 

# Determinants of Online Purchase Decisions by Online Users

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**Abstract**
This study was focused on evaluating the determinants of online purchase decisions by thoroughly focusing on the key variables such as need recognition, information search, evaluation of alternatives, cost and time efficiency. 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 the internet to purchase. The need recognition, information search, evaluation of alternatives, cost and time efficiency 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 substantial. The need recognition, information search, evaluation of alternatives, cost and time efficiency have a positive effect on consumers' online purchase decisions. The internet has been 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 prioritize customers, and their needs, through the use of the internet and online means.
**Keywords:** Need recognition, Informative search, Evaluation of alternatives ,Cost and time efficiency
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## 1. Introduction

Understanding the determinants of online purchase decisions has become a major theme of research inquiry among several scholars around the world. The availability and usage of the internet has enabled individ uals to use a variety of websites as well as social media platforms like, Twitter (Hajli, 2014), Facebook and Instagram to interact, on daily bases without any need to meet physically. According to Nolcheska (2017), these internet websites have enabled a two- way flow of information that allows businesses to influence the purchase decisions among their targeted markets (Xhema, 2019). Through the use of the internet and various websites, businesses are now providing brand awareness, increasing sales, influencing positive word-of- mouth, and obtaining support (Xhema, 2019) and loyalty from their customers. Due to the high internet usage, electronic commerce has expanded and this has prompted the need for understanding the determinants of consumer online purchase decisions (Xhema, 2019).

Businesses are now seeking to understand the impact of the internet on consumer online purchase decisions. According to Dellarocas (2002), the internet is at large significantly influencing consumer purchase decisions. People are now relying on the reviews or opinions shared via the internet and social media platforms (Alsubagh, 2015; Xhema, 2019). The internet is now being used as the primary source of information by most consumers, and search engines are being utilised by consumers to evaluate products, create status updates and make informed recommendations (Xhema, 2019). While connecting with other online customers, consumers are now able to share their opinions and experiences (Nolcheska, 2017).

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 (Nolcheska, 2017, in Xhema, 2019). In other words, the internet now has a high influence in impacting purchase decisions among customers. According to Xhema (2019), 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 post-purchase satisfaction. Little attention has been directed towards this field. As such, this research seeks to evaluate the determinants of online purchase decisions by thoroughly focusing on the key variables such as need recognition, information search, evaluation of alternatives, cost and time efficiency.

## 2. Literature

According to Voramontri and Klieb (2019), 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 (Kotler and Armstrong, 2014). 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

(Voramontri and Klieb, 2019). 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 (Voramontri and Klieb, 2019).

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 (Voramontri and Klieb, 2019). Consumers' perceptions about a product, based on the social information, are also influencing the purchase decisions.

Cost and time efficiency: Because online shopping customers are often offered a better deal, they can get the same product as they buy at store at a lower price (Rox, 2007). Since online stores offer customers with variety of products and services. It gives customers more chances to compare price from different websites and find the products with lower prices than buying from local retailing stores (Lim and Dubinsky, 2004). Some websites such as Ebay for example, offer customers auction or best offer option, so they can make a good deal for their products. It also makes shopping a real game of chance and treasure hunt and makes shopping a fun and entertainment (Prasad and Aryasri, 2009). Again, since online shopping can be anywhere and anytime, it makes consumers' life easier because they do not have to stuck in the traffic, look for parking spot, wait in checkout lines or be in crowd in store (Childers et al., 2001). As such, customers often find shop from the website that is offering convenience can reduce their psychologicalcosts (Prasad and Aryasri, 2009).

## 3.Research Model

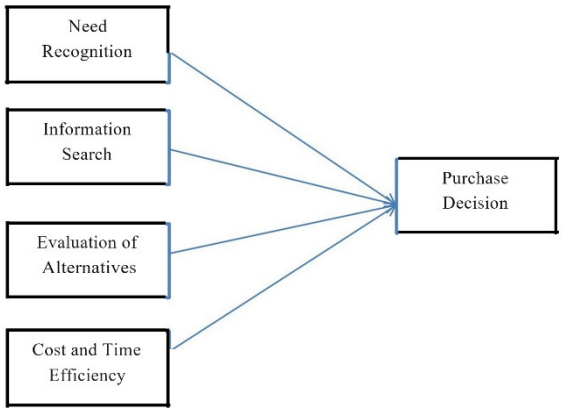


**Figure 1: Research Model**

**Proposed Hypotheses**

Hypothesis 1: Need recognition has a positive effect on online purchase decision.
Hypothesis 2: Information search has a positive effect on online purchase decision.
Hypothesis 3: Evaluation of alternatives has a positive effect on online purchase decision.
Hypothesis 4: Cost and time efficiency has a positive effect on online purchase decision

**Regression Model**

This research seeks to examine the determinants of online purchase decision. Based on the literature review, consumers are relying on the internet for: the need recognition (NR), information search (IS), and for the evaluation of alternatives (EOA) when making purchase decisions (PD). Their purchase decision is also influenced by the cost and time efficiency. Based on this relationship, a regression model was crafted. Need recognition (NR), information search (IS), evaluations of alternatives (EOA), cost and time efficiency (CTE) were regressed on purchase decision (PD).

The model is illustrated as follows:

$$PD = F(NR, IS, EOA, CTE)$$

The model was expanded into a linear mathematical relationship as follows:

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

## 4. 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 the internet. Need recognition, information search, evaluation of alternatives and cost and time efficiency, 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.

## 5. Data Analysis and Results Interpretation

**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 | |

Out of 377 respondents, 181 (48.0%) were males, while 196 (52.0%) were females.

