The Influence of Digital Marketing on Consumer Behavior in the Context of Online Shopping in the Klang Valley, Malaysia

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Abstract: The contemporary business landscape has undergone significant transformations, resulting in a highly competitive atmosphere. The onset of the second wave of digitization and technological innovation occurred in the early 2010s, and the COVID-19 pandemic further amplified its momentum. The second wave pertains to digitalizing the industrial sector, encompassing several aspects such as digital manufacturing, data-driven healthcare, intelligent buildings, and smart cities (World Economic Forum, 2021). Digital marketing has emerged as a highly prevalent marketing strategy organizations employ, mainly through social media platforms and email marketing techniques. Social media and email marketing are potent strategies for cultivating consumer engagement. This engagement plays a crucial role in influencing the frequency of customers’ intent to make purchases. Furthermore, these marketing methods are characterized by their user-friendly nature and resilience. Digital marketing technologies provide organizations with a convenient means to effectively promote their products and foster customer relationships at a reduced cost, resulting in heightened sales volume. This study investigates the relationship between digital marketing, consumer engagement, and purchase intention within the Klang Valley region. The primary objective is to optimize the utilization of the study findings by obtaining theoretical validation of the relationship between the variables and selecting the most suitable implications that contribute to identifying the influence of digital marketing on consumer engagement and purchase intention.

Keywords: Digital Marketing, Consumer Behavior, Online Shopping, Customer Experience, Malaysia.

1. Introduction and Background

Digital marketing refers to the strategic promotion and advertisement of goods or services utilizing digital technology, mainly on the Internet, but also encompassing mobile devices, display advertising, and other digital platforms (Desai, 2019). A study conducted in 2020 by Akter et al. provided a subsequent definition of digital marketing as the strategic approach employed to advertise and sell items and services by utilizing digital distribution channels, such as smartphones, digital computers, and other digital devices.

Before the emergence of digital marketing, customers were mostly exposed to traditional mass media channels for advertising. This traditional advertising medium encompassed television, radio, newspapers, magazines, billboards, and similar platforms. Social media and email marketing are widely recognized as the most prevalent digital marketing methods globally. Email marketing is often regarded as one of the most highly regarded tools in digital marketing. According to a study conducted by Nawaz and Kaldeen (2020), email marketing is a strategy that focuses on engaging clients who are receptive to promotional offers. Consumers who provide authorization for email marketing are inclined to have more excellent buy intentions. The impact of social media on client interaction is evident.

Following the exponential expansion of technology, digital marketing exhibits boundless prospects for growth. According to Mkviizu (2019), the field of digital marketing offers various prospects, namely in social media marketing, content marketing, and mobile marketing. The internet has become a valuable tool for Generation X buyers since it enables them to utilize several devices simultaneously, engage in logical thinking, and multitask while purchasing, as mentioned in Akter and Sultana (2020).

In contrast, online shopping entails directly acquiring items from a seller, bypassing any intermediaries. It can also be described as the practice of engaging in commercial transactions, including the purchase and sale of things through the Internet (Daroch et al., 2021).
In essence, electronic commerce is a digital platform that enables consumers to engage in direct transactions with sellers, facilitating the acquisition of goods or services via the Internet (Prebreza & Shala, 2021). Online shopping is widely recognized as a highly convenient and efficient transaction method, primarily attributed to today's increasingly busy lifestyles. This situation has prompted enterprises to establish brand recognition and engage with their intended consumers to promote and distribute their goods and services. Akter and Sultana (2020) conducted a study that proved that digitalization has facilitated the ability to connect with customers worldwide, regardless of geographical location.

Research on consumer behavior plays a crucial role in aiding marketers to adjust their strategies to address customer wants and effectively sustain a competitive edge (Davis et al., 2021). Currently, internet retailers need to comprehensively understand the brands, assortment, and caliber of products they provide (Daroch et al., 2021).

Online shoppers have shown a heightened inclination to interact with brands actively and intellectually. Moreover, it was found that online retail customers exhibit higher levels of cognitive engagement compared to their offline counterparts, suggesting that they allocate more time to deliberate and acquire knowledge about the brand (Bowden et al., 2021).

