

## The Impact of Digital Marketing Strategies on Consumers' Online Buying Behaviour of University Students Towards Brands in Kuala Lumpur, Malaysia

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### Abstract

This research paper delves into the effects of digital marketing on the buying behaviour of online consumers in universities. It focuses on the impact of social media marketing and online display ads on the purchasing behaviour of consumers in the cosmetic industry. The study posits that the use of digital marketing platforms has a continuous influence on consumers' attitudes, beliefs, purchasing patterns, and intentions. To gather data, a questionnaire was distributed to 100 participants within the Klang Valley. The research used quantitative methods to analyze the data using IBM SPSS software to provide reliability and validity tests. The findings, which are of significant importance, not only confirmed a positive correlation between digital marketing and consumer online buying behaviour but also shed light on the specific strategies that are most effective. These results are crucial for marketers and service providers looking to enhance their understanding of consumer buying behaviour and improve their marketing strategies.

**Keywords:** *Social Media Marketing, Influencer Marketing, E-Shopping, Purchasing Decisions, Buying Behaviour*

### 1.0 Introduction

The world of digital marketing is not just a vast landscape but a transformative force that encompasses a plethora of strategies, including social media marketing and search engine marketing. These approaches have revolutionised the way individuals connect, enabling marketers to target their intended audiences and promote their products more effectively. In today's society, the internet, social media platforms, and various applications have become integral parts of our daily lives, providing businesses with endless opportunities to leverage the digital world. As a result, consumer behaviour has significantly transformed, influencing how individuals choose the products they purchase to fulfill their wants and needs. Extensive research has been conducted on digital marketing, but this study aims to delve deeper into the relationship between digital marketing and actual consumer purchases (Trudel, 2019; Bala & Verma, 2018 & Damanpour & Damanpour, 2001). The objective is to determine precisely how

social media, websites, and online display ads impact consumer behaviour and drive sales, urging businesses to adapt to these changes swiftly and engage with this transformative force.

Between 2010 and 2018, the e-commerce industry in Malaysia experienced remarkable growth. In 2010, it generated a net profit of RM37.5 billion, but by 2018, it had surged to RM85.8 billion. This impressive growth is reflected in the number of businesses registered for e-commerce with MDEC, which has surpassed 20,000. Additionally, Malaysia's mobile phone penetration rate is at 132%, indicating that there are 39,161 subscribers. The country's fixed broadband speed ranks third among other ASEAN countries, and its mobile broadband speed ranks fifth. These statistics demonstrate that Malaysia's e-commerce industry is thriving, and the country is well-positioned to continue to be a leader in the region.

Digital platforms have significantly influenced consumers' attitudes, beliefs, purchasing patterns, and intentions. Wang (2021) suggests that digital media has led to the growth of websites that have enhanced various activities and interactions among Internet users. Recent statistics have shown that about 75% of individuals aged 25 years and above use the internet daily, with 35% searching for information on local businesses, and about 45% purchasing products online yearly (Lee, 2019). The advancement of technology has greatly contributed to the growth of the digital marketing sector. Marketers can now identify their consumers' needs and wants, which has led to increased profitability. This study aims to investigate the impact of digital marketing on consumer behaviour and explore the connection between the two.

The objectives of this research are (1) to examine the effect of social media marketing and display Ads influence consumer buying behaviour. This research is expected to contribute to the extended Technology Acceptance Model (TAM) by including the perceived risk and perceived utility as factor antecedents.

## **2.0 Literature Review**

### **2.1 Digital Marketing**

According to research by Sulthana and Vasantha (2019), "Purchase Intention" describes the intention to buy a product or service in the near future. It is typically tied to a client's state of mind, attitude, and propensity to buy. Consumer interest in a product is a major factor in their final purchasing decision (Shields, 2021).

Purchasing intentions are reflective of consumers' habitually predicted behaviour in making purchases in the near future. Among the many factors that are considered in consumer research studies is the desire to purchase a certain brand's product or service. These studies may be conducted for any number of reasons and can include any number of items or services. For instance, while planning a future shopping trip, consumers often think about what items or brands they want to purchase. In particular, the structure of attitudes will be heavily influenced by customers' purchase intentions, which are projections of their future behaviour (Muhammad et al., 2015).

