

Demystifying the Effect of Social Media on Consumer Behaviour

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Abstract: This study was focused on assessing the effect of social media platforms on consumer behaviour, by specifically looking at the key variables such as the need recognition, information search, evaluation of alternatives and purchase decision. The study adopted a quantitative approach, and primary data was collected through a survey technique. The respondents were randomly selected based on their likelihood of using social media platforms. The need recognition, information search, evaluation of alternatives and consumer perception were regarded as the independent variables of this study; while purchase decision was treated as a dependent variable. Based on the findings of this study, all the proposed hypotheses are proven significant. The need recognition, information search, evaluation of alternatives and consumer perception have a positive effect on consumers' purchase decisions. Social media platforms are now being regarded and used as the prime source of information by a wide range of consumers. Therefore, it is recommended that companies should use a customer centric approach that seeks to engage and prioritise customers, and their needs, through social media platforms.

1. Introduction

Understanding the effect of social media on consumer behaviour has become a major theme of research inquiry among several scholars around the world. The availability and usage of the internet has enabled individuals to use social media networks, such as Facebook, Twitter and Instagram to interact, on daily bases without any need to meet physically^[1]. According to Nolcheska^[2], these social media networking platforms have enabled a two-way flow of information that allows businesses to influence the purchase decisions among their targeted markets^[3]. Through social networks, businesses are now providing brand awareness, increasing sales, influencing positive word-of-mouth, and obtaining support and loyalty from their customers. Due to the internet usage, electronic commerce has expanded and this has prompted the need for understanding the e-consumer behavior.

Businesses are now seeking to understand the effect of social media platforms on consumer behaviour. Social media platforms are significantly changing consumer behaviour. People are now relying on the reviews or opinions shared via social media platforms^[3,4]. The internet is now being used as the primary source of information by most consumers, and social media platforms are being utilised by consumers to evaluate products, create status updates and make informed

recommendations^[3]. While connecting with other online customers, consumers are now able to share their opinions and experiences.

Social interactions via online networking platforms is highly influencing the purchase decisions among consumers, stretching from the problem or need recognition, looking for relevant information, evaluation of alternatives, final purchase decisions, and post purchase satisfaction. In other words, social media platforms are now impacting purchase decisions among customers. According to Xhema^[3], researchers should now focus on investigating other variables regarding customer behaviour, such as; problem recognition, searching of relevant information, evaluation of alternatives, final purchase decision, and postpurchase satisfaction. Little attention has been directed towards this field. As such, this research seeks to examine the effect of social media on consumer behaviour, by specifically looking at the key variables of consumer behaviour, such as need recognition, information search, evaluation of alternatives and consumer perceptions.

2. Literature Review

Social media refers to convenient platforms such as websites and applications that are created to enable individuals to share information quickly and efficiently, in real-time. People can now easily access social media through smartphones even though it all started with computers. Social media can also be contextualized as any internet communication tool that allows users to largely share information and engage with the community. It is also regarded as a collection of software centered digital technologies that are usually presented in the form of apps and websites. This type of technology provides users with platforms where they can send and receive digital information over some type of online social network ^[5]. Social media is made up of a wide range of apps and websites. Some social media platforms like Twitter are specializing in sharing links and short written messages, while other like Instagram optimize the sharing of videos and photos. There are some important procedures in analyzing social network, which are shown in the following:

2.1. Need recognition

Need recognition is regarded as the first step towards the consumers' decision-process. According to Kotler and Armstrong ^[6], consumers' external stimuli such as advertisements have a direct influence in making consumers realise the difference between their state of desire and the current state. This is considered as a general trigger which initiates the consumer buying decision process and acts as the precursor of all consumers' subsequent initiated activities which include information search, assessment and the initial purchase. The need for purchase is established through various choices which are also dependent on numerous individual characteristics. Although this stage is characterized by various drivers, it is however different from all the other stages which come later ^[7].

