions that are tailored to customers' specific interests, based on their social media interactions, increase the likelihood of conversion. The ability to deliver highly targeted PPRs leads to better conversion rates, stronger customer relationships, and long-term loyalty, which are crucial for maintaining BMS (Liang et al., 2023). SME is crucial for building awareness, but PPR serves as the bridge that moves customers from awareness to loyalty. By offering promotions that reward engaged customers such as loyalty programs, exclusive discounts, or early access to new products businesses can turn social media followers into loyal, repeat customers. Repeat purchases and loyal customers are foundational for long-term BMS, as customer retention is often more cost-effective than acquisition (Mazzucchelli et al., 2018). Accordingly, PPRs that emerge from social media engagement offer businesses valuable insights into what resonates with their audience. By analyzing the results of promotional campaigns launched via social media, businesses can fine-tune their marketing strategies, ensuring sustainable growth (Seo & Park, 2018). Thus, PPR acts as a vital intermediary that translates the awareness, trust, and engagement generated through social media into tangible outcomes, such as sales, customer loyalty, and long-term BMS success. Thus, PPR effectively mediates the relationship between SME and BMS, ensuring that engagement efforts contribute to both immediate and long-term business success.

H6: Product promotion significantly mediates the link between social media engagement and business marketing sustainability

Customer Purchase Behaviour mediates the link between social media engagement and business marketing sustainability link

Customer purchase behavior (CPB) serves as a critical mediator between social media engagement (SME) and business marketing sustainability (BMS). While SME drives customer interaction and awareness, it is ultimately the purchasing behavior of customers that translates engagement into financial outcomes, ensuring long-term BMS (Karimi & Liu, 2020). SME helps build relationships, create awareness, and generate interest, but the impact on BMS is realized only when this engagement leads to actual purchases. CPB mediates this conversion process by representing the shift from passive interaction such as likes, shares, and comments to active buying decisions. When customers convert their engagement into purchases, businesses generate revenue, which is key to ensuring long-term BMS. This income enables reinvestment in future marketing initiatives, product development, and customer acquisition (Jain et al., 2022). Moreover, Huo et al., (2023) explored the mediation role of CPB between SME and BMS. Their study outcome revealed that SME allows businesses to interact with potential customers in real-time, answer questions, and address concerns, which significantly influences CPB. Customers who trust a brand based on their social media interactions are more likely to make purchase decisions that support long-term BMS success. Likewise, Liang et al., (2023) suggests that SME offers businesses valuable data about customers' preferences, behaviors, and interests. This data helps businesses create personalized offers and marketing strategies, which influence CPB by aligning promotions and content with individual customer needs. Additionally, SME plays a vital role in creating awareness and interest, but it is CPB that mediates the transition from interest to action. Customers may engage with a brand on social media without purchasing, but certain engagement strategies such as social proof, promotions, and influencer recommendations can directly influence their buying decisions. When awareness leads to action, businesses see

direct sales growth, which supports long-term BMS. Increased purchase rates strengthen the business's financial foundation and enable it to invest in future marketing efforts (Nazir *et al.*, 2023). SME doesn't just influence customers' own purchase behavior, it also encourages customers to share their experiences with others, influencing their social circles. When customers purchase after engaging on social media, they are more likely to promote the product or brand within their networks, reinforcing the relationship between CPB and BMS (Tafesse & Wien, 2018). Therefore, the paper contends that CPB acts as a bridge between the engagement generated on social media and the sustainable success of a business. While SME builds awareness and trust, CPB translates that engagement into revenue, customer loyalty, and advocacy, which are essential for BMS success.

H7: Customer purchase behaviour substantially mediates the link between social media engagement and business marketing sustainability

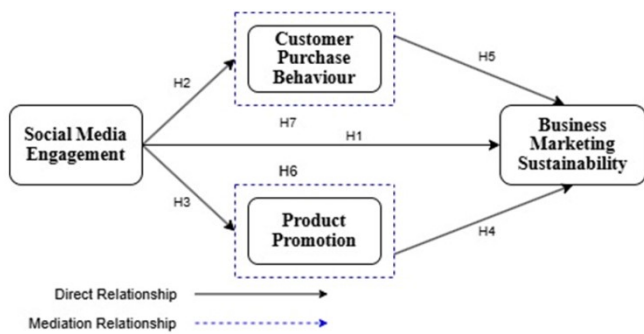


Figure 1. Conceptual framework for the study

RESEARCH METHODOLOGY

Research method and sampling: As social mediabusiness lingers to expand rapidly, shopping trends are shifting from traditional brick-and-mortar stores to social media platforms, leading to an annual rise in online shoppers and BMS. To meet the objectives of this research, social media consumer groups primarily shoppers from major e-commerce platforms in Indonesia were chosen for the study. A self-administered questionnaire was developed for data collection, which took place over three months (August 2024 to October 2024). The questionnaire was conducted in two phases: Phase 1 collected basic information such as respondents' demographic data, socio-economic details, and social media shopping experiences, while Phase 2 included 16 measurement scales related to respondents' general social media purchase experiences. Each item was rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The measurement scales were adapted from previous studies with slight modifications to suit this research. Originally drafted in English, the questionnaires were then translated into Bahasa Indonesia with the help of experts in the field. Participants were selected based on their status as social media shoppers and business marketing professionals, including CEOs, General Managers, Sales Personnel, and social media marketing managers. These individuals were required to have been social media consumers and engaged in social mediabusiness for over 5 years, ensuring they had substantial knowledge of Social Media Engagement, Customer Purchase Behavior, Product Promotion, Business Marketing Sustainability, and other relevant areas.