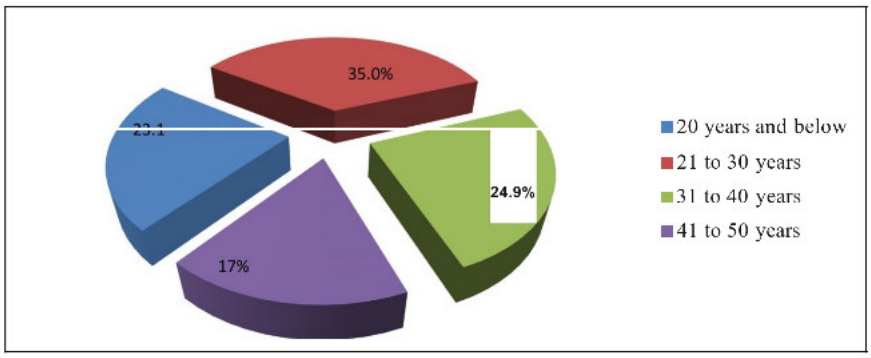


**Figure 2: Age of Participants**

Regarding the age of respondents, 87 (23.1%) were aged below 21 years, 132 (35%) were in the age category of21 to 30 years, while 94 (24.9%) were aged between 31 and 40 years. 64 (17%) were in the age category of 41 to 50 years.

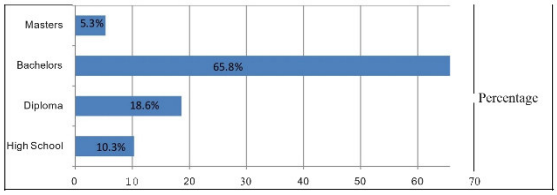


**Figure 3: Level of education**

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.

 

### 5.1 *Reliability Analysis*

**Table 2: 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 |
| Cost and Time Efficiency | 5 | 0.774 |
| Purchase Decision | 5 | 0.802 |

A reliability analysis was executed on SPSS Version 20, 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 (Nunnally, 1978).

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

### *5.2 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, all the factor loadings are acceptable, as they ranged between 0.55 and 0.86. Hence, all construct variables of this study are valid.

**Table 3: Variables, Items and Factor Loadings**

| Variable | Item | Factor Loadings | Number of Factors |
|---|---|---|---|
| | NRl | 0.77 | |
| | NR2 | 0.77 | |
| Need Recognition | NR3 | 0.86 | 5 |
| | NR4 | 0.67 | |
| | NR5 | 0.86 | |
| | 1S1 | 0.69 | |
| | 1S2 | 0.64 | |
| Information Search | 1S3 | 0.62 | 5 |
| | 1S4 | 0.64 | |
| | 1S5 | 0.78 | |
| | EOAl | 0.71 | |
| | EOA2 | 0.64 | |
| Evaluation of | EOA3 | 0.64 | 5 |
| Alternatives | EOA4 | 0.60 | |
| | EOA5 | 0.59 | |
| | CTEl | 0.69 | |
| | CTE2 | 0.55 | |
| Cost and Time | CTE3 | 0.60 | 5 |
| Efficiency | CTE4 | 0.61 | |
| | CTE5 | 0.74 | |
| | PDl | 0.76 | |
| | PD2 | 0.67 | |
| Purchase Decision | PD3 | 0.66 | 5 |
| | PD4 | 0.67 | |
| | PD5 | 0.57 | |

 

### *5.3 Structural Equation Model*

A structural equation model (SEM) was then constructed on AMOS Version 20. 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.

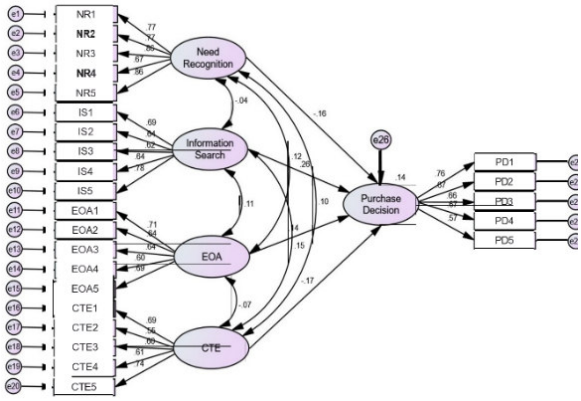


**Table 4: Results of Hypotheses Testing**

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

**Regression Weights: (Group number 1 - Default model)**

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

## 6. 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 cost and time efficiency have 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.

The internet allows consumers to recognise the need of purchasing, find relevant information, evaluate alternatives, and then make final purchase decisions, and post purchase satisfaction (Nolcheska, 2017, Xhema, 2019; Voramontri and Klieb, 2019). Based on the findings of this study, the need recognition, information search, evaluation of alternatives cost and time efficiency, 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" (Du Plessis et al., 1991). 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.

### Recommendations

As a recommendation, organizations should utilise a customer centric approach that seeks to engage and prioritise customers, in order to understand their needs, through the use of reliable search engines on the internet. Future researchers should seek to understand how the internet platforms can also influence the customer purchase behaviour.

## 7. Conclusion

This research was focused on evaluating the determinants of online purchase decisions by thoroughly focusing on the key variables such as need recognition, information search, evaluation of alternatives, cost and time efficiency. 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, cost and time efficiency 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. The internet is now being utilized as the primary source of information by a wide range of consumers, for need recognition, information search, evaluation of alternatives, and for evaluating the actual cost and time efficiency.

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