

From clicks to carts: Examining the role of perceived flow and customer satisfaction as mediators in social media e-commerce

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ABSTRACT

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Customer satisfaction is the bedrock of e-commerce. This study identifies the factors and consequences of the perceived flow of consumers with shopping websites. The research scrutinizes the association linking purchase intentions arising from customer satisfaction, website quality and perceived flow by incorporating the model of Stimulus Organism Response. The data were collected from online shoppers using purposive sampling targeted through social media. The data from 270 respondents have been analyzed using SmartPLS incorporating the Partial Least Square-Structural Equation Modeling. The assessment showed an important beneficial impact of website usability, their security, functionality, and privacy features on the perceived flow of customers. Furthermore, perceived flow has been found to affect customers' purchase intentions as well as satisfaction, and lastly, purchase intention is induced by how satisfied customers are with their shopping experience. The findings identify how important perceived flow functions in enhancing purchase intentions and customer satisfaction online. The findings can be noteworthy for online businesses and banks to improve online shopping experience and transactions.

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1. Introduction

This research was initiated to investigate and study different modern online shopping tools. With advancing technology every day, the market has also observed a critical switch to e-commerce applications. As the market is highly competitive, brands are encountering several challenges in retaining their old customers. This study aims to identify how consumer buying trends have changed in the contemporary rising profile of social networking websites. The research makes emphasis on the dynamics of changing the quality of websites with perceived flow, purchase intentions and customer satisfaction. For a couple of decades, data innovation has assumed a critical job in changing and building up the social media (SM) purchase industry (Santouridis & Trivellas 2010) elaborated on the relationship of direct and indirect users with cross-cultural research in website setting. As a fantastic showcasing and operational platform, the web has altered business tasks by giving uncommon chances to the concerned organizations and their customers in this diligence (Moslehpour et al., 2020). The SM industry has relied on intermediaries to spread data and move items. However, the rise of web-based business websites has built up another possibly incredible correspondence and appropriation channel for the industry, diminishing the disparity between them and customers. Although there is widespread recognition of the similarities between the web and the SM sector, it is important for the SM industry to recognize the substance of website quality alongside other aspects with potential to influence consumers' behavior (Beneke et al., 2013). Several investigations have shown that the quality of a website increases customer satisfaction, which then, in turn, affects their motivation to make a purchase (Kim et al, 2013). The focal point of this study is to enhance the clarity of the correlation between quality of the website and the contributing factors of consumer satisfaction and intentions of customers to make a purchase (Hossain et al., 2018). This investigation presents an apparent basis to check the consolidated impact of purchase intentions and customer satisfaction on social websites. Considering that clients' buying behavior is vital because behavior is customers' cognizance state when they are entirely associated with an action (Shah & Asghar, 2023; Wang

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et al., 2015); web surfing is one of these exercises (Gummerus et al., 2012; Jie et al., 2022). Hence, considering apparent stream alongside the website quality can help anticipate customer purchase intentions and satisfaction on social platforms.

The previous decade has seen the fast advancement of social media in numerous approaches. Most momentarily, it is noticed that consumers have shifted their purchasing patterns, and because of their hectic daily schedule, they find it more convenient to purchase online (Hossain & Zhou, 2018). The enlightenment of social media will give firms a competitive advantage and opportunities to grow globally. The study will help the organization's management not only to retain the previous customers but also to attract more customers across the face of the earth. Moreover, the dilemma discussed in the exploration will study the consumer's mind from three aspects. It would provide a clear picture of customer satisfaction and purchase intention through social media purchases (Wibowo et al., 2021). Although broad studies have examined purchase intention and customer satisfaction, no single investigation states the correlation between social media's usability, functionality security, and privacy on how the satisfaction of shoppers and their intent to purchase is affected by perceived flow (McClure & Seock, 2020). This study accomplishes this examination of disproportion by leading an exact investigation and looking at the interrelationships between usability, functionality security, and privacy of social networking platforms on perceived flow, customer satisfaction and intention to purchase (Ceyhan, 2019). Social media is an interactive platform that facilitates online communication between users, allowing them to share information and opinions. Using social media sites like Facebook, Instagram and X (formerly), have significantly increased across all brands and have been recognized as must-have for new businesses and are considered beneficial tools for corporate growth. Due to the increased use of social media for marketing communication, conducting empirical research to examine the impacts of social media marketing has become crucial (Jamil et al., 2022; Khatoon et al., 2020). The researchers in this investigation appraised the correlation linking SM platforms' functionality security, privacy, and usability and their impact on perceived flow, which have proven to be significant for industries to retain their customers and gain competitive advantage, as modernization progresses, organizations must find innovative ways to attract and retain customers to stay current and relevant.