During the distribution of the surveys, the authors provided a consent form and explained the study's objectives to participants. They were assured that their responses would remain strictly confidential and be used exclusively for research purposes. The researchers used a stratified sampling method to select participants. This widely used technique in research involves dividing a population into subgroups or strata based on specific characteristics, then sampling from each subgroup. Stratified sampling is commonly applied in areas such as market research, public health studies, educational research, and ecological studies. In this study, the stratified sampling method was employed, with respondents selected from social media consumer

groups and social media businesses. Throughout the initial phase of data collection, the researchers reached out to 400 respondents via personal contact, WhatsApp, Instagram, and Facebook. By the end of the data collection period, they had achieved a strong response rate of 90% (N = 360), indicating high participation. Ethical approval was not required for this study as no clinical or animal experiments were conducted. Furthermore, the data was gathered privately, and participants voluntarily responded to the survey.

Demographic Profile of Respondents: The study discovered that the demographic profile of the respondents comprises of 190 men, accounting for 41% of the respondents and 270 females, making up 59% of the total respondents, as showed in Table 1. The age distribution of the respondents is as follows: 22% (n=100) are aged between 18-25, 29% (n = 135) are between the ages of 26-35, 26%, (n = 120) fall between the ages of 36-49, and 23% (n=105) are above the age of 50. The study revealed that 22% of the participants possessed a high-school education, whereas 28% held a college degree. Moreover, 27% of individuals had successfully acquired their undergraduate degree, while 23% possessed a postgraduate degree or above. Additionally, the survey found that 24% of the respondents are Chief Executive Officers, 26% are General Managers, 29% occupy the position of Social Media Marketing Manager, and 21% are in the role of Sales Personnel. In the business category, 21% of respondents primarily deal in clothing and textiles, 23% are in food and beverages, 26% handle electric appliances, 17% are involved in furniture, and 13% represent other businesses. Concerning monthly expenditure, 17% of respondents spend less than or equal to Rp14,000, while those spending between Rp15,000- 24,000, Rp25,000-35,000, Rp36,001-45,000, and above Rp 50,000 account for 20%, 18%, 22%, and 22% correspondingly.

Table 1. Demographic Profile of Respondent's (N=460)

| Characteristics | Category | Frequency | % |
|--------------------------|--------------------------------|-----------|-----|
| Gender | Male | 190 | 41% |
| | Female | 270 | 59% |
| Age | 18-25 | 100 | 22% |
| | 26-35 | 135 | 29% |
| | 36-49 | 120 | 26% |
| | Above 50 | 105 | 23% |
| Educational Background | High school | 100 | 22% |
| | College | 130 | 28% |
| | Undergraduate | 125 | 27% |
| | Postgraduate and above | 105 | 23% |
| Job Position | Chief Executive Officer | 108 | 24% |
| | General Manager | 120 | 26% |
| | Social Media Marketing Manager | 135 | 29% |
| | Sales Personnel | 97 | 21% |
| | | | |
| Monthly Expenditure (Rp) | ≤14,000 | 80 | 17% |
| | 15,000-24,000 | 92 | 20% |
| | 25,000-35,000 | 85 | 18% |
| | 36,001-45,000 | 100 | 22% |
| | Above 50,000 | 103 | 22% |
| Business Category | Clothing and textile | 95 | 21% |
| | Food and beverage | 105 | 23% |
| | Electric appliance | 120 | 26% |
| | Furniture | 80 | 17% |
| | Others | 60 | 13% |

Measurements: The study's online survey was conducted in two phases. In Phase 1, respondents provided basic information such as demographic, socio-economic details, and online shopping experiences. This included data on gender, age, educational background, occupation, job position, monthly income, expenditure, and business category, as outlined in Table 1. Phase 2 included measurement scales based on previous studies, detailed in Table 2. The questionnaire featured two higher-order constructs encompassing Social Media Engagement (SME), Customer Purchase Behaviour (CPB), Product Promotion (PPR), and Business Marketing Sustainability (BMS). To ensure accuracy and reliability, feedback from online shoppers and business experts was gathered before distributing the questionnaire. A 5-point Likert scale (1 = strongly

disagree to 5 = strongly agree) was used to measure the study's constructs.

Method of Data Analysis: The PLS-SEM technique was used to assess the theoretical framework for several reasons. First, it allows for precise estimation of relationships between variables by simultaneously analyzing both the structural and measurement models (Wiredu et al., 2024). PLS-SEM is well-suited for exploratory studies, as it can evaluate moderation and mediation effects and handle complex relationships with relatively small sample size (Hair et al., 2019; Wiredu, Yang, Saljoughipour, et al. 2023; Otoo et al. 2024). Finally, its frequent use in various fields and numerous BMS studies highlights the reliability of this method in similar contexts (Zhang & Shi, 2022; Nazir et al., 2023).

RESULTS AND DISCUSSION

Measurement reliability and validity: The study employed several tests, including composite reliability, Cronbach's alpha, factor loadings, and average variance extracted (AVE), to evaluate the internal reliability of the constructs. According to Wiredu et al. (2024), the recommended threshold for composite reliability, Cronbach's alpha, and factor loadings is above 0.70. As presented in Table 3, the data analysis confirms that the indicators are both reliable and valid. All constructs surpassed the recommended threshold values, demonstrating that the scales used in this research exhibit strong internal reliability.