2.2. Information search

Based on the need recognition, it is observed that consumers undergo a lot of consideration in determining product choice with all the available choices. If consumers do not possess sufficient internal knowledge, an external search is then necessary to supplement the existing knowledge. Hence, they will utilise social media platforms to search for relevant information since social media is now regarded as a primary source of information. Voramontri and Klieb ^[7] stipulate that the infrequency in complex buying involves a substantial intensity and amount of search. The external search which is conducted is typically undertaken using various personal sources such as family and friends as well as other sources like salesperson, advertisements, and public media sources such as

magazines, newspapers, internet and television. To consumers, what matters the most is the process of information seeking^[8]. Therefore, it is the duty of marketers to ensure that they provide relevant descriptions to promotions and products. Consumers continue searching for information until information of sufficient quality is obtained although it can be limited by the quantity and availability of information. Less availability of information often leads to limited decision making. However, too much supply of information also prevents good decision making due to limited capabilities for consumers to process information^[7]. Additionally, previous product experiences, personal or similar experiments while searching can also play a huge role in influencing the decision making process.

2.3. Evaluation of alternatives

As information is collected and gathered, the following stage is evaluation, whereby the consumer assesses and evaluates various product choices so as to arrive at a decision to purchase. This is the stage where consumers ask questions such as the necessity of purchasing the particular product, if they are alternatives to that product out there, the authenticity and integrity of the product. The stages of information search and evaluation of alternatives are presented separately but are intricately coiled together during decision making and it makes consumers move back and forth in decision making^[7]. Alternative evaluation implies the selection of alternatives and the evaluation criteria. As the decision is determined, the selected choices are then compared along with the outstanding choices and decision rules are then used to narrow down so as to get to the final decision and the ultimate selection. This is the stage in which formation of beliefs, intentions and attitudes lead to the ultimate stage of purchase. Consumers usually select products based on the best attributes such as brand, quality and price which ultimately contribute to the final decision.

2.4. Purchase decision

Purchase decision is defined as the final selection or choice made with regards to product choice of purchase. The stage of purchase is considered as the final major stage for the consumer as it involves making decisions such as where to buy, what to buy and how to pay. Purchase involves individual situations, function of intentions and environmental influences. Other factors that can influence purchase action involve information availability, retail environment and the availability of time in decision making. The study result of^[9] also highlight other factors such as family and friends attitudes, unanticipated circumstances like product availability such as color and size as well as stock outs which may force re-evaluations. During the post-purchase stage, buyers evaluate the performance of the product based on state of satisfaction or dissatisfaction and expectations. As expressed by Oliver^[10], the expectation confirmation theory describes the satisfaction of post-purchase as a perceived performance, function of expectations and as confirmation of beliefs. It is believed that consumers who take their effort, money and time in purchasing may likely encounter a cognitive dissonance in which they wonder if they made the right decision or not^[11]. Consumers are then influenced to find supportive information in order to reduce dissonance through accepting the selection made or accepting the unwise decision made. Karimi^[12] noted that customer satisfaction is the final outcome which a consumer goes through in all the stages of the purchase process because the outcome of one stage influences the experience of other stages. Numerous studies on customer satisfaction have their main focus on satisfaction as the key goal and outcome and sideline satisfaction in line with decision making process. Important to note is that both concepts have fundamental dimensions however, they both contribute positively towards a consumers overall satisfaction^[13]. Therefore it is of significance to critically examine the entire decision process.

2.5. Social media and consumer behavior

The coming in of social media and the way in which it has influenced both marketing practice and consumer behaviour, has greatly been driven by the social media platforms themselves. This dominant business model has since historically up to the present day involved monetization of its audience through offering advertising services to those individuals with the desire to reach a larger target audience with marketing communications and digital content. Previous studies have investigated the usefulness of the various forms of social media on consumer behavior purposes. For instance, Stephen and Galak^[13] and Trusov et al^[14] demonstrated that different kinds of social interactions which are being experienced on social media such as online discussions may positively influence significant outcomes on consumer behaviour purposes such as the sales and new customer acquisition. Recent studies continue to explore the values of social media advertising.

In conjunction with the above analysis, the study of [15] expressed the view that consumers' decision making process consists of five consecutive phases, namely: "need recognition, search for information, alternative evaluation, purchase (choice), and outcomes (post-purchase), which are each influenced by individual characteristics, environmental influences and psychological processes". The need recognition is the first stage of the consumer's purchase decision-process. In this regard, external stimuli such as advertisements, via social media platforms makes consumers realise that there is a difference between their current state and their desired state^[11]. After the stage of need recognition, a consumer then searches into memory to evaluate if enough information is known about the options available to make a suitable choice^[15]. As soon as the information has been gathered, the consumer then uses it to assess the alternative product or service choice in order to arrive at a purchase decision. Purchase decision is then regarded as the final choice made by a consumer regarding which product to purchase. The evaluation of the product's performance in line with the perceived quality and expectations will then occur at the post-purchase stage. Consumers' perceptions about a product, based on the social information, are also influencing the purchase decisions. In order to make profits, businesses should thus seek to understand their customers^[16].