2. Literature review

2.1 The Stimulus-Organism-Response (S-O-R) Framework

This research is hinged on the Stimulus-Organism-Response (S-O-R) framework, which has been extensively used to analyze people's psychological, humanitarian, social, and individual responses in various situations. The concept of the SOR model was proposed by Arora (1982) and Slama and Tashchian (1987); the background thought of the model was to study the consumers' purchase behavior when they are in a superstore and are given numerous choices. Islam et al. (2018) scrutinized the uninvolved and brief impression of materialism in the sudden purchasing behavior of teenagers and young grown-ups. The SOR Theory is the point at which the organism mediates between the stimulus and response. Mehrabian and Russell (1974) elaborated a pattern demonstrating that encouragement from the environment and surroundings can influence a person's cognitive and full of feeling reactions, impacting human purchase behavior. Scholars have posited that the SOR model is the most popular theory for understanding behavior of customers (Huang, 2023; Yu et al., 2021). According to Wu and Li (2017), the S-O-R framework affects individual behavior and improves perceptual learning while at the same time shopping. The SOR framework in this instance was adapted from previous studies. In accordance with the S-OR framework, a stimulus is seen as an effect that has the potential to influence the internal state of the users. This creature was regarded to be a mediator of the interaction between the stimulus and the reaction, and it was responsible for indicating the processes. The reaction represents the result, which may include the pleasure of the customer and their desire to make a purchase, as well as their approach or avoidance behavior with relation to a certain product/service. Wu et al. (2017) noted that the usage of mobile payments in the context of smart shopping is rapidly rising. This is since mobile payments are helpful, make people feel secure, and are emotionally engaging. The utility, emotion, and security of mobile payments serve as the stimulant since they influence the internal state of the client during the transaction. In their study, Webster et al. (1993) found that the perception of flow is a psychological state that may vary depending on the setting and can be predisposed by the one's involvement in a particular scenario. This statement was made because the apparent flow is a psychological condition. The hypotheses of this research posit that the positive impact of the expediency, sentiment, and security level of mobile solutions (stimulus) on shoppers' perceived flow (organism) may subsequently influence their satisfaction and motivation to make purchases online (reaction).

2.2 Customer Satisfaction

Companies and Brands in each industry progress toward customer satisfaction in light of their sway on their exhibition and benefits (Ryu et al., 2012). Customer satisfaction is critical in challenging e-commerce environments because of how it impacts client retention and acquisition. Ensuring client satisfaction is necessary for expanding client retention, fostering the long-standing expansion of online enterprises, thus achieving the objective of making purchases (Chen et al., 2012; Disastra et al., 2019). Customer satisfaction was considered by Oliver (1997) as "a judgment that an item, or administration highlight, or the item or service itself, gives a pleasurable degree of utilization related satisfaction, including levels of under or over satisfaction". In particular, fulfillment and satisfaction is not just the significant driver of shoppers' web-based

shopping continuation (Lee & Lin, 2005); likewise, it establishes and maintains a dedicated group of enduring, loyal consumers (Evanschitzky et al., 2004).

2.3 Purchase Intention

Purchase intention refers to the capacity and anticipation of shoppers to engage in purchasing online considering their assessment of the quality of the website and the available information provided. It is additionally essential to comprehend customers' intention of purchasing since shoppers' conduct may typically be anticipated based on their purpose (intention). Zeithaml et al. (1996) showed that a critical component of social behavior is the intention of the consumers to make a purchase. Purchase intention is the important targeted variable of this investigation. Changing from exploring visitors to buyers is the main obstacle that buyers encounter during the first visit to a website. Likewise, purchase intention straightforwardly impacts the firm's income and benefit. Accordingly, its importance as a focused variable of interest is evident. Similarly, our model incorporates customers' purchase intention as a last focused variable (Chen et al., 2018).

2.4 Website usability and perceived flow

Website usability was depicted by Dwivedi et al. (2021) to be the degree of efficiency ascribed to website including how enjoyable it is for the products and services it offers. Website usability is connected to user-friendliness and consumer ease of use and is seen as a crucial element for winning over users' and customers' trust and satisfaction (Al-Emadi et al., 2021; Guo et al., 2022; Tandon et al., 2016). Bell et al. (2020) characterized perceived flow as a psychological state or experience in which a consumer becomes fully absorbed and engaged in a pleasurable activity to the point that they lose awareness of themselves. The website is a preeminent platform for online purchasing, and the customers must find the experience of purchasing from the website enjoyable. The quality of the website more than makes up for the absence of the more conventional, in-person buying experience since internet purchasing is so different from it (Mckinney et al. 2002). Many researchers have identified multiple dimensions of evaluating website quality. A pervasive and strong dimension of assessing website quality is website usability (Jauhari et al., 2019). It is believed that if the customers can access and purchase on the website with ease of use, they will likely be engaged in a perceived flow, which can also lead to converting a website browser to a loyal customer. Ali (2016) also suggested and stated that website usability positively influences the perceived flow of online customers. Thus, considering the arguments above, the subsequent hypothesis is proposed.

H₁: *A direct beneficial relationship exists between website usability and customer's perceived flow.*

2.2.2 Website Functionality and Perceived Flow

Website functionality is one method used to assess a website's quality. Website functionality refers to the standard by which customers assess the user-friendliness of a website's functionalities, performance, design, and features. Csikszentmihalyi (1988) introduced the notion of perceived flow as a cognitive condition, defining it as the sense of inclusivity that individuals experience when they fully engage in activities with wholehearted participation and commitment (Khattoon et al., 2020). Website functionality is one of the factors related to the quality check of a social media purchasing website. It is observed that when customers find website functionality user-friendly, it makes them more involved in browsing the products for shopping, which means that the consumers' perceived flow is related to the website functionality (McClure & Seock, 2020). Hsu et al. (2012) state that an important correlation can be found linking website quality and perceived flow. One of these aspects is website functionality, which indicates a favorable association with customers' perceived flow. Therefore, the following hypothesis may be inferred based on the preceding discussion.