Common method bias (CMB): Common method bias (CMB) can inflate the standard errors of regression coefficients, making it harder to isolate the specific effects of each predictor on the dependent variable. By addressing multicollinearity, the study ensures more accurate and meaningful interpretations of the relationships between variables. In this research, the potential for multicollinearity was assessed using the variance inflation factor (VIF). As shown in Table 3, all VIF scores are below the recommended threshold of 5.00, as suggested by Harman (1976), indicating no issues with collinearity or CMB.

Assessing reflective measurement model

Discriminate validity (Fornell-Larcker Criterion): Discriminant validity is a crucial aspect of construct validity, demonstrating how well a measurement accurately represents the intended theoretical construct. According to Henseler et al. (2015), a research model is considered valid if the values for the structural model constructs are below the 0.90 threshold. This paper applied both the Heterotrait-Monotrait (HTMT) ratio and the Fornell & Larcker (1981) principles. As shown in Table 4, the results from HTMT and Fornell & Larcker (1981) confirm that the proposed model exhibits strong psychometric properties.

Combined loadings and Cross loadings: Table 5 presents the results for both cross-loadings and combined loadings of the variables. The findings show that each variable has higher loadings on its own items compared to its loadings on other variables.

Table 2. Measurement Details

| Construct | No of Items | Source |
|-----------------------------------|-------------|--|
| Social Media Engagement | 4 | (Dwivedi et al. 2021; Khokhar et al., 2019) |
| Customer Purchase Behaviour | 4 | (Zhang & Shi, 2022; Singh et al., 2023) |
| Product Promotion | 4 | (Abdelsalam et al., 2020; Jain et al., 2022) |
| Business Marketing Sustainability | 4 | (Kaplan and Haenlein 2020; Sarah et al., 2021) |

Table 3. Summary of validity results

| Indicators | Items | Factor Loadings | Cronbach's alpha ($\alpha > 0.7$) | Composite reliability (ρ_c) | AVE (> 0.5) | VIF |
|------------|-------|-----------------|-------------------------------------|------------------------------------|-----------------|-------|
| BMS | BMS1 | 0.868 | 0.765 | 0.862 | 0.627 | 2.371 |
| | BMS2 | 0.896 | | | | 3.069 |
| | BMS3 | 0.893 | | | | 3.007 |
| | BMS4 | 0.791 | | | | 1.030 |
| CPB | CPB1 | 0.838 | 0.768 | 0.848 | 0.583 | 1.130 |
| | CPB2 | 0.783 | | | | 2.028 |
| | CPB3 | 0.774 | | | | 2.079 |
| | CPB4 | 0.804 | | | | 1.757 |
| PPR | PPR1 | 0.799 | 0.812 | 0.875 | 0.637 | 2.141 |
| | PPR2 | 0.799 | | | | 2.152 |
| | PPR3 | 0.805 | | | | 1.707 |
| | PPR4 | 0.789 | | | | 1.492 |
| SME | SME1 | 0.740 | 0.763 | 0.843 | 0.590 | 1.533 |
| | SME2 | 0.828 | | | | 1.170 |
| | SME3 | 0.907 | | | | 2.670 |
| | SME4 | 0.898 | | | | 2.548 |

Table 4. Results of Discriminant Validity

| Fornell & Larcker, (1981) Criteria | | | | | |
|------------------------------------|-------|-------|-------|-------|--|
| | BMS | CPB | PPR | SME | |
| BMS | 0.792 | | | | |
| CPB | 0.664 | 0.764 | | | |
| PPR | 0.715 | 0.706 | 0.798 | | |
| SME | 0.475 | 0.597 | 0.271 | 0.768 | |
| HTMT Criteria | | | | | |
| | BMS | CPB | PPR | SME | |
| BMS | | | | | |
| CPB | 0.856 | | | | |
| PPR | 0.862 | 0.837 | | | |
| SME | 0.668 | 0.646 | 0.302 | | |

This confirms that each construct in the study exhibits valid convergent validity based on its item loadings. These results suggest enhanced reliability and validity of the measurement instrument used. Additionally, they indicate that the study model is not influenced by potential measurement bias (Zhang & Shi, 2022;Singh *et al.*, 2023).

Table 5. Item cross-loading matrix of the constructs

| Items | BMS | CPB | PPR | SME |
|-------|-------|-------|-------|-------|
| BMS1 | 0.868 | 0.581 | 0.676 | 0.284 |
| BMS2 | 0.896 | 0.565 | 0.673 | 0.300 |
| BMS3 | 0.893 | 0.552 | 0.654 | 0.305 |
| BMS4 | 0.791 | 0.355 | 0.129 | 0.734 |
| CPB1 | 0.433 | 0.688 | 0.300 | 0.779 |
| CPB2 | 0.453 | 0.783 | 0.601 | 0.305 |
| CPB3 | 0.475 | 0.774 | 0.642 | 0.244 |
| CPB4 | 0.644 | 0.804 | 0.686 | 0.321 |
| PPR1 | 0.494 | 0.671 | 0.799 | 0.200 |
| PPR2 | 0.488 | 0.693 | 0.799 | 0.232 |
| PPR3 | 0.546 | 0.468 | 0.805 | 0.216 |
| PPR4 | 0.706 | 0.467 | 0.789 | 0.216 |
| SME1 | 0.383 | 0.350 | 0.120 | 0.740 |
| SME2 | 0.139 | 0.167 | 0.019 | 0.828 |
| SME3 | 0.411 | 0.589 | 0.279 | 0.907 |
| SME4 | 0.442 | 0.574 | 0.290 | 0.898 |