Social media platforms are now allowing customers to easily share their opinions via a range of forums such as blogs, chat rooms, discussions, while at the same time enabling customers to rate products and services^[15]. Most companies are now operating on a customer-centric approach and they are now trying to promote customer engagement through engaging with them. According to Sashi^[16], social networks are now enabling businesses to connect with their customers, and customers to connect with other customers. Nowadays, marketing is more concentrated on building relationships and interactivity^[17]. Pre and post-purchase information from their customers can now be received via social media platforms^[18].

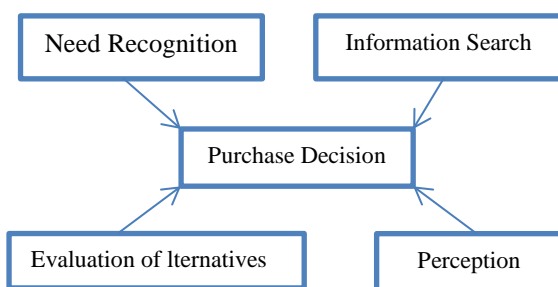


Figure 1: Research Model

3. The Effect of Social Media on Consumer Behavior Analysis

3.1. Proposed Hypotheses

Hypothesis 1: Need recognition has a positive effect on purchase decision.

Hypothesis 2: Information search has a positive effect on purchase decision.

Hypothesis 3: Evaluation of alternatives has a positive effect on purchase decision.

Hypothesis 4: Consumer perception has a positive effect on purchase decision.

3.2. Regression Model

This research seeks to examine the effect of social media on consumers' purchase behaviour. Based on the literature review, social media platforms are aiding consumers' purchase decisions. Customers are using social media platforms for: the need recognition (*NR*), information search (*IS*), evaluations of alternatives (*EOA*) and to boost their perceptions (*P*) about specific brands, in order to make purchase decisions (*PD*). Based on this relationship, a regression model was crafted. Need recognition (*NR*), information search (*IS*), evaluations of alternatives (*EOA*) and perceptions (*P*) were regressed on purchase decision (*PD*).

The model is illustrated as follows:
 $PD = f(NR, IS, EOA, P)$. The model was expanded into a linear mathematical relationship as follows:

$$PD = \beta_0 + \beta_1 NR + \beta_2 IS + \beta_3 EOA + \beta_4 P + \varepsilon$$

3.3. Research Methodology

This research relied on a quantitative approach, and primary data was collected through an online survey technique. Self-administered questionnaires were distributed among the targeted participants. The targeted respondents of this research were randomly selected on the basis of their likelihood of using social media platforms such as Facebook and Instagram. Need recognition, information search, evaluation of alternatives and consumer perception, were regarded as the independent variables of this study; while purchase decision was treated as a dependent variable. The measurement items were developed based on previous research.

Data entry and analysis of descriptive statistics was conducted on a Statistical Package for Social Sciences (SPSS version 20). SPSS version 20 was also used for reliability analysis, through the use of Cronbach's Alpha. Statistical software called AMOS (version 20) was then utilised for Structural Equation Modeling (SEM). The model included all the measurement constructs of this study. A Structural Model also produced the results of a Confirmatory Factor Analysis (CFA), which were then used to assess the validity and acceptability of the internal consistency of the measurement items of this study. The results of hypotheses testing were also obtained from the output of this structural model.

3.4 Data Analysis and Results Interpretation

The obtained experimental results are shown in table 1, table2 and figure2. Out of 377 respondents, 181 (48.0%) were males, while 196 (52.0%) were females. Regarding the age of respondents, 34 (9%) were aged below 21 years, 324 (85.9%) were in the age category of 21 to 30 years, while 19 (5%) were aged between 31 and 40 years.

Focusing on the highest level of education, 39 (10.3%) respondents had completed High School, 70 (18.6%) had attained Diplomas, while 248 (65.8%) were in possession of Bachelor's Degrees. 20 (5.3%) respondents were holding Master's Degrees.