H₂: *There is a clear and direct correlation between website functionality and perceived flow by users.*

2.2.3 Website security, privacy, and perceived flow

Website security and privacy refer to how the customer feels safe and comfortable while sharing their personal information, such as credit card numbers, IDs, etc., on a website while browsing or purchasing on websites (Disastra et al., 2019). It is believed that if the customer is not satisfied with the website's security and privacy, they will not find the experience enjoyable, which means they will not be engaged in a perceived flow. Customers will only be absorbed and inflow while shopping when they feel that the website's quality dimensions, such as website security and privacy, are meeting the standards (Wibowo et al., 2021).

This suggests that when the website security and privacy policies are up to the mark, the customers will eventually be laid back and enjoy a good shopping experience by indulging themselves in a perceived flow of purchasing. Zhou (2011) also verified the presence of a positive association connecting the different aspects of website quality (website security and privacy) and the buyers perceived flow. The above discussion leads to the following hypothesis:

H₃: *An established correlation exists between the level of website security and privacy and the perceived flow of e-commerce shoppers.*

2.2.4 Interactions of customer satisfaction, purchase intention and perceived flow

Researchers like Webster et al. (1993) have argued regarding the perception of flow among consumers on online platforms, such as websites, stating it may lead to enhanced learning and shifts in viewpoints and behaviors (Hossain & Zhou, 2018). Others have hypothesized that increasing perceived flow experiences online might appeal to customers, diminish the impact of prices, and foster favorable behaviors and practices (Chiu et al., 2014; Chiu & Ch, 2021; Kabadayi & Gupta, 2005). Specifically, research has demonstrated a common ground linking a compelling perceived flow experience and consumers' behavior and attitude toward certain websites (Mathwick & Rigdon, 2004), just as being emphatically connected to return to and invest more time into browsing and shopping in store (Kabadayi & Gupta, 2005). Ceyhan (2019) argued that perceived flow contributes to favorable client perceptions of the website and directly results in customer satisfaction. Previous research has also shown a robust correlation between the perceived flow online and internet-related activities of the consumer (Ishfaq & Mengxing, 2022; Ceyhan, 2019). Cyr et al. (2005) inferred that clients with a good perceived flow when spending online are liable to have a strong intention to make future purchases and are more inclined to revisit the site or make purchases from it (Hossain & Zhou, 2018). In this manner, buyers who have perceived flow on the website while shopping would be liable to have increasing purchase intention (Wu & Chang, 2005). The study by Hsu et al. (2012) avers that customers who are likely to be perceived in a flow during online shopping and purchasing on a website often are bound to be satisfied and have greater purchasing intention. Thus, the authors propose the following hypotheses in view of the preceding discussions cited above.

H₄: *Perceived flow is firmly and beneficially impactful on customer satisfaction.*

H₅: *Perceived flow is strongly and positively effectual on purchase intention.*

2.5 Evaluating purchase intention and customer satisfaction

Customer satisfaction is closely tied to the effective management and tracking of customer service connections, mainly when a consumer engages with a service, such as a website (Lin & Lekhawipat, 2014; Jauhari et al., 2019). Purchase intention on online platforms such as websites is the extent to which the customer is willing and intends to buy a product. It is a buyer's eagerness to perform determined buying conduct through the Internet (Jie et al., 2022; Khatoon et al., 2020). Empirical evidence suggests an encouraging correlation linking customer satisfaction and the purchase intention of customers. Clients online with positive experiences and satisfactory services with a website incline more to exhibit keen emotions and intentions in their behavior (Zeithaml et al., 1996; Chen et al., 2018), which eventually prompts a rise in customer's purchase intention on the website (Wang et al., 2023). The connection linking purchase intention and customer satisfaction has received significant attention and has been extensively studied by academics. Many researchers have explored the progressive connection that links purchase intention online with customer satisfaction (Istijanto et al., 2023; Phan Tan & Le, 2023; Wang et al., 2023). Many researchers have asserted that online clients with acceptable and pleasant encounters are more inclined to develop an elevated intention to shop online (Ahmad et al., 2022; Gulfranz et al., 2022; Mofokeng & Tan, 2021). Therefore, considering the abovementioned issues, the following hypothesis is put forth.

H₆: *Customer satisfaction strongly influences purchase intention positively.*

3. Research Method

The study utilized a quantitative survey research design. The study's population consists of public members in Thailand who utilize social media. This research used a non-probability convenience sampling approach. A total of 400 respondents have provided data. Investigations have examined the reactions of SM users; this study concentrates on the feedback from SM users, explicitly referring to people with internet access via their communication devices. In this study, the researcher has opted for the survey method. The survey method is an effective data collection method such that the investigator can collect data only specifically for that problem. The data collection instrument was an objective questionnaire. It incorporates different choices for each inquiry, and in a few structures, it likewise gives rankings for each answer by methods for Likert scale from 1-5, appraised one as slightest needed and five as most attractive (such as, strongly agree, agree, neutral, disagree, and strongly disagree). It enables respondents to choose their answers, which could be increasingly exact.