**Problem Statement:** The advent of digital marketing is gradually displacing conventional advertising methods (Tobi, et al., 2020), although the research found that despite the numerous advantages of online advertising and sales compared to conventional types of commerce, however Malaysian population, particularly the older generation, has not yet embraced this technology in their everyday purchasing and selling endeavors. On the contrary, those previously involved in online commerce exhibit diminished enthusiasm compared to their previous state (Hasan et al., 2022). Whether positive or destructive feedback provided by customers can significantly influence their decision-making process when engaging in online buying (Komal, 2021).

The advent of digital marketing has significantly influenced consumer perceptions and behaviors in the context of making purchase decisions. Presently, consumers are allocating their financial resources towards acquiring goods and services mainly through mobile devices, driven by the desire for enhanced convenience. Over time, the impact of digital marketing on customers' attitudes toward online buying has been substantial. However, several consumers still opt not to utilize Internet platforms for their shopping needs.

The effectiveness of a company’s digital transformation initiatives has come under significant scrutiny considering the Covid-19 outbreak. Sampe (2022) posits that the endurance of micro, small, and medium enterprises (MSMEs) in the face of the COVID-19 pandemic can be enhanced through the practical application of digital marketing expertise acquired through participation in seminars, training sessions, and discussion shows. According to the research conducted by Park (2022), it is indicated that the growing prevalence of digital surveillance gives rise to apprehensions over the potential erosion of privacy. The research warns that individuals who make impulsive judgments with their data may unintentionally jeopardize their privacy in exchange for instant satisfaction, ultimately resulting in inactivity.

**Significance of Study:** Following the report of the World Economic Forum (Schwab & Zahidi, 2020), the governance of digitalization encompasses three significant problems, one of which pertains to the imperative of fostering transparency in the use of artificial intelligence, also referred to as trustworthiness. This aspect is a significant issue that will be the primary focus of this research, as it pertains to the behavior of consumers engaging in online purchasing and their willingness to provide personal data inside the system.

According to Komal (2021), the feedback provided by customers, whether favorable or adverse, can significantly influence their decision-making process regarding online shopping. This issue concerns the credibility of digital marketing about the online sale of products and the information sellers provide regarding their items.

In the context of digital marketing security, the reputation and credibility of a company's brand can be significantly compromised by a single unfavorable customer experience resulting from a cybersecurity
incident. This occurrence can broadly impact the brand’s overall perception (Chambers, 2021). This study examines the potential influence of digital marketing security on consumer online purchase behavior. The prevalence of online shopping adoption among consumers exhibits a consistent upward trend annually. According to Venkatesh (2022), the primary factors influencing online shopping include congruence, impulse buying behavior, value consciousness, risk perception, local shopping preferences, shopping delight, and browsing enjoyment.

2. Literature Review

According to Cambridge Dictionary (online), consumer refers to a person who buys goods or services for their use, while online refers to online products, services, or information that can be bought or used on the internet. In general, people widely know that shopping refers to an action when we buy things. As for behavior, according to Cambridge Dictionary (online); it refers to the way that someone behaves. "Online consumer behavior" describes the process of online shopping from a consumer's perspective. It is often described as the study of trends, including the influence of online advertising, consumer willingness to click on links, and the prevalence of comparison shopping (Mitchell, 2023). Shaouf et al. (2016) mentioned that online buying intentions have become key elements influencing the usefulness of online impetuses. It is supported by Martins et al. (2019), stating that shopping behavior/purchase intention is the basis of demonstrating buying behavior that led to the world’s current customer behavior undergoing enormous and essential changes.

In the current digital world, consumers are more empowered, demanding, and satisfied (Akter & Sultana, 2020). Consumer behavior is characterized as investigating how, what, when, and why people purchase. It describes the purchasing procedure for anyone willing to purchase, including individuals, households, groups, or organizations (Tobi et al., 2020). There are numerous studies on consumers’ impulsive online purchases now. However, most consumers will look at cultural differences, distance, anticipated remorse, product type, price promotion, online store image, and consumer traits. Some people also consider the variety of products or whether they buy for themselves, close friends, or family members (Wu & Chen, 2019). There is a strong connection between purchase intention and online shopping behavior (Lim et al., 2016). Impulsiveness is a dominant predictor of purchase completions, and risk moderates the power of impulsiveness in predicting purchase completions significantly (Rejikumar & Asokan-Ajitha, 2021).