### **2.2 Digital Marketing and Consumer Buying Behavior**

According to Wang (2020), with the advent of digital marketing, customers now have access to detailed information about a particular product that a company offers. This information empowers them to make informed comparisons and purchase decisions, regardless of their

physical location. As technology continues to advance, customers are becoming more connected with one another, leading to a shift in consumer behavior. Consequently, organizations must have a deep understanding of consumer behavior, including their attitudes and purchasing patterns, to remain competitive in the market.

According to Lee (2021), the impact of digital media on consumers' buying behavior has been the subject of a recent survey. The findings indicate that traditional stores have been severely disrupted by Internet methods in recent years, and this trend is expected to continue. The convenience of buying online has convinced consumers that it saves them time and effort, making it an increasingly popular option. In response, retail marketing has undergone significant changes, with a focus on transparency in pricing and social messages. Digital marketing platforms such as web design, customer alerts, and Facebook have become the primary means of communication between businesses and consumers. As such, businesses need to embrace digital marketing strategies to remain relevant and competitive in the current market.

### **2.3 Social Media Marketing**

Social media has continuously improved the business sector's performance, improving living standards (Chuang, 2020). According to Donthu & Gustafsson (2020), social media has become a vital tool in various aspects like education, marketing, and the business sector. Buyers nowadays interact directly with social media platforms, making it easier for them to acquire various products and services that they are interested in. Most companies aim to maintain a positive brand image across social media platforms such as Facebook, X, LinkedIn, and many others.

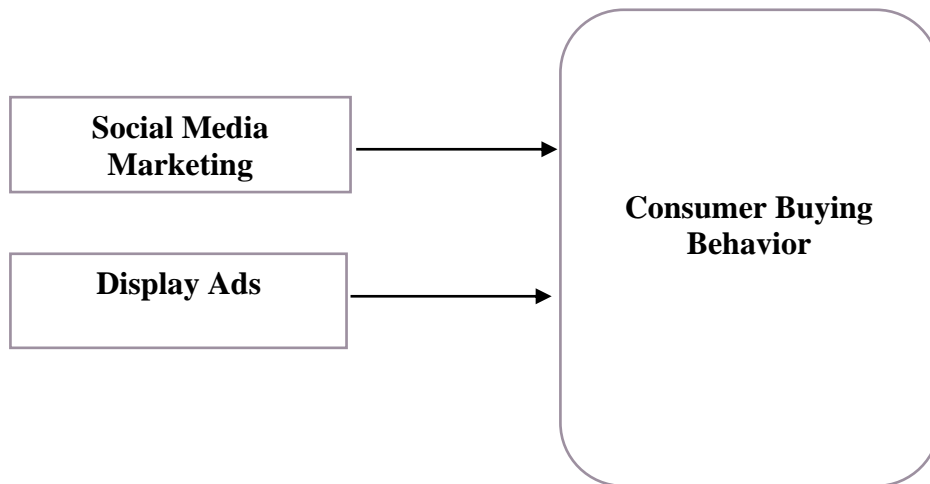
Ebrahim (2020) states that social media has become an essential tool in marketing and for a good reason. According to recent studies, social media is directly linked to word-of-mouth marketing. About 79% of consumers prefer to follow and like brands on social media platforms like X, Facebook, LinkedIn, YouTube, and Instagram. It's no longer just a platform for individuals to connect with friends and family; it has now become an indispensable tool for businesses worldwide to market their products and services. The potential reach of social media is vast, and it's a cost-effective way to connect with consumers. Therefore, you're missing out on many opportunities if you're not utilising social media for your business (Kumar & Nanda, 2019).

### **2.4 Online Display Ad**

Nicolaou (2021) stated that online advertising refers to advertisements primarily displayed online. The main goal of online advertising is to communicate with the audience using the digital environment effectively. Interactive tools are used to target this audience. According to the literature, the online advertising banner is the most commonly used instrument for online advertising.

According to Clapp (2021), banner ads have been found to have a greater impact on individuals who are browsing rather than those who are directly trying to achieve a specific goal. Although individuals tend to avoid looking at display ads actively, they have a significant positive effect on brand awareness and advertising recall, ultimately resulting in improved sales and purchases for both consumers and marketers (Belanche, Flavián & Pérez-Rueda, 2020).