The questionnaire was adapted from previous studies where they have passed through rigorous testing. The scale to measure website usability and customer's perceived flow was adopted from Ali (2016). Website functionality was measured with the scale from Hsu et al. (2012). Website security scale was derived from Zhou (2011). The scale for customer satisfaction was taken from Hsu et al. (2012). Finally purchase intention was measured by adopting scale Hossain and Zhou (2018). Various statistical methodologies were applied in this research to examine the data. The confirmation of convergent and discriminant validity has shown the constructs' validity. SmartPLS has been used for regression analysis and path coefficient.

4. Results

4.1 Measurement model

The association between two theoretically related items is examined by applying the convergent validity test. Convergent validity is attained when measurements are effectively linked in a statistically reliable manner based on an established theoretical framework. The study's convergent validity was assessed through the employment of Average Variance Extracted (AVE), Composite Reliability (CR), and Cronbach's alpha (CA), as Table 1 highlighted.

Table 1
Convergent Validity

| Constructs | Cronbach's Alpha (CA) | Composite Reliability (CR) | Average Variance Extracted (AVE) |
|--------------------------------|-----------------------|----------------------------|----------------------------------|
| Customer satisfaction (CS) | 0.84 | 0.91 | 0.76 |
| Perceived flow (PF) | 0.84 | 0.9 | 0.75 |
| Purchase intention (PI) | 0.85 | 0.93 | 0.87 |
| Web functionality (WF) | 0.81 | 0.87 | 0.57 |
| Web security and privacy (WSP) | 0.72 | 0.84 | 0.64 |
| Website usability (WU) | 0.74 | 0.85 | 0.66 |

After thoroughly examining the provided values, it is apparent that the data satisfies the necessary standards for both reliability and validity. By meticulously assessing the composite reliability ($CR > 0.70$), and average variance extracted ($AVE > 0.50$) of the model, we have successfully determined its convergent validity. While the CR value is commonly considered more reliable, it is essential to acknowledge that the CA value in Smart PLS can still serve as a significant predictor of reliability. Positive indicators In Structural Equation Modeling-Partial Least Squares are characterized using CR values that surpass 70% and AVE values that exceed 50%.

Table 2
Heterotrait-Monotrait Ratio (HTMT) criterion

| Constructs | CS | PF | PI | WF | WSP |
|------------|------|------|------|------|------|
| PF | 1.00 | | | | |
| PI | 0.95 | 0.96 | | | |
| WF | 0.98 | 0.99 | 0.86 | | |
| WSP | 0.80 | 0.85 | 0.80 | 0.86 | |
| WU | 0.87 | 0.89 | 0.74 | 0.85 | 0.78 |

Discriminant validity (DV) pertains to the ability of one variable to be differentiated from another. As stated by Cepeda Carrin et al. (2016), the HTMT test ought to be employed to validate the DV of the model. The DV condition is met when the HTMT value is below 0.90. Henseler et al. (2015) informs that the value of HTMT should be from 0 to 1. Considering the HTMT value presented in Table 2, each figure is precise. The reliability and discriminatory capacity of the model have been established.

4.2 Structural Model

Following the verification of the reliability and validity of the model, we statistically evaluated the relationship across the standard path using Smart-PLS 4. Smart-PLS demonstrates a higher level of effectiveness in handling different types of formative and reflective learning compared to covariance based on SEM. Applying PLS-SEM greatly facilitates the analysis of relationships within path models (Hair et al., 2009). We used the bootstrapping procedure to evaluate the statistical import of the SEM route, generating a total of 5,000 independent samples. The validity of this approach is reinforced by the R-squared value, which measures the model's goodness of fit to the data (Concilio et al., 2017). Table 3 shows the values for the R-squared.

Table 3
R Square values

| Constructs | R Square | R Square (Adj) |
|------------|----------|----------------|
| PF | 0.16 | 0.15 |
| CS | 0.14 | 0.14 |
| PI | 0.47 | 0.46 |

Based on the R-squared value of PF (0.16), it can be inferred that WU, WF, and WSP collectively account for approximately 16% of the variation observed in PF. The R-squared value, which represents the coefficient of determination, for the association between CS and PF is 0.14, indicating that about 14% of the variability in CS can be explained by PF. While the R-squared value of PI was determined to be 0.47. This illustrates that the model's components are indispensable. The findings of the route analysis, including the implication of the direct effect and the appropriate values for the bootstrapping beta coefficient, are presented in Table 4 and Fig. 1. The calculated t-statistic value exceeded the critical value of 1.96. The quasi-

variables exhibit a significant correlation among themselves. Furthermore, we have included the p-values, which serve as statistical indicators of the significance of the findings.