Time pressure and choice overload significantly influence the consumer purchasing decision. For instance, when customers are presented with many items/ options, for example, online shopping, but without time pressure, there is a higher tendency for them to postpone their purchasing decision, indicating a certain level of doubt or confusion regarding the attributes of the product and their worth (Basso et al., 2019).

**H1:** There is an effect of digital marketing security on consumer online shopping behavior.

Security is a vital consideration in the realm of online commerce. According to the Cambridge Dictionary (online), the term "security" pertains to safeguarding individuals, structures, institutions, or nations from potential risks such as criminal activities or hostile actions originating from foreign entities. Conversely, the Merriam-Webster Dictionary (online) defines "security" as the attribute or condition of being free from danger or harm. The concept of protecting consumers’ sensitive information from unauthorized disclosure during electronic transactions is commonly referred to as security (Pébreza & Shala, 2021). While numerous websites assert to provide security and privacy, they often lack comprehensive explanations of the robustness of their transaction and data protection measures (Ali et al., 2016).

Customers often prioritize gathering information about the shop as a precautionary measure, given that online purchases commonly involve the use of debit or credit cards for payment (Wu & Chen, 2019). The role of perceived risk is crucial in the escalation of instability within the online shopping landscape and continues to be a significant barrier to the widespread adoption of online shopping in Egypt (Aref & Okasha, 2020). Nonetheless, the younger consumers’ purchase intention was not significantly affected by the perceived danger. This assertion is substantiated by a discovery made by Muda et al. (2016) in their investigation of Generation Y. The majority of participants expressed awareness of the potential risks inherent in engaging in online transactions. However, it has been suggested that this issue can be mitigated by conducting thorough
According to a study conducted by Daroch et al. (2021), it was shown that consumers exhibit reluctance to disclose their personal information due to their perception of online purchasing being riskier compared to traditional shopping. Online shopping is sometimes regarded as less secure compared to traditional shopping, and the available product information may not be adequate for making informed purchasing decisions. The enhancement and use of advanced technology have led to a substantial improvement in the security of the online shopping environment in Malaysia. Banks offer digital certificates to users as a means of augmenting the security of their transactions. In Malaysia, online vendors also provide an additional payment method known as cash-on-delivery (Muda et al., 2016). To mitigate the risks connected with online purchasing, electronic merchants must implement robust site security measures and effectively communicate these measures to customers. This can be achieved through various means, such as prominently displaying information regarding consumer rights and the return policy on the retailer’s website (Aref & Okasha, 2020).

H2: There is an effect of digital marketing credibility on consumer online shopping behavior.

According to the Cambridge Dictionary (online), credibility pertains to the quality or characteristic of being deemed trustworthy or believable. Similarly, in the context of online digital marketing, credibility can be defined as the extent to which it is deemed reliable and trustworthy. Meanwhile, Merriam-Webster Dictionary (online) (Culpepper, 2000), credibility is defined as the attribute or capacity to evoke belief. Two major disadvantages of online purchasing are the absence of physical interaction with the product and the inability to make payments directly to the sellers. The utilization of diverse marketing instruments unquestionably provides online consumers with accurate information, augments their capacity to make well-informed judgments regarding their purchases, and reduces the incidence of grievances (Komal, 2021). The quality of goods and services offered has a beneficial impact on customer satisfaction in the context of Internet purchasing. Perceived product quality refers to the evaluative judgment made by consumers regarding the overall excellence or superiority of a product (Prebreza & Shala, 2021).