**Figure 1: Research Framework**



**3.0 Methodology**

In this study, SPSS software will be the primary tool used to analyse the data collected from a survey. The use of this software is crucial as it enables the practical completion of the study while taking into account the research hypotheses. The study employs several statistical tools to ensure that the variables used are relevant and appropriate to the study. These tools include frequency, Pearson correlation matrix, and standard deviation. Additionally, the Kaiser-Meyer-Olkin (KMO) measurement is used to help determine the suitability of the variables for the study. To enhance the validity of the study hypothesis testing, the study also utilises Cronbach's alpha test and total Variance. Finally, the study uses linear regression analysis, a statistical method used to determine the relationship between the dependent and independent variables.

**3.1 Reliability Test**

Conducting a reliability test is crucial for ensuring the accuracy and credibility of questionnaire items. This step helps to guarantee that the data collected will be reliable and valuable for the study. The Cronbach's alpha method is a statistical tool that measures the reliability of the coefficient, which enhances the correlation between related items. This ensures adequate internal consistency and reliability of data. A score greater than 0.6 is acceptable, while a score greater than 0.8 is considered excellent (Story & Tait, 2019).

**Table 1: Reliability statistics in pilot test (Dependent variables)**

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Based on N of Items
.674	.720	5

Table 1 presents the reliability statistics obtained in the pilot test for the independent variable. The table shows that Cronbach's alpha has a value of 0.674, which indicates that the dependent variables are excellent for further analysis. In other words, there is a high correlation between the statements used to measure the factors for the dependent variables.

#### 4.0 Data Analysis

During this study, roughly 100 questionnaires were deemed suitable for the research. A total of 120 questionnaires were disseminated, primarily via Facebook, to facilitate the completion of the pilot test. 105 questionnaires were gathered, with only five considered unsuitable. Consequently, the response rate was 83%, which is satisfactory for drawing conclusions that can be generalized to the target population.

#### 4.1. Demographic Profile of Respondents

##### 4.1.1. Age

As depicted in Table 1, four age categories were specified. The majority, 55% of respondents, consisted of respondents between the ages of 25 and 29, followed by 20% of respondents consisting of 18-24 of age.

**Table 2: Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	20	20.0	20.0	20.0
	25-29	55	55.0	55.0	75.0
	30-37	16	16.0	16.0	91.0
	Above 45	9	9.0	9.0	100.0
	Total	100	100.0	100.0	

##### 4.1.2 Gender

As depicted in Table 2, respondents were given two options. 57% of respondents were males and 43% were females. Consequently, the survey received a more significant number of male responses.

**Table 1: Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	57	57.0	57.0	57.0

Female	43	43.0	43.0	100.0
Total	100	100.0	100.0	

#### 4.2 KMO and Bartlett's Test of Sphericity

Before conducting factor analysis, it is important to perform KMO and Bartlett's Test of Sphericity. According to Shrestha (2021), if the value of KMO and Bartlett's Test of Sphericity is greater than 0.6, it indicates that the data has better sampling adequacy, which makes it suitable for factor analysis. However, if the value is less than 0.6, it is most likely to be inadequate, and factor analysis may not be necessary.

**Table 3: KMO and Bartlett's Test (Consumer Buying Behavior)**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.591
Bartlett's Test of Sphericity	Approx. Chi-Square	159.215
	df	10
	Sig.	.000

Table 3 displays Bartlett's Test of Sphericity results for the dependent variable. The KMO coefficient is 0.591, which is greater than 0.5. The p-value is 0.000, indicating that the dependent variable has a high correlation measurement statement and is crucial for further analysis.

**Table 4: Total Variance Explained**

#### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.412	48.235	48.235	2.412	48.235	48.235
2	1.224	24.478	72.713	1.224	24.478	72.713
3	.730	14.601	87.313			

4	.431	8.622	95.936			
5	.203	4.064	100.000			

Extraction Method: Principal Component Analysis.

Table 4 provides the total variance for the dependent variable. The values are mostly above one, and the extract is 72.713. This indicates the validity of the data for the study.