Table 4

Route analysis and bootstrapping beta coefficient values

| Hypotheses | Relationships | β | T-Statistics | P-Values | End Results |
|------------|----------------------|---------|--------------|----------|-------------|
| H1 | WU \rightarrow PF | 0.25 | 5.13 | 0.00 | Supported |
| H2 | WF \rightarrow PF | 0.59 | 10.89 | 0.00 | Supported |
| H3 | WSP \rightarrow PF | 0.11 | 2.73 | 0.01 | Supported |
| H4 | PF \rightarrow CS | 0.36 | 7.13 | 0.00 | Supported |
| H5 | PF \rightarrow PI | 0.29 | 4.94 | 0.00 | Supported |
| H6 | CS \rightarrow PI | 0.17 | 3.96 | 0.00 | Supported |

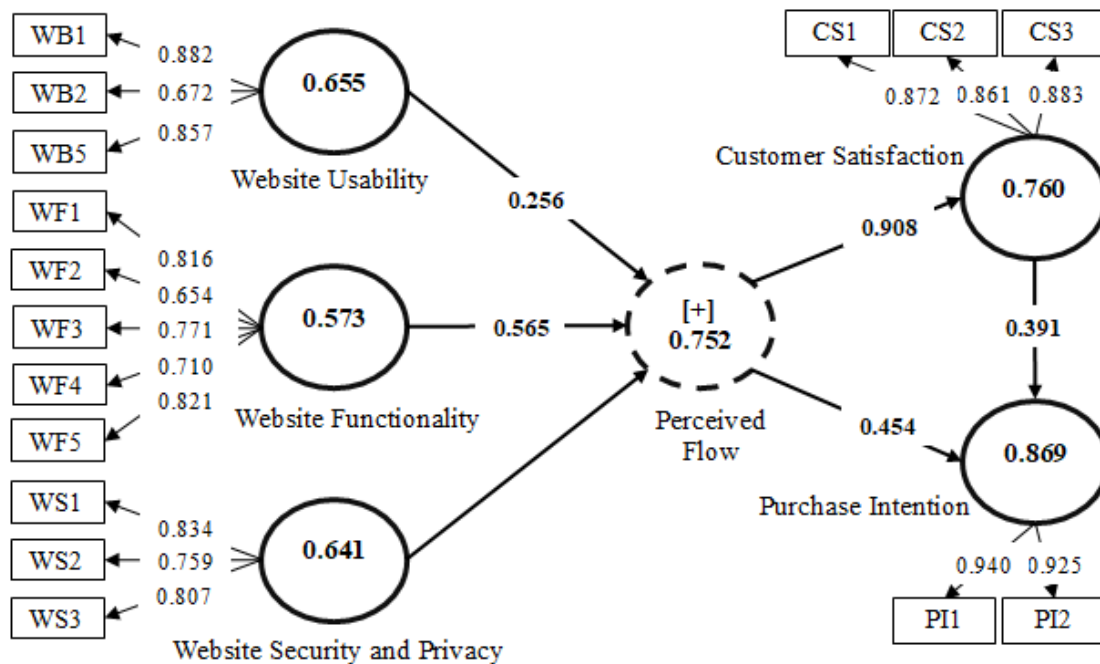


Fig. 1. The route analysis results

5. Discussions and Conclusion

It is the internet and technology age. It is evident that particular aspects of website quality, such as its functionality, usability, privacy, and security, are very significant in connection to the perceived flow of the client since the globe is quickly shifting towards online shopping. After studying the context for this research in detail, which intends to determine the effect of social networking sites purchasing websites on perceived flow, shoppers' satisfaction, and intention to purchase, it can be confirmed that the current evaluation is related to the three aspects of perceived flow, i.e., website functionality, usability, security and privacy. Perceived flow is essential for managers to achieve customer satisfaction because it is of immense importance to design the website carefully, preserving their clients and gain repurchase intention. Advancement in the buying channels has brought about a statement-making evolution in e-commerce, posing distinct challenges in the customer's intention to repurchase. Up-to-date fortune for elevation and urge to bring state-of-the-art relationships in marketing (Gong, Stump & Maddox, 2013). Online website intention to purchase appears to impact the online flow of the website unequivocally. Online website intention to purchase exhibits critical positive relationships with behavioral findings plus the relational benefit of online websites (Hsu et al., 2014).

A direct positive relationship exists between website usability and customer's perceived flow in accordance with results of Ali (2016). It found a direct association between the functioning of a website and the perception of flow. These findings support the research conducted by Hsu et al. (2012). Zhou (2011) has established a strong and positive correlation between website security and privacy and the perceived flow of consumers. Persistent with the findings of Hsu et al. (2012), perceived flow has a significant and positive effect on consumer happiness. According to a 2018 study by Hossain and Zhou, perceived flow and purchase intention are strongly correlated. Purchase intention and customer happiness are strongly positively correlated, claim Wang et al. (2015).

As mentioned earlier, the data analyzes and corroborates the correlation between the qualities associated with a product website, the perception of flow, client satisfaction, as well as the desire to make a purchase. Consumers who see well-designed websites and forums are more inclined to feel a state of flow. These consumers are pleased and more likely to repeat purchases from that specific product website. Hence, social media e-commerce platforms must prioritize and ensure a high-quality website experience. This can be achieved by focusing on website usability, functionality, privacy, and security. By doing so, these platforms can effectively attract potential customers and encourage repeat purchases.