Companies must demonstrate a willingness to allocate resources toward enhancing their brand image since research has shown that the perceived reputation of online sellers has a noteworthy and statistically significant influence on customers’ inclination to engage in online purchases (Muda et al., 2016). Prospective consumers have the opportunity to peruse feedback from both the general public and past buyers before reaching a decision. Therefore, it can be inferred that online merchants who establish a robust reputation can attract a greater volume of visitors to their virtual storefronts.

In addition, it has been observed that sellers who actively participate in corporate social responsibility initiatives are perceived to possess a favorable reputation in contrast to those who prioritize profit maximization as their primary objective (Muda et al., 2016).

Consumers tend to exclusively engage in transactions with reputable online retailers after doing price comparisons and ensuring the provision of guarantees or warranties on the purchased goods (Daroch et al., 2021). According to Hamouda (2021), both affective and cognitive elements of user experience have a positive and considerable influence on users’ purchase intention. Based on the findings of Purwanto (2022), it has been established that digital marketing exerts a favorable and substantial impact on purchasing decisions. Moreover, the presence of brand image as a moderating variable has the potential to enhance or amplify the influence of digital marketing factors on purchasing decision variables.

H3: There is an effect of digital marketing trustworthiness on consumer online shopping behavior.

According to Davis et al. (2021), the perception of trustworthiness among consumers is influenced by the absence of any discernible disparity in product quality, regardless of whether the product is purchased through online or offline channels. According to a study conducted by Hasan et al. (2022), the assessment of risk by consumers plays a crucial role in their decision-making process regarding online purchases. Individuals need to possess awareness of a multitude of hazards, including aspects such as quality, security, and various other considerations. Moreover, when considering the perspective of the consumer, it may be argued that e-commerce transactions entail a greater degree of risk compared to purchases made in traditional brick-and-mortar stores (Ali et al., 2016). Complaints are unlikely to arise when the product aligns...
with the consumer's quality standards and expectations. However, the presence of complaints becomes probable when the product fails to match the criteria (Komal, 2021).

The reluctance of consumers to engage in online purchasing can be attributed to factors such as limited information, negative prior experiences, and the absence of monthly installment choices provided by certain online shops (Daroch et al., 2021). According to Bowden and Mirzaei (2021), marketers should strive for consumer engagement by implementing "participative" events and promotions. This approach is effective because customers tend to exhibit higher levels of brand involvement when they have a sense of personal connection and belonging, leading to a rise in trust.

The purchase intention of customers was found to be influenced by their perception of their social networks, including relatives, friends, and media, as indicated by studies conducted by Lim et al. (2016) and Aref & Okasha (2020). According to Muda et al. (2016), the inclination of Generation Y to engage in online shopping is influenced by their heightened perception of trust towards online retailers. Nevertheless, the study conducted by Lim et al. (2016) found no substantial correlation between the perceived usefulness and online shopping behavior of university students.

This assertion is corroborated by a prior investigation conducted by Bowden and Mirzaei (2021), which posited that online brand communities exert a substantial and augmenting influence on the association between self-brand connections and engagement. The findings of Hawaldar et al. (2022) demonstrate a significant correlation between digital media and sales, indicating that outbound marketing strategies, particularly word-of-mouth promotion, play a crucial role in establishing a brand’s image as it proliferates across various social media platforms.

According to Fahmi et al. (2022), the research findings indicate that utilizing email and social media marketing, along with search engine optimization, presents numerous prospects for hospitals to establish connections with patients. Furthermore, it is emphasized that healthcare organizations must fulfill this requirement and recognize the significance of staying abreast of marketing trends and current promotions to cultivate a global brand image for the future.

**H4:** There is an effect of consumer intention on consumer online shopping behavior.

Based on the study by (Pena-Garcia et al., 2020) in the context of online consumer behavior in Columbia and Spain stated that consumer intention is the degree to which consumers are willing to purchase products using online shopping. Examining purchase intentions can serve as a method for evaluating the introduction of a novel distribution channel. This approach aids managers in ascertaining the viability of the concept for additional refinement and assists in making informed choices regarding the specific geographical markets and consumer segments that should be focused on via this channel. As outlined by Ajzen (1991), consumer intentions serve as a gauge of the degree to which individuals are inclined to engage in a specific action, which, within the scope of this study, pertains to online purchasing behavior. Previous studies have revealed that the absence of intent to make online purchases constitutes a primary obstacle to the advancement of e-commerce. Scholars like Lim et al. (2016) emphasize the necessity for further investigation into both online purchase intentions and actual online purchase behaviors. Building upon these insights, the initial research hypothesis of this study delves into examining the impact of online purchase intentions on consumer purchase behavior (Pena-Garcia et al., 2020).