Model Performance and Goodness of Fit: Evaluating effect size is an important complement to assessing the significance level (p-value) of associations between constructs, as it provides a measure of the practical significance of the effects in research models. In this research, effect size was analyzed using tests such as F^2 and R^2 . As shown in Table 6, the results indicate that the statistical coefficients for F^2 and R^2 reflect effect sizes ranging from small to large. Additionally, the study measured the model's goodness of fit using RMSE, RMS_theta, and NFI. These findings confirm that the analysis is robust and reliable, offering a strong foundation for policy-makers to use in decision-making based on this research.

Table 6. Structural Model Fit Summary

| Variables | R^2 | F^2 |
|--------------------------|-----------------|-----------------|
| BMS | 0.601 | 0.098 |
| CPB | 0.356 | 0.552 |
| PPR | 0.073 | 0.377 |
| SME | | |
| Model Fitness Indicators | Saturated Model | Estimated Model |
| RMSE | 0.151 | 0.205 |
| NFI | 0.515 | 0.469 |
| (RMS theta) | 0.008 | 0.007 |

Hypotheses testing

Direct Path and Mediation Analysis: The analysis proposed five direct associations in the study model. The empirical outcomes specified that SME has a direct and substantial influence on BMS H1 ($\beta = 0.475, t = 12.302; p - value = 0.000$), SME H2 ($\beta = 0.597, t = 43.836; p - value = 0.000$) has a direct and significant impact on CPB. The study further revealed that SME H3 ($\beta = 0.271, t = 31.304; p - value = 0.000$) has a positive impact on PPR. Correspondingly, the study showed that PPR H4 ($\beta = 0.715, t = 63.346; p - value = 0.000$) has a direct connection with BMS. Additionally, the research revealed that CPB H5 ($\beta = 0.664, t = 16.461; p - value = 0.000$) positively influence BMS. Finally, the study evaluated the mediation effect of PPR on the link between SME and BMS. The empirical results from the study revealed that the indirect impact of PPR on the link between SME and BMS was statistically significant H6 ($\beta = 0.454; t - value = 21.072; p = 0.000$). Similarly, the research outcome discovered that the indirect influence of CPB on the connection between SME and BMS was statistically substantial H7 ($\beta = 0.566; t - value = 17.095; p = 0.000$). The implication of this outcome postulates that PPR and CPB have a significant mediation influence on SME and BMS relationships. Thus, the result of the direct path and mediation outcome of the study has been reported in

Table 7. Also, the structural model and the final model with estimated parameters are presented in Figure 2.

Table 7. Outcomes of Hypothesis Analysis

| Hypothesis | Relationship | β | T-stats | P-value | Hypothesis Supported |
|-------------------------------|------------------|----------|---------|---------|----------------------|
| Direct Relationship | | | | | |
| H1 | SME -> BMS | 0.475*** | 12.302 | 0.000 | Supported |
| H2 | SME ->CPB | 0.597*** | 43.836 | 0.000 | Supported |
| H3 | SME ->PPR | 0.271*** | 31.304 | 0.000 | Supported |
| H4 | PPR ->BMS | 0.715*** | 63.346 | 0.000 | Supported |
| H5 | CPB ->BMS | 0.664*** | 16.461 | 0.000 | Supported |
| Mediation Relationship | | | | | |
| H6 | SME ->PPR -> BMS | 0.454*** | 21.072 | 0.000 | Supported |
| H7 | SME-> CPB -> BMS | 0.566*** | 17.095 | 0.000 | Supported |

DISCUSSION

The notion of SME has attracted significant interest from scholars studying business marketing sustainability. However, few studies have explored the mechanisms through which SME impacts CPB, PPR, and BMS, especially in developing regions like Indonesia. Therefore, this study examines the direct and mediating relationships between these indicators to address this gap. The study results are outlined as follows. First, the results confirm that SME has a positive and significant influence on CPB, PPR, and BMS among businesses in Indonesia. Additionally, the study revealed that PPR and CPB have a strong positive impact on BMS. These results validate hypotheses H1 through H5 proposed in this study. The positive influence of social media engagement (SME) on business marketing sustainability (BMS) revealed in the study's empirical finding can be attributed to the fact that SME allows businesses to maintain direct and continuous communication with their customers, leading to stronger relationships and better understanding of customer needs. This engagement fosters loyalty and long-term customer retention, contributing to BMS (Huang and Rust 2021). The result of this study further suggests that active engagement on social media platforms helps businesses reach a wider audience, increasing brand visibility. This broader reach can drive long-term growth, ensuring consistent customer interest and helping maintain sustainable marketing efforts. As championed by the TPB theory, engaged customers are more likely to become brand advocates, promoting products and services within their networks, which strengthens the business's sustainability by generating organic marketing efforts (Kaplan and Haenlein 2020). The outcomes found in this study correspond to past research that emphasized that SME predicts BMS (Jhaveri, Chirputkar, and Ashok 2023; Dwivedi *et al.* 2021).