5.1 Theoretical implications

The current study creates a theoretical framework that combines online usability, functionality, security, and privacy, together with perceived flow, customer satisfaction, and buy intent, into a single model. This model provides a full knowledge of how these aspects interact to shape the entire online consumer experience. Researchers can investigate possible moderating factors that might affect the strength of the found correlations. For example, variables such as user attributes, product type, or industry-specific context should be explored to better understand how these interactions change under various settings. They can look at the temporal component of the connections, including how changes in website usability, functionality, security, and privacy over time may affect perceived flow, customer happiness, and purchase intent. This might provide insights into the long-term impact and viability of these interactions.

Different cultural origins or industrial settings may cause differences in the significance of website features and their influence on consumer perceptions and actions. They can investigate plausible mediating processes that explain how website functionality, usability, privacy and security affect perceived flow, purchase intention and consumer satisfaction. Understanding the underlying processes may give more information on the specifics of online shoppers' interactions. It creates theoretical contributions on successful ways for improving website functionality, usability, privacy and security in order to optimize perceived flow, customer happiness, and buy intent. This might include putting out realistic standards or frameworks for website design and administration.

The theories can be extended by looking at how the detected connections may alter across multiple digital platforms and apps. Understanding platform-specific characteristics may help to provide a more complex and platform-specific understanding of the interactions. The findings adds to the feedback loop dynamics including client happiness, perceived flow, and website aspects. For example, changes in website usability or security may result in higher consumer satisfaction, impacting later perceptions of flow and buying intent.

5.2 Practical Implications

Managers should prioritize expenditures to improve website usability and functionality. A user-friendly layout and fluid functioning significantly impact consumers' perceived flow, improving their whole online experience. To guarantee that customers continue to have pleasant experiences, regular usability testing and upgrades should be included in the overall plan. Given the favorable correlation between website security and privacy and perceived flow, managers should emphasize and convey strong security measures. Customers are more likely to experience flow when they feel safe and their privacy is respected. This might include putting in place SSL certificates, secure payment methods, and clear privacy rules. Managers should actively focus on techniques to improve perceived flow throughout the customer's journey on the website, since it positively influences customer satisfaction and purchase intent. This may include speeding navigation, lowering load times, and improving the entire user experience in order to provide a smooth and engaging online environment.

Recognizing the importance of perceived flow on purchase intention, managers should coordinate marketing and communication initiatives to provide a seamless and engaging customer experience. Targeted messaging and customized content may be used to lead clients through the buying process, increasing their overall happiness and propensity to purchase. It is critical to set up methods for collecting and analyzing user input on usability, functionality, security, and perceived flow. Customer satisfaction levels may be regularly monitored to identify areas for development and drive strategic choices. Furthermore, real-time feedback technologies may provide rapid insights into user experiences.

Recognize the interconnectedness between website components and consumer impressions. Managers should create an integrated customer experience plan that considers usability, functionality, security, and privacy. This technique guarantees that clients get a complete and unified online experience. Given the significance of customer satisfaction in boosting purchase intent, it is critical to invest in training and support for customer-facing personnel. Frontline workers should be well-equipped to respond to client requests, problems, and challenges timely and efficiently, hence increasing overall customer satisfaction. Managers may use the beneficial influence of customer satisfaction on purchase intention to design loyalty programs and incentives that reward repeat consumers. Creating a feeling of loyalty may improve consumer satisfaction while also increasing the possibility of repeat purchases. Organizations may improve their online platforms and client interactions by turning these findings into concrete management implications that promote good experiences, contentment, and higher purchase intentions.

5.3 Future research and study limitations

The research's concentration on a specific sector or kind of website might limit its generalization across industries or sectors. It may be difficult to generalize the results to multiple industries or circumstances, thus future studies should look into differences between sectors. It's possible that cultural variations in user perceptions and actions were not appropriately handled. Future studies might look at how cultural differences affect the found connections, offering a more complete picture of worldwide applicability. The research may fail to consider temporal changes in technology, design trends, or user expectations. As online settings change, future studies should look at the temporal stability of the discovered connections and their significance across time.

The research may not have considered all of the possible mediating factors that influence the correlations. Future studies might look at other variables that may mediate or modify the found connections, resulting in a more detailed knowledge of the underlying processes. Limitations may occur from the measuring instruments employed for characteristics such as perceived flow, usability, and function. Future studies should investigate modifying measuring tools to improve data accuracy and dependability.