Table 1: Gender of participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	181	48.0	48.0	48.0
	Female	196	52.0	52.0	100.0
	Total	377	100.0	100.0	

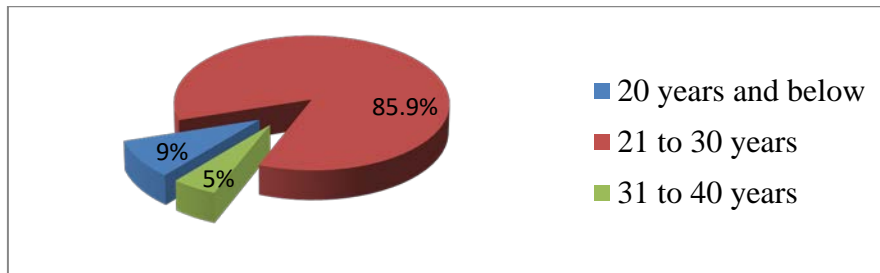


Figure 2: Age of participants

Table 2: Highest level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	39	10.3	10.3	10.3
	Diploma	70	18.6	18.6	28.9
	Bachelor's Degree	248	65.8	65.8	94.7
	Master's Degree	20	5.3	5.3	100.0
	Total	377	100.0	100.0	

3.5. Reliability Analysis

A reliability analysis was executed on SPSS Version 20 shown in table3, through Cronbach's alpha, in order to assess the internal consistency of the measurement constructs of this study. Based on the results of this study, all the obtained values of internal consistency are acceptable. The attained values ranged between 0.774 and 0.892. An acceptable alpha should at least range above 0.70

The need recognition obtained the value of 0.892, while information technology attained 0.807. Evaluation of alternatives accounted for 0.791, while perception recorded 0.774. Purchase decision obtained the value of 0.802. It should also be noted that there were 5 items per each variable.

3.6. Confirmatory Factor Analysis

A confirmatory factor analysis (CFA) is normally carried out to assess the validity of the measurement constructs. In this study, a confirmatory factor analysis was conducted on AMOS version 20 through the construction of a structural equation model that constituted all the measurement items. Based on the findings shown in table 4, all the factor loadings are acceptable, as they ranged between 0.55 and 0.87. Hence, all construct variables of this study are valid.

Table 3: Reliability analysis on Cronbach's Alpha

Constructs	Number of Items	Cronbach's Alpha
Need Recognition	5	0.892
Information Search	5	0.807
Evaluation of Alternatives	5	0.791
Perception	5	0.774
Purchase Decision	5	0.802

Table 4: Variables, Items and Factor Loadings

Variable	Item	Factor Loadings	Number of Factors
Need Recognition	NR1	0.77	5
	NR2	0.78	
	NR3	0.86	
	NR4	0.67	
	NR5	0.87	
Information Search	IS1	0.69	5
	IS2	0.64	
	IS3	0.63	
	IS4	0.64	
	IS5	0.78	
Evaluation of Alternatives	EOA1	0.71	5
	EOA2	0.64	
	EOA3	0.64	
	EOA4	0.60	
	EOA5	0.60	
Perception	P1	0.69	5
	P2	0.55	
	P3	0.60	
	P4	0.61	
	P5	0.74	
Purchase Decision	PD1	0.76	5
	PD2	0.67	
	PD3	0.66	
	PD4	0.68	
	PD5	0.57	

3.7. Structural Equation Model

A structural equation model (SEM) was then constructed on AMOS Version 20 shown in figure 3. The model achieved a good fit, giving the value of Chi-square = 648.685, Degrees of freedom = 265, GFI = 0.882, AGFI = 0.855, TLI = 0.873, CFI = 0.888, RMSEA = 0.062.

Based on the results, all the independent variables of this study have a positive effect on the dependent variable. That is; the need recognition, consumer perception, information search and evaluation of alternatives has a positive effect on consumers’ purchase decision.