Furthermore, the outcomes of this study align with the conclusions from these studies that SME substantially impacts customer purchase behaviour (CPB) (Ming *et al.* 2021; Khokhar *et al.*, 2019). The inference from this intriguing result is that SME allows businesses to build trust with their audience through transparent communication, user reviews, and social proof. This trust increases customers' confidence in the brand, encouraging them to make purchases (Abdelsalam *et al.*, 2020). In addition, engaged customers often share their experiences, reviews, and recommendations on social media. Positive feedback and endorsements from peers can strongly influence others' purchase decisions, boosting CPB (Zhang and Shi 2022). In support of the TPB theory and present study outcome, SME ensures that customers are regularly exposed to a brand's products, promotions, and updates. This frequent interaction keeps the brand top-of-mind, making customers more likely to consider the brand when making purchase decisions. Moreover, the third hypothesis of this study confirmed that SME substantially and positively influences product promotion (PPR). In line with TPB theory, social media platforms have vast user bases, allowing businesses to reach a larger and more diverse audience compared to traditional marketing methods. Engaging with this audience through posts, shares, and interactions helps amplify PPR efforts (Ismagilova *et al.*, 2020). The

study by Wiredu et al., (2021) advocated that social media platforms provide sophisticated targeting options, enabling businesses to promote products to specific customer segments based on demographics, interests, behaviors, and past interactions. This targeted approach ensures PPRs reach the right audience, improving promotional outcomes. Consequently, this study's results align with current study, which emphasizes that integrating PPR into business operations and models is critical for improving SME (Kim, 2023; Roxas & Marte, 2022). Also, the H4 outlined in this research enunciated that PPR directly influences BMS. Therefore, effective PPR helps businesses consistently reach a broad audience, raising brand awareness. Sustained visibility through promotions keeps the brand in customers' minds, contributing to long-term marketing sustainability by maintaining interest and engagement over time. The paper's results underpin the outcomes by Han & Kim, (2017) that PPR impacts BMS. Their research suggested that well-executed product promotions, especially those that offer value such as discounts or exclusive offers, can foster stronger customer loyalty. When customers feel they benefit from promotions, they are more likely to remain loyal to the brand, enhancing the business's ability to sustain marketing efforts through repeat engagement. The current investigation approves that PPR is a crucial determinant of BMS and is consistent with these present studies (Tabiat, 2022; Annunen et al., 2021).

Additionally, the H5 of this study established that CPB substantially and positively impacts BMS. Grounded on the TPB concept, positive CPB, such as repeat buying, reflects strong customer loyalty. Loyal customers provide a reliable source of income, reducing the need for constant new customer acquisition and helping businesses focus on sustainable marketing practices that foster long-term relationships. The research by Singh et al., (2023) supported that consistent CPB creates opportunities for businesses to cross-sell or upsell additional products and services to existing customers. These practices not only increase the lifetime value of each customer but also contribute to sustainable growth by maximizing revenue from the current customer base. Thus, this study result approves with the claim by present studies that CPB improves BMS (Huo et al., 2023; Chawla, 2020). Finally, concerning the mediation influence of CPB and PPR on the connection between SME and BMS, empirical evidence from the study established the presence of a positive and significant intermediary effect. Hence, this result affirmed the H6 and H7 of this study. In practical terms, this research outcome established that CPB and PPR create a feedback loop where customer purchases and successful product promotions encourage more SME. Engaged customers who buy products are more likely to share their experiences online, generating further engagement and continuing the cycle. This self-reinforcing mechanism ensures that SME, CPB, and PPR collectively contribute to the long-term sustainability of BMS efforts (Jain et al., 2022). Other empirical studies have proposed that CPB and PPR function as an efficient mechanism through which SME can improve BMS (Johnson et al., 2022; Nazir et al., 2023).

CONCLUSION

This study offers valuable insights into the relationship between SME, CPB, PPR, and BMS. The research hypothesis was tested using the SEM-PLS methodology. The empirical findings revealed that SME positively affects CPB, PPR, and BMS. Additionally, the results demonstrated that both CPB and PPR have a significant and positive impact on BMS. Lastly, the study confirmed the mediating role of CPB and PPR in the connection between SME and BMS.

Theoretical Implications: The research findings make a significant contribution to TPB by highlighting how SME and social media peers serve as role models, influencing users' attitudes and behaviors. This extends TPB's concept of modeling by demonstrating the impact of virtual role models on behavior. In the context of SME, social media offers immediate feedback through likes, shares, and comments, reinforcing observed behaviors. This aligns with TPB's focus on social reinforcement in the acquisition and retention of behavior.

Therefore, the study's results expand the TPB framework and build on previous research on SME, CPB, PPR, and BMS (Huang and Rust 2021; Roxas & Marte, 2022). The study also highlights the impact of CPB and PPR on BMS. The findings indicate that CPB and PPR are direct predictors of BMS. This result offers a new insight, expanding on previous research related to CPB and PPR (Dwivedi et al. 2021; Annunen et al., 2021). This paper's results advance knowledge of the concept of BMS. Theoretically, this study introduces a distinctive model that adds to the existing literature on CPB and PPR, particularly their mediating role in the relationship between SME and BMS. It offers a new direction for research that has not been adequately explored (Johnson et al., 2022). The study advances this field by providing empirical evidence suggesting that CPB and PPR can enhance the connection between SME and BMS (Nazir et al., 2023).