References

- Ahmad, F., Mustafa, K., Hamid, S. A. R., Khawaja, K. F., Zada, S., Jamil, S., Qaisar, M. N., Vega-Muñoz, A., Contreras-Barraza, N., & Anwer, N. (2022). Online customer experience leads to loyalty via customer engagement: Moderating role of value co-creation. *Frontiers in psychology, 13*, 897851. <https://doi.org/10.3389/fpsyg.2022.897851>
- Al-Emadi, K. A., Kassim, Z. A., & Razzaque, A. (2021). User friendly and user satisfaction model aligned with FinTech. In Y. Albastaki, A. Razzaque, & A. Sarea (Eds.), *Innovative Strategies for Implementing FinTech in Banking* (pp. 291-301). IGI Global. <https://doi.org/10.4018/978-1-7998-3257-7.ch017>
- Ali, F. (2016). Hotel website quality, perceived flow, customer satisfaction and purchase intention. *Journal of hospitality and tourism technology, 7*(2), 213-228.
- Arora, R. (1982). Validation of an SOR model for situation, enduring, and response components of involvement. *Journal of Marketing Research, 19*(4), 505-516.
- Bell, L., McCloy, R., Butler, L., & Vogt, J. (2020). Motivational and affective factors underlying consumer dropout and transactional success in eCommerce: An overview. *Frontiers in Psychology, 11*. <https://doi.org/10.3389/fpsyg.2020.01546>
- Beneke, J., Flynn, R., Greig, T., & Mukaiwa, M. (2013). The influence of perceived product quality, relative price and risk on customer value and willingness to buy: a study of private label merchandise. *Journal of Product & Brand Management, 22*(3), 218-228.
- Ceyhan, A. (2019). The impact of perception related social media marketing applications on consumers' brand loyalty and purchase intention. *Emerging Markets Journal, 9*(1), 88-100.
- Chen, C.-C., Hsiao, K.-L., & Wu, S.-J. (2018). *Purchase intention in social commerce: An empirical examination of perceived value and social awareness*. Library Hi Tech.
- Chiu, C.-M., Wang, E.T.G., Fang, Y.-H., & Huang, H.-Y. (2014). Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal, 24*, 85-114.
- Chiu, W., & Cho, H. (2021). E-commerce brand: The effect of perceived brand leadership on consumers' satisfaction and repurchase intention on e-commerce websites. *Asia Pacific Journal of Marketing and Logistics, 33*(6), 1339-1362. <https://doi.org/10.1108/APJML-10-2018-0403>
- Csikszentmihalyi, M. (1988). The flow experience and its significance for human psychology. *Optimal experience: Psychological studies of flow in consciousness, 2*, 15-35.
- Disastra, G. M., Suryawardani, B., & Sastika, W. (2019). *Website atmosphere, perceived flow and its impact on purchase intention. 1st International Conference on Economics, Business, Entrepreneurship, and Finance (ICEBEF 2018)*. Atlantis Press.
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management, 59*, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Gong, W., Stump, R., & Maddox, L. (2013). Factors influencing consumers' online shopping in China. *Journal of Asia Business Studies, 7*(3), 214-230.
- Gulfraz, M. B., Sufyan, M., Mustak, M., Salminen, J., & Srivastava, D. K. (2022). Understanding the impact of online customers' shopping experience on online impulsive buying: A study on two leading E-commerce platforms. *Journal of Retailing and Consumer Services, 68*, 103000. <https://doi.org/10.1016/j.jretconser.2022.103000>
- Gummerus, J., Liljander, V., Weman, E., & Pihlström, M. (2012). Customer engagement in a Facebook brand community. *Management Research Review, 35*(9), 857-877.
- Guo, J., Zhang, W., & Xia, T. (2022). Impact of shopping website design on customer satisfaction and loyalty: The mediating role of usability and the moderating role of trust. *Sustainability, 15*(8), 6347. <https://doi.org/10.3390/su15086347>
- Hossain, M. S., & Zhou, X. (2018). Impact of m-payments on purchase intention and customer satisfaction: Perceived flow as mediator. *International Journal of Science and Business, 2*(3), 503-517.