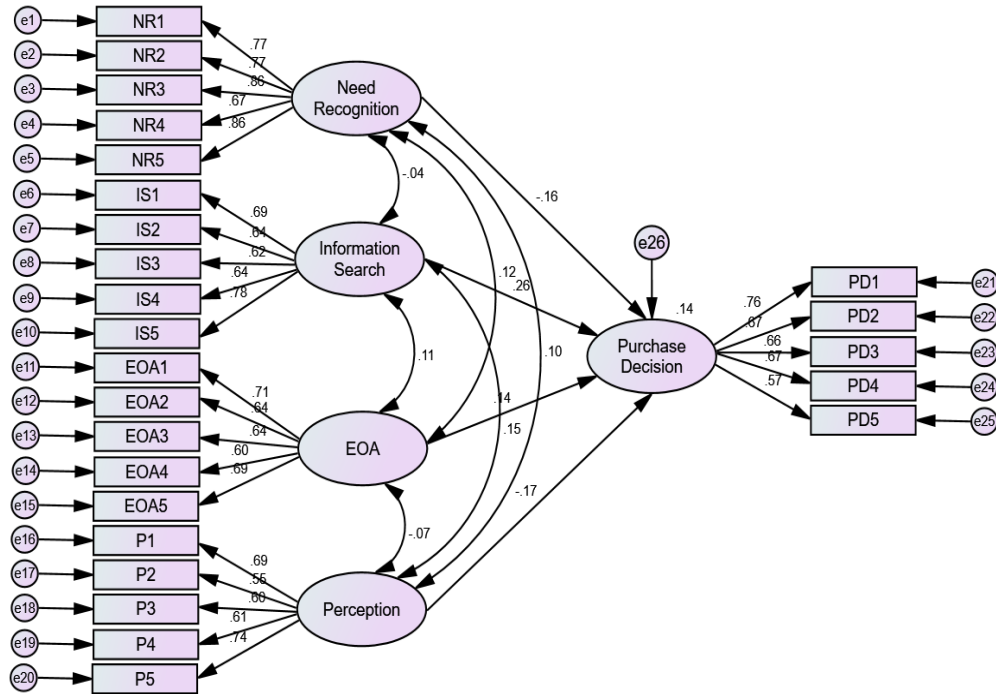


Figure 3: Structural Equation Model

Table 5: Results of Hypotheses Testing
Regression Weights: (Group number 1 - Default model)

Hypothesised Effect	Estimate	S.E.	C.R.	P	Label
Purchase_Decision ← Need_Recognition	-.123	.046	-2.655	.008	Positive
Purchase_Decision ← Perception	-.135	.051	-2.624	.009	Positive
Purchase_Decision ← Information_Search	.187	.049	3.846	***	Positive
Purchase_Decision ← EOA	.109	.050	2.189	.029	Positive

3.8 Results Discussion

The need recognition has a positive effect on purchase decision: (standardized estimates = -0.123, t – value = -2.655, p < 0.05). The research also indicates that consumer perception has a positive effect on purchase decision: (standardized estimates = -0.135, t – value = -2.624, p < 0.05). The findings also reveal that information search has a positive effect on purchase decision (standardized estimates = 0.187, t – value = 3.846, p < 0.05). According to the results, the evaluation of alternatives has a positive effect on consumers’ purchase decisions.

Social media is regarded as highly influencing consumers’ purchase decisions, starting from the need recognition, looking for relevant information, evaluation of alternatives, final purchase decisions, and post purchase satisfaction [3,8,15]. Based on the findings of this study, the need recognition, information search, evaluation of alternatives and consumer perception, has a positive effect on final purchase decision. Consumer decision-making could be defined as the “behaviour patterns of consumers that precede, determine and follow on the decision process for the acquisition of need satisfying products, ideas or services”. The need recognition is the first stage of the

consumer's purchase decision-process. After the stage of need recognition, a consumer then searches into memory to evaluate if enough information is known about the options available to make suitable information. As soon as the information has been gathered, the consumer then uses it to assess the alternative product or service choice in order to arrive at a purchase decision.

4 Conclusion and Further Work

This research was focused on examining the effect of social media platforms on consumer behaviour, by specifically looking at the key variables of consumers' decision making process, such as need recognition, information search, evaluation of alternatives and purchase decision. This research adopted a quantitative approach, and primary data was collected through a survey technique. The respondents of this study were randomly selected on the basis of their likelihood of using social media. Need recognition, information search, evaluation of alternatives and consumer perception were regarded as the independent variables of this study; while purchase decision was treated as a dependent variable. Based on the findings, the independent variables of this study have a positive effect on consumers' purchase decision. Social media platforms are now being used as the primary source of information by a wide range of consumers, for need recognition, information search, evaluation of alternatives, and for making the actual purchase decisions. As a recommendation, companies should utilise a customer centric approach that seeks to engage and prioritise customers, in order to understand their needs, through social media platforms. Future researchers should seek to understand the extent to which different social media platforms can influence the purchase decisions.

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