Practical Implications: The paper presents the following practical contributions: Since the research outcomes established that SME, CPB, and PPR, the study suggests that businesses can leverage SME to interact with customers in real-time, fostering stronger relationships and gathering immediate feedback. This engagement helps brands adjust their marketing strategies to better meet customer needs, improving the sustainability of their efforts. Moreover, through consistent engagement, businesses can nurture customer loyalty, leading to higher retention rates. Loyal customers are more likely to continue supporting the brand, contributing to long-term marketing sustainability. Furthermore, given the importance and central role of CPB and PPR in driving BMS, businesses can implement effective sales promotions and limited-time offers to stimulate CPB, leading to increased short-term sales and overall revenue. The study emphasizes the need to optimize website and app design for a seamless and enjoyable shopping experience that encourages impulse purchases. Additionally, managers should leverage PPR to deliver personalized marketing messages and product recommendations to a broad audience, enhancing customer experience and boosting sales. The insights from this research can support businesses in fostering a culture of continuous improvement, where performance is regularly assessed and strategies are refined based on data and response. Finally, by examining the mediating role of CPB and PPR in the SME-BMS association, this study emphasizes the significance of BMS for stockholders. From a practical perspective, it highlights the importance of strategic resource allocation, recommending that businesses invest in PPR tools and technologies to improve the effectiveness of their SME efforts and achieve stronger performance. Also, the study emphasizes the value of adopting advanced marketing methods. Implementing AI-driven policies empowers businesses to stay ahead of evolving marketing trends and technologies, guaranteeing they remain viable in the digital landscape.

Limitations and Future Research: While the study provides valuable insights, it is important to recognize some limitations. First, the research may have generalizability issues due to its focus on a specific sample size and regional context. Future studies should aim to include larger and more diverse samples to improve the representativeness and generalizability of the findings. Additionally, examining the potential moderating effects of external factors such as economic conditions, cultural differences, and global events could enhance our understanding of the complexities involved in fostering business marketing sustainability. Finally, investigating the role of product promotion and purchase occasions in advancing business marketing sustainability presents a promising direction for future research, as product promotion increasingly influences customer purchase behavior and overall marketing sustainability.

REFERENCES

- Abdelsalam, S., Salim, N., Alias, R. A., & Husain, O. (2020). Understanding Online Impulse Buying Behavior in Social Commerce: A Systematic Literature Review. *IEEE Access*, 8, 89041–89058. <https://doi.org/10.1109/ACCESS.2020.2993671>