- Hossain, M. S., Zhou, X., & Rahman, M. F. (2018). Examining the impact of QR codes on purchase intention and customer satisfaction on the basis of perceived flow. *International Journal of Engineering Business Management*, 10, 1847979018812323.
- Hsu, L., Chang, C., & Chen, C. (2012). Flow Experience and Internet Shopping Behavior: Investigating the Moderating Effect of Consumer Characteristics. *Systems Research and Behavioral Science*, 29(3), 317-332. <https://doi.org/10.1002/sres.1101>
- Hsu, M., Chuang, L., & Hsu, C. (2014). Understanding online shopping intention: the roles of four types of trust and their antecedents. *Internet Research*, 24(3), 332-352.
- Huang, T. (2023). Using SOR framework to explore the driving factors of older adults smartphone use behavior. *Humanities and Social Sciences Communications*, 10(1), 1-16. <https://doi.org/10.1057/s41599-023-02221-9>
- Ishfaq, N., & Mengxing, H. (2022). Consumer usage behavior of internet-based services (IBS) in Pakistan during COVID-19 crisis from the perspective of technology acceptance model. *Environmental Science and Pollution Research International*, 29(57), 85632-85647. <https://doi.org/10.1007/s11356-021-15868-1>
- Islam, T., Sheikh, Z., Hameed, Z., Khan, I. K., & Azam, R. I. (2018). Social comparison, materialism, and compulsive buying based on stimulus-response-model: a comparative study among adolescents and young adults. *Young Consumers*, 19(1), 19-37.
- Istijanto, Arifin, Y., & Nurhayati. (2023). Examining customer satisfaction and purchase intention toward a new product before its launch: Cookies enriched with spirulina. *Cogent Business & Management*, 10(3). <https://doi.org/10.1080/23311975.2023.2257346>
- Jamil, K., Dunnan, L., Gul, R. F., Shehzad, M. U., Gillani, S. H. M., & Awan, F. H. (2022). Role of social media marketing activities in influencing customer intentions: A perspective of a new emerging era. *Frontiers in Psychology*, 12, 808525. <https://doi.org/10.3389/fpsyg.2021.808525>
- Jauhari, M. T., Kusumawati, A., & Nuralam, I. P. (2019). The impact of website quality on consumer satisfaction and purchase intention (study case of e-commerce Lazada Indonesia in Malang city). *Jurnal Administrasi Bisnis*, 67(1), 54-61.
- Jie, W., Poulouva, P., Haider, S. A., & Sham, R. B. (2022). Impact of internet usage on consumer impulsive buying behavior of agriculture products: Moderating role of personality traits and emotional intelligence. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.951103>
- Kabadayi, S., & Gupta, R. (2005). Website loyalty: An empirical investigation of its antecedents. *International Journal of Internet Marketing and Advertising*, 2(4), 321-345. <https://doi.org/10.1504/IJIMA.2005.008105>
- Khatoun, S., Zhengliang, X., & Hussain, H. (2020). The Mediating Effect of customer satisfaction on the relationship between Electronic banking service quality and customer Purchase intention: Evidence from the Qatar banking sector. *SAGE Open*, 10(2), 2158244020935887.
- Kim, J., Yang, K., & Yong Kim, B. (2013). Online retailer reputation and consumer response: examining cross cultural differences. *International Journal of Retail & Distribution Management*, 41(9), 688-705.
- Lee, G., & Lin, H. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management*, 33(2), 161-176.
- Lin, C., & Lekhawipat, W. (2014). Factors affecting online repurchase intention. *Industrial Management & Data Systems*, 114(4), 597 - 611.
- McClure, C., & Seock, Y.-K. (2020). The role of involvement: Investigating the effect of brand's social media pages on consumer purchase intention. *Journal of Retailing and Consumer Services*, 53, 101975.
- McKinney, V., Yoon, K., & Zahedi, F. M. (2002). The measurement of web-customer satisfaction: An expectation and disconfirmation approach. *Information systems research*, 13(3), 296-315.
- Mofokeng, T.E., & Tan, A.W.K. (2021). The impact of online shopping attributes on customer satisfaction and loyalty: Moderating effects of e-commerce experience. *Cogent Business & Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1968206>
- Moslehpour, M., Dadvari, A., Nugroho, W., & Do, B. R. (2021). The dynamic stimulus of social media marketing on purchase intention of Indonesian airline products and services. *Asia Pacific Journal of Marketing and Logistics*, 33(2), 561-583.
- Oliver, R. L., Rust, R. T., & Varki, S. (1997). Customer delight: foundations, findings, and managerial insight. *Journal of retailing*, 73(3), 311-336.
- Phan Tan, L., & Le, T.H. (2023). The influence of perceived price and quality of delivery on online repeat purchase intention: The evidence from Vietnamese purchasers. *Cogent Business & Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2173838>
- Santouridis, I., & Trivellas, P. (2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *The TQM Journal*, 22(3), 330-343.
- Shah, S.S., & Asghar, Z. (2023). Dynamics of social influence on consumption choices: A social network representation. *Heliyon*, 9(6). <https://doi.org/10.1016/j.heliyon.2023.e17146>
- Slama, M. E., & Tashchian, A. (1987). Validating the SOR paradigm for consumer involvement with a convenience good. *Journal of the Academy of Marketing Science*, 15, 36-45.
- Tandon, U., Kiran, R., & Sah, A. N. (2016). Customer satisfaction using website functionality, perceived usability and perceived usefulness towards online shopping in India. *Information Development*. <https://doi.org/10.1177/0266666915621106>

- Wang, C., Liu, T., Zhu, Y., Wang, H., Wang, X., & Zhao, S. (2023). The influence of consumer perception on purchase intention: Evidence from cross-border E-commerce platforms. *Heliyon*, 9(11), e21617. <https://doi.org/10.1016/j.heliyon.2023.e21617>
- Webster, J., Trevino, L. K., & Ryan, L. (1993). The dimensionality and correlates of flow in human-computer interactions. *Computers in Human Behavior*, 9(4), 411-426. [https://doi.org/10.1016/0747-5632\(93\)90032-N](https://doi.org/10.1016/0747-5632(93)90032-N)
- Wibowo, A., Chen, S.-C., Wiangin, U., Ma, Y., & Ruangkanjanases, A. (2021). Customer behavior as an outcome of social media marketing: The role of social media marketing activity and customer experience. *Sustainability*, 13(1), 189.
- Wu, J. J., & Chang, Y. S. (2005). Towards understanding members' interactivity, trust, and flow in online travel community. *Industrial Management & Data Systems*, 105(7), 937-954.
- Wu, Y.-L., & Li, E.Y. (2018). Marketing mix, customer value, and customer loyalty in social commerce: A stimulus-organism-response perspective. *Internet Research*, 28(1), 74-104.
- Yu, Z., Klongthong, W., Thavorn, J., & Ngamkroekjoti, C. (2021). Understanding rural Chinese consumers' behavior: A stimulus-organism-response (S-O-R) perspective on Huawei's brand loyalty in China. *Cogent Business & Management*, 8(1), 1880679. <https://doi.org/10.1080/23311975.2021.1880679>
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of marketing*, 60(2), 31-46.
- Zhou, T. (2011). Examining the critical success factors of mobile website adoption. *Online information review*, 35(4), 636-652.



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