**Theory of Planned Behavior (TPB):** As stated by LaMorte (2022), the initial conceptual framework that emerged was the Theory of Reasoned Action in 1980, which aimed to forecast an individual’s desire to partake in a certain action within a specific temporal and spatial context. Subsequently, this theory underwent further development and transformation, leading to the emergence of the Theory of Planned action (TPB). The primary objective of the theory was to provide an explanatory framework including all behaviors that individuals are capable of self-regulating. The primary determinant is behavioral intention, which is determined by the individual’s attitude towards the perceived probability of the anticipated outcome, as well as their subjective judgment of the associated risks and advantages.

This study examines individuals' inclination to engage in activities that they perceive as advantageous, while
also considering the level of danger they are willing to bear. Therefore, individuals can strategize whether they should engage with or experiment with novel concepts acquired and observed through online digital marketing. According to LaMorte (2022), the theory has certain limitations. For instance, it assumes that an individual who exhibits the desired behavior has had access to the necessary opportunities and resources for success, irrespective of their intention. However, the theory fails to consider other variables that contribute to behavioral intention and motivation, including fear, threat, mood, and past experiences. Therefore, consumers may prefer digital marketing strategies that offer them a sense of security, confidence, trustworthiness, and ease of adaptation. Consequently, this will lead to a rise in web traffic and the acquisition of a larger consumer base.

**Figure 1: Theory of Planned Behavior**

Research Framework: Based on the theoretical background and review of the previous literature, the conceptual model of this study is developed to examine the relationships among the security, credibility, trustworthiness towards intention and the on consumer online shopping behavior by consumer intention. Figure 2 presents the research model.

**Figure 2: Research Framework Model**

3. Research Methodology

Quantitative research plays a crucial role in the identification of underlying explanations for hypotheses by collecting data to explore novel notions for further investigation (Creswell, 2013). Questionnaire-based
quantitative research is commonly employed for hypothesis evaluation. In this technique, data is collected by predictive methods, which enable the acquisition of statistical information and the examination of numerical correlations among participants (Creswell, 2013). This study employs numerical measures and statistical analysis, indicating the utilization of quantitative research methodology. Questionnaires will be employed as a means of gathering quantitative data. This methodology enables the examination of a substantial cohort, thus facilitating the formulation of inferences based on the samples under investigation.

Based on the stated research objectives, the primary purpose of this study is to examine the correlation between the independent variables (security, credibility, trustworthiness, and adaptability) and the dependent variable (consumer online buying behavior). This study will utilize descriptive research as it seeks to uncover the causal relationships between the variables. Descriptive research is a form of conclusive research that aims to provide a comprehensive understanding of a particular situation by the collection of information and analysis of relevant samples. Its primary objective is to characterize the phenomena under investigation and develop a coherent representation of the observed events.

The target population refers to the specific group of individuals that researchers have identified and selected to conduct their research (Zikmund, et al., 2013). To enhance the reliability and accuracy of the findings about the association between independent variables (IVs) and dependent variables (DVs), the researchers must identify and select a sizable and targeted population, from which a representative sample may be drawn to gather data. The primary aim of this study is to examine the many factors that have influenced the online buying behaviors of consumers residing in the Klang Valley region. Consequently, our focus is directed at all individuals who now reside in the Klang Valley region and possess access to an internet connection. The questionnaire is disseminated to the participants possessing these specific attributes.

The sampling location is located inside the Klang Valley region, The Klang Valley region, which is home to around 9 million residents, has been selected as the primary sampling site for the research study.