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Anjum, T., Farrukh, M., Heidler, P., & Tautiva, J. A. D. (2021). Entrepreneurial intention: Creativity, entrepreneurship, and university support. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 1–13. <https://doi.org/10.3390/joitmc7010011>
- Annunen, P., Mustonen, E., Harkonen, J., & Haapasalo, H. (2021). Sales capability creation during new product development—early involvement of sales. *Journal of Business & Industrial Marketing*, 36(13), 263–273.
- Aslam, H., Rashid, M., & Chaudhary, N. (2021). Impact of Personalized Social Media Advertising on Online Impulse Buying Behavior. *SEISENSE Business Review*, 1(3), 12–25. <https://doi.org/10.33215/SBR.V1I3.660>
- BANICA, L., BRINZEA, V.-M., & RADULESCU, M. (2015). Analyzing Social Networks From The Perspective Of Marketing Decisions. *Scientific Bulletin - Economic Sciences*, 14(3), 37–50.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. V. (2013). *Digital Business Strategy: Toward a Next Generation of Insights*.
- Chawla, A. (2020). Role of Facebook video advertisements in influencing the impulsive buying behavior of consumers. *Journal of Content, Community and Communication*, 10(6), 231–246. <https://doi.org/10.31620/JCCC.06.20/17>
- Chawla, Y., & Chodak, G. (2021). Social media marketing for businesses: Organic promotions of web-links on Facebook. *Journal of Business Research*, 135, 49–65.
- de Oliveira Santini, F., Ladeira, W. J., Pinto, D. C., Herter, M. M., Sampaio, C. H., & Babin, B. J. (2020). Customer engagement in social media: a framework and meta-analysis. *Journal of the Academy of Marketing Science*, 48, 1211–1228.
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., ... Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 57, 101994. <https://doi.org/10.1016/J.IJINFOMGT.2019.08.002>
- Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, 18(3), 382. <https://doi.org/10.2307/3150980>
- Gentsch, P. (2018). AI in Marketing, Sales and Service: How Marketers without a Data Science Degree can use AI, Big Data and Bots. *AI in Marketing, Sales and Service: How Marketers without a Data Science Degree Can Use AI, Big Data and Bots*, 1–271. <https://doi.org/10.1007/978-3-319-89957-2/COVER>
- Gholamrezaei, S., Aliabadi, V., & Ataei, P. (2021). Understanding the pro-environmental behavior among green poultry farmers: Application of behavioral theories. *Environment, Development and Sustainability*, 23(11), 16100–16118. <https://doi.org/10.1007/s10668-021-01331-1>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Han, M. C., & Kim, Y. (2017). Why Consumers Hesitate to Shop Online: Perceived Risk and Product Involvement on Taobao.com. *Journal of Promotion Management*, 23(1), 24–44. <https://doi.org/10.1080/10496491.2016.1251530>
- Harman, H. H. (1976). *Modern factor analysis*. University of Chicago press.
- How Artificial Intelligence Marketing Works, and How B2C Brands Use it for 1-to-1 Interactions | Smart Insights*. (n.d.).
- Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49(1), 30–50. <https://doi.org/10.1007/S11747-020-00749-9>
- Huo, C., Wang, X., Sadiq, M. W., & Pang, M. (2023). Exploring Factors Affecting Consumer's Impulse Buying Behavior in Live-Streaming Shopping: An Interactive Research Based Upon SOR Model. *SAGE Open*, 13(2), 1–15. <https://doi.org/10.1177/21582440231172678>
- Ismagilova, E., Dwivedi, Y., & Rana, N. (2020). Unanticipated Consequences of Interactive Marketing: Systematic Literature Review and Directions for Future Research. *Springer Proceedings in Business and Economics*, 91–98. https://doi.org/10.1007/978-3-030-47595-6_12
- Jain, N. K., Kaul, D., & Sanyal, P. (2022). What drives customers towards mobile shopping? An integrative technology continuance theory perspective. *Asia Pacific Journal of Marketing and Logistics*, 34(5), 922–943. <https://doi.org/10.1108/APJML-02-2021-0133>
- Jhaveri, M., Chirputkar, A., & Ashok, P. (2023). The Efficacy of Artificial Intelligence in making Best Marketing Decisions. *2023 International Conference on Innovative Data Communication Technologies and Application (ICIDCA)*, 225–229. <https://doi.org/10.1109/ICIDCA56705.2023.10100132>
- Johnson, M., Albizri, A., Harfouche, A., & Fosso-Wamba, S. (2022). Integrating human knowledge into artificial intelligence for complex and ill-structured problems: Informed artificial intelligence. *International Journal of Information Management*, 64, 102479. <https://doi.org/10.1016/J.IJINFOMGT.2022.102479>
- Kaplan, A., & Haenlein, M. (2020). Rulers of the world, unite! The challenges and opportunities of artificial intelligence. *Business Horizons*, 63(1), 37–50. <https://doi.org/10.1016/J.BUSHOR.2019.09.003>
- Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P., Dwivedi, Y. K., & Nerur, S. (2018). Advances in social media research: Past, present and future. *Information Systems Frontiers*, 20, 531–558.
- Karimi, S., & Liu, Y. L. (2020). The differential impact of “mood” on consumers’ decisions, a case of mobile payment adoption. *Computers in Human Behavior*, 102, 132–143. <https://doi.org/10.1016/J.CHB.2019.08.017>
- Khokhar, A. A., Qureshi, P. A. baker, Murtaza, F., & Kazi, A. G. (2019). The Impact of Social Media on Impulse Buying Behaviour in Hyderabad Sindh Pakistan. *International Journal of Entrepreneurial Research*, 2(2), 8–12. <https://doi.org/10.31580/ijer.v2i2.907>
- Kim, S. J. (2023). The role of social media news usage and platforms in civic and political engagement: Focusing on types of usage and platforms. *Computers in Human Behavior*, 138(September 2022), 107475. <https://doi.org/10.1016/j.chb.2022.107475>
- Kusumasondjaja, S. (2018). The roles of message appeals and orientation on social media brand communication effectiveness: An evidence from Indonesia. *Asia Pacific Journal of Marketing and Logistics*, 30(4), 1135–1158. <https://doi.org/10.1108/APJML-10-2017-0267>
- Liang, J., Ali, M. H., & Rosli, A. (2023). The Influence of Online Marketing on Impulse Buying and Economic Benefits of Consumer Efficiencies: Evidence from the Cosmetic Industry. *Transnational Marketing Journal*, 11(2), 60–80. <https://doi.org/10.58262/tmj.v11i2.2004>
- Liu, C., Bao, Z., & Zheng, C. (2019). Exploring consumers’ purchase intention in social commerce: An empirical study based on trust, argument quality, and social presence. *Asia Pacific Journal of Marketing and Logistics*, 31(2), 378–397. <https://doi.org/10.1108/APJML-05-2018-0170>
- Liu, Q., Zhang, X., Huang, S., Zhang, L., & Zhao, Y. (2020). Exploring Consumers’ Buying Behavior in a Large Online Promotion Activity: The Role of Psychological Distance and Involvement. *Journal of Theoretical and Applied Electronic Commerce Research* 2020, Vol. 15, Pages 66–80, 15(1), 66–80. <https://doi.org/10.4067/S0718-18762020000100106>
- Lucarelli, C., Mazzoli, C., & Severini, S. (2020). Applying the Theory of Planned Behavior to Examine Pro-Environmental Behavior: The Moderating Effect of COVID-19 Beliefs. *Sustainability (Switzerland)*.
- Mazzucchelli, A., Chierici, R., Ceruti, F., Chiacchierini, C., Godey, B., Pederzoli, D., Mazzucchelli, A., Chierici, R., Ceruti, F.,