**Table 5: KMO and Bartlett's Test (Social Media Marketing)**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.665
Bartlett's Test of Sphericity	Approx. Chi-Square	233.690
	df	10
	Sig.	.000

**Table 6: KMO and Bartlett's Test (Website)**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.795
Bartlett's Test of Sphericity	Approx. Chi-Square	376.527
	df	10
	Sig.	.000

**Table 7: KMO and Bartlett's Test (Display Ads)**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.578
Bartlett's Test of Sphericity	Approx. Chi-Square	220.133
	df	10
	Sig.	.000

The factor loading for the independent variables is displayed above. The KMO result is 0.665, 0.795, and 0.578 for each variable, respectively. The communality values of the significance are all 0.000. This suggests that the items of the independent variables are valid and suitable for further analysis.

**Table 8: Total Variance Explained**

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.815	56.305	56.305	2.815	56.305	56.305
2	.991	19.823	76.128			
3	.724	14.482	90.609			
4	.346	6.911	97.521			
5	.124	2.479	100.000			

Extraction Method: Principal Component Analysis.

The tables above primarily show the total variance for the independent variables. As a result, the values are mostly greater than one, with the figures being 56.305, 66.538, and 78.849. This indicates that the data is valid for the study.

**4.3 Multiple Regression Analysis and ANOVA**

Multiple regression analysis helps to determine the correlation between dependent and independent variables. ANOVA is a statistical method used to determine whether there's a significant difference between the means of two or more groups. The residuals should have a normal distribution. See the results below:

**Table 9: Model Summary**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.884 <sup>a</sup>	.782	.742	.706



a. Predictors: (Constant)

The R square value in the table above is 0.782 which is greater than 0.5. When the R square is greater than 0.5, the model tends to be fit. Therefore, the items of the study are valid and accepted for further analysis.

**Table 10: ANOVA**

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	147.953	15	9.864	19.803	.000 <sup>b</sup>
	Residual	41.340	83	.498		
	Total	189.293	98			

**5.0 Discussion**

The data analysis provided valuable insights into the associations between the independent variables (IVs) and dependent variable (DV), leading to a deeper understanding of the factors.

The study found that the coefficient of the variables about social media and consumer behavior is predominantly 0.665, with a p-value of 0.000. This indicates that social media marketing exerts a significant and positive impact on consumers' purchasing behavior. This conclusion is backed by Kumar & Nanda (2019), who reported that social media marketing has emerged as a potent tool that enhances continuous interaction between users, enables effective communication, and brings about changes in consumers' behavior over time. Therefore, the hypothesis that social media marketing has a positive influence on consumer buying behavior is accepted as valid based on the findings of this study.

The study provides insightful information on the relationship between digital marketing and consumer behavior. The study's findings indicate that online display ads have a significant and positive impact on consumer buying behavior, with a coefficient of 0.578 and a p-value of 0.000. This implies that online display ads are an effective tool for influencing consumer behavior.

Moreover, the study's results are supported by Clapp (2021), who suggests that banner ads tend to influence individuals who are browsing more than those who have a specific goal in mind. This implies that online display ads can be more effective in capturing the attention of potential customers who may not be actively looking for a product or service.

In summary, the study's findings provide valuable insights into the effectiveness of online display ads in influencing consumer behavior. The results suggest that businesses can leverage online display ads as a powerful tool to reach potential customers and influence their buying behavior.

## 5.1 Implication of the Study

Digital marketing is a highly significant tool for effective advertising of products and services through the internet. It involves using various digital platforms and modern communication methods to enhance marketing efforts. The internet, social media, and applications have greatly impacted our lives in recent years. Marketers can access their target consumers and promote their products through digital marketing. This study examines the impact of social media marketing, website advertising, and display ads on consumers and how they affect their behavior.

The study focuses on the connection between online marketing and consumer behaviour. Marketers and companies must gain insight into the scope of the market that is mainly influenced by the digital marketing strategy. This helps in overcoming challenges that affect the marketing sector and increases profitability. The literature review considers past research conducted by other researchers.

## 5.2 Recommendation

The limitations of the present research include the emphasis on context with samples obtained from Malaysia. Future research should explore on a comparative study between the developed and developing countries. We propose subsequent studies to explore on other constructs for the antecedents such as consumers' motivation, trust, and marketing communications, as well as other consumer behaviour such as satisfaction.

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