The primary objective of this research is to examine the population of individuals living in the Klang Valley area who have access to financial means. This includes various groups such as government employees, private sector employees, self-employed individuals, and students. A sample size of 100 persons has been selected to partake in the researcher survey through the completion of a questionnaire. According to Sekaran (2003), A sample size ranging from greater than 30 to less than 500 is generally considered suitable for most research endeavors.

Convenience sampling is a method that may be utilized to efficiently and effectively gather a significant number of completed questionnaires. This approach leverages the benefits of saving time and reducing costs by targeting varied populations for questionnaire delivery. Therefore, the current study has chosen to utilize convenient non-probability sampling instead of probability sampling.

The research will employ a survey instrument for data collection purposes. Sekaran and Bougie (2013) argue that the utilization of the questionnaire approach is warranted due to its ability to enhance the respondents' understanding of the study's aims. The content of the surveys will be developed by incorporating the findings and insights of previous researchers. The study will employ a Likert scale with a range of 1 to 5. The scale will be interpreted as follows: a score of 1 will indicate "strongly disagree," a score of 2 will indicate "disagree," a score of 3 will indicate "neither agree nor disagree," a score of 4 will indicate "agree," and a score of 5 will indicate "strongly agree." The scale will be utilized to produce a series of response alternatives for the provided statement.

The statistical software SPSS 22 will be employed for demographic analysis, with a specific emphasis on descriptive statistics, to carry out data analysis. The present study will entail an analysis of the frequency distribution, means, and standard deviation of the business profile. The examination of the data in this research will be carried out using structural equation modeling (SEM). The examination of data reliability and validity for each variable will be carried out by Structural Equation Modelling (SEM). The statistical method known as Structural Equation Modelling (SEM) is highly suitable for performing research that involves prediction, hypothesis formation, theory construction, theory testing, and theory confirmation, as outlined by
Hair et al. (2019).

**Pilot Test:** A pilot test was conducted by using a survey method to 30 respondents from the targeted population. The reliability test was conducted through Statistical Package for Social Science (SPSS) to reach Cronbach’s alpha value for each variable. Based on the analysis, the value of Cronbach’s alpha for each variable is greater than 0.6 showing a high internal consistency. The value of Cronbach’s alpha is listed in the following table.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>DIMENSION</th>
<th>NUMBER OF ITEMS</th>
<th>CRONBACH’S ALPHA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variable</td>
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<td>0.616</td>
</tr>
<tr>
<td></td>
<td>Credibility</td>
<td>5</td>
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<td></td>
<td>Trustworthiness</td>
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<tr>
<td>Mediating variable</td>
<td>Intention</td>
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<tr>
<td>Dependent variable</td>
<td>Consumer Online</td>
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<td>0.685</td>
</tr>
</tbody>
</table>

4. Conclusion

In summary, the present study has empirically demonstrated that all the digital advertising elements examined in emerging markets have been found to have either direct or indirect effects on purchase intention. Hence, marketers operating in emerging regions must consider these aspects while executing advertising digitally. By doing so, they can effectively enhance customers’ buy intention, thereby increasing the likelihood of purchase (Martins et al., 2019). The research findings highlight the significant influence of credibility on purchase intention, emphasizing the importance for practitioners to acknowledge and address this relationship.

Therefore, marketers must prioritize the credibility of their advertising messaging when developing advertising programs in emerging markets. The findings of the study also hold significance for digital marketers operating in emerging markets. The developers should prioritize enhancing the algorithms utilized in the advertising tools provided to users. These tools should possess the capability to assist users in generating advertisements that are both engaging and instructive, while also being highly credible and less bothersome to clients. In addition, developers must effectively utilize their database to provide advertising recommendations that align with user preferences. This strategic approach aims to enhance buy intention by delivering targeted advertisements.

Nevertheless, it is crucial to consider that the collection of customer data should be conducted within reasonable limits to prevent the emergence of privacy concerns. Failure to do so may result in negative consequences such as a decline in credibility and attitude towards advertising, which are two variables that have been identified as having a significant impact on purchase intention in this study. Consequently, this could lead to a backfiring effect and ultimately reduce the purchase intention of consumers.

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