- Chiacchierini, C., Mazzucchelli, A., & Chierici, R. (2018). Affecting brand loyalty intention: The effects of UGC and shopping searches via Facebook. *Journal of Global Fashion Marketing*, 00(00), 1–17. <https://doi.org/10.1080/20932685.2018.1461022>
- Ming, J., Jianqiu, Z., Bilal, M., Akram, U., & Fan, M. (2021). How social presence influences impulse buying behavior in live streaming commerce? The role of S-O-R theory. *International Journal of Web Information Systems*, 17(4), 300–320. <https://doi.org/10.1108/IJWIS-02-2021-0012>
- Misra, R., Mahajan, R., & Singh, N. (n.d.). *Analysis of Factors Affecting Intent to Use Mobile Commerce Services in India*. 14(1), 1–21. <https://doi.org/10.4018/ijesma.300268>
- Nazir, S., Khadim, S., Ali Asadullah, M., & Syed, N. (2023). Exploring the influence of artificial intelligence technology on consumer repurchase intention: The mediation and moderation approach. *Technology in Society*, 72, 102190. <https://doi.org/10.1016/J.TECHSOC.2022.102190>
- Otoo, P., Haojie, S., Wiredu, J., & Elvis, A. (2024). *The influencing factors of quality health care delivery and nhis accessibility: A*.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123–134.
- Roxas, H., Banjo, & Marte, R. (2022). Effects of institutions on the eco-brand orientation of millennial consumers: a social cognitive perspective. *Journal of Consumer Marketing*, September. <https://doi.org/10.1108/JCM-11-2020-4262>
- Sarah, F. H., Goi, C. L., Chieng, F., & Taufique, K. M. R. (2021). Examining the Influence of Atmospheric Cues on Online Impulse Buying Behavior across Product Categories: Insights from an Emerging E-Market. *Journal of Internet Commerce*, 20(1), 25–45. <https://doi.org/10.1080/15332861.2020.1836593>
- Sarwar-A Alam, M. D., Wang, D., & Waheed, A. (2019). Impact of digital marketing on consumers' impulsive online buying tendencies with intervening effect of gender and education: B2C emerging promotional tools. *International Journal of Enterprise Information Systems*, 15(3), 44–59. <https://doi.org/10.4018/IJEIS.2019070103>
- Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management Decision*, 50(2), 253–272.
- Sazili, S., Ju'im, J., Sri, I., & Riyanto, E. (2023). International Journal of Social Science Research and Review. *International Journal of Social Science Research and Review*, 5(1), 159–165.
- Seo, E. J., & Park, J. W. (2018). A study on the effects of social media marketing activities on brand equity and customer response in the airline industry. *Journal of Air Transport Management*, 66 (September 2017), 36–41. <https://doi.org/10.1016/j.jairtraman.2017.09.014>
- Shantatula, S., Lei, Z., & Wiredu, J. (2024). *The effect of artificial intelligence generated content and user generated content on*.
- Singh, P., Sharma, B. K., Arora, L., & Bhatt, V. (2023). Measuring social media impact on Impulse Buying Behavior. *Cogent Business & Management*, 10(3). <https://doi.org/10.1080/23311975.2023.2262371>
- Smith, B. Y. A., & Anderson, M. (2018). Online Shopping and E-Commerce. *Pew Research Centre*, March, 29.
- Steward, M. D., Narus, J. A., Roehm, M. L., & Ritz, W. (2019). From transactions to journeys and beyond: The evolution of B2B buying process modeling. *Industrial Marketing Management*, 83(May), 288–300. <https://doi.org/10.1016/j.indmarman.2019.05.002>
- Tabiat, A. (2022). The Impact of Digital Marketing on Sales Performance: The Case of Lebanese Pharmaceutical Companies. *European Journal of Business and Management Research*, 7(4), 349–355.
- Tafesse, W., & Wien, A. (2018). Using message strategy to drive consumer behavioral engagement on social media. *Journal of Consumer Marketing*, 35(3), 241–253. <https://doi.org/10.1108/JCM-08-2016-1905/FULL/PDF>
- Wiredu, J. (2023). *An investigation on the characteristics, abilities, constraints, and functions of artificial intelligence (ai): the age of chatgpt as an essential*.
- Wiredu, J., Bo, Y., Yang, Q., & Agyemang, S. A. (2021). Customer Satisfaction on the Impact of ICT Based Products on Rural Banks: A Case Study of Anyinam-Rural Bank Limited in Ghana. *Journal of Business*, 9(4), 192–204.
- Wiredu, J., Labaran, U. I., Nketiah, E., & Osibo, B. K. (2020). The Impact of Information and Communication Technology (ICT) on Rural Banks Management. A Case Study of Atiwa-Rural Bank Limited in Ghana. *American Journal of Industrial and Business Management*, 10(10), 1681.
- Wiredu, J., Yang, Q., Saljoughipour, S., Olufunke, E. C., Sampene, A. K., & Brenya, R. (2023). Stimulating environmental performance through green human resource practice: Does green transformational leadership matter? *Journal of Infrastructure, Policy and Development*, 7(1), 2127.
- Wiredu, J., Yang, Q., Sampene, A. K., Gyamfi, B. A., & Asongu, S. A. (2024). The effect of green supply chain management practices on corporate environmental performance: Does supply chain competitive advantage matter? *Business Strategy and the Environment*, 33(3), 2578–2599.
- Zhang, M., & Shi, G. (2022). Consumers' Impulsive Buying Behavior in Online Shopping Based on the Influence of Social Presence. *Computational Intelligence and Neuroscience*, 2022. <https://doi.org/10.1155/2022/6794729>
- Zhou, S., Zhang, D., Lyu, C., & Zhang, H. (2018). Does seeing “mind acts upon mind” affect green psychological climate and green product development performance? The role of matching between green transformational leadership and individual green values. *Sustainability (Switzerland)*, 10(9). <https://doi.org/10.3390/su10093206>
