**FACTORS AFFECTING CUSTOMER SATISFACTION IN ONLINE SHOPPING IN KUCHING, SARAWAK.**

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**ABSTRACT**

Customer satisfaction is important in online shopping as online shopping has become a trend nowadays. Therefore, customer satisfaction is important so that we can improve customer satisfaction towards online shopping thus increase the growth of E- commerce in Malaysia. This study aims to examine the factors (Website Design, Delivery Service and Security) that affect customer satisfaction and their relationship between factors (Website Design, Delivery Service and Security) with customer satisfaction in online shopping in Kuching, Sarawak. Website Design, Delivery Service and Security are the three independent variables while customer satisfaction is the dependent variables in this study. A total of 300 electronic questionnaires through google from been collected and analysed by using the Descriptive Analysis and Inferential Analysis where Pearson Correlation Coefficient and Multiple Linear Regressions Analysis being employed to test the three-hypothesis developed in this study. In this study, all the three independent variables which included Website Design, Delivery Service and Security are significant and positive related to the customer satisfaction in online shopping in Kuching, Sarawak. Besides, among the three independent variables, Website Design is the most influential factors that affect customer satisfaction in online shopping in Kuching, Sarawak.

Keywords: Customer Satisfaction, Delivery Service, Online Shopping, Security, Website Design

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**INTRODUCTION**

Nowadays, online shopping is an industry that grow rapidly and it started to place in the hearts of Malaysians especially to young generations. According to Internet survey report 2018, there are 48.8% of online shoppers of internet users in year 2016 and it increased to 53.3% in year 2018. At the same time, there was RM10.8 billion increased of the value added for e-commerce from Year 2016 (RM75 billion) to year 2017(RM85.8 billion). In other side, it also shows that E-commerce industry had contributed to 6.3% of gross domestic product (GDP) in Year 2017. The growth of e- commerce also brings up the adoption of electronic and mobile wallet.

Besides, in National Budget 2020, the then Minister of Finance Malaysia, Lim Guan Eng declared that government will using new economy and digital era to stimulate economic growth of Malaysia and one of the project that announced in national budget 2020 speech is government will continue giving funds with the amount of RM10 million to MDEC in order for them to groom micro-digital entrepreneurs and technologists to sell their goods and services in e-Marketplaces and social media platforms. Majority of these micro-digital entrepreneurs are women and youth, and they successfully generated revenues with the amount of RM23 million in just 6 months, it made them a different experience than before.

Therefore, Malaysia’s industry can expand the business worldwide through improving the consumer’s satisfaction to purchase online using the Internet. The entrepreneur can get a better profit with less cost in conducting their business. Thus, this is a good chance for entrepreneur to expand business and market their products by using the internet.

**PAST STUDIES**

Referring to Guo et al. (2012), relationship between independent variable- payment method, information quality, security, website design, product quality, e- service quality, delivery service and product variety with customer satisfaction- the dependent variable being tested. Primary data has been collected in China in this study. The respondent of this research was 350 online shoppers in China. Multiple regression analysis being employed for testing their relationship. It showed a positive significant relationship between the independent variables with dependent variable.

According to Essays UK (2018), a study that concerned to customer satisfaction in online shopping had been carried out. It aims to examine and find out the overall attitude towards online shopping and the key factors that influences MMU students’ satisfaction of their online shopping providers. The key factors are convenience, time saving, security and also the website design. Questionnaire was used to collect the data. It shows a positive relationship between the four factors which are convenience, time saving, security and also the website design with the customer satisfaction.

Nebojsa, Milorad and Tanja (2018) has been carried the research to examine the relationship between factors that influence online shopping with the Customer Satisfaction at Serbian Market. Partial Least Squares (PLS) and Confirmatory Factor Analysis (CFA) were used in this study. A positive relationship between Time, Information Availability, Security, Shipping, Product Quality and also Pricing with Customer Satisfaction were found with application of Confirmatory factor analysis and correlation coefficient analysis.

**CONCEPTUAL FRAMEWORK**

Security

* User Authentication
* Data and Transaction security

Customer Satisfaction

* Transaction Specific
* General Overall

Website Design

* Navigation Design
* Visual Design
* Information Design

Delivery Services

* Delivery Time
* Product Delivery Condition
* Cost of the delivery

**DESCRIPTION OF VARIABLES**

**Customer Satisfaction**

According to Yi (1991), transaction specific and general overall are the two ways that can calculate customer satisfaction. Customer satisfaction is the assessment made after a specific purchase occasion in transaction specific concept. It may also offer specific diagnostic information about a particular product or service encounter. For example, it only considers the customer satisfaction on new purchasing experience instead of encounter all the previous purchasing experience. Thus, the customer’s rating of the brand means the general overall which based on all encounter and experiences (Johnson & Fornell, 1991). The another way to calculated customer satisfaction is overall satisfaction. A main indicator of the firm’s past, current and future performance refer to overall satisfaction because customer will decide to purchase the products again because they have a good purchase experience instead of just base on a single transaction only. (Anderson, 1994).

**Website Design**

Website design is extremely important because it can be said as the first impression of the online retailer and it helps in attract people to visit the webpage and searching the items in those webpages. A simple but user friendly website design can help to convince the first time visitors to purchase product easily and chances to revisit the webpage is higher. According to Cyr (2008), there are three categorize that can measure the webpage design which are visual design, information design and also navigation design. It shows that there are positive relationship or impact to consumer satisfaction.

**Delivery Service**

Delivery service refers to the correct product is delivered with the good packaging and having a correct amount and quality within the time and place given with the minimum expenses (Collier, 2006). Patterson also stated that the product delivery service is the main concern for customer satisfaction which include the well packed ordered product and the amount, quality, and specification are matching with the order as delivery time stated. Furthermore, Ahn (2005) also mentioned the timely and reliable product delivery stimulate new online sales. In online shopping, the basic and essential goal for online customers is a reliable, safe and fast delivery service.

**Security**

Security refers to the ability of the website to protect consumers' personal data from any unauthorized revelation of information during online transactions (Nebojsa, 2017). According to Guo et al., (2012), there are two part in security which are online data and transaction security, authentication of user. Data and transaction security consist of the security on providing the personal information, debit or credit card information while complete the transaction online while the user authentication refers to a server that needs to know the exact person that access to the information and website.

**DATA AND METHOD**

**Questionnaire Design**

The questionnaire consists of five sections which are section A, B, C, D and E. In section A, the demographic profile such as gender, age, occupation, income level and how frequency did the respondent visit website and purchase online. It was distributed and the nominal and ordinal scale were used in Section A. The nominal scale is used for gender and occupation while age, income level and how often the respondent purchase online or online shopping is using ordinal scale. Section B consisted of the question which related to the first independent variables such as website design and the Section C consisted of the question which related to the second independent variable as security and Section D was the question that related to the third independent variables as the Delivery Service. Section E was the question which related to dependent variable in this study as Customer Satisfaction.

**Constructs Measurement**

Nominal, ordinal and interval scale are the three types of measurement that used in this study.

Table 1: Types of Measurement

|  |  |  |
| --- | --- | --- |
| Section | Items | Scare of measurement |
| A | Demographic Respondents | |
| Gender | Nominal |
|  | Age | Ordinal |
| Income | Ordinal |
| How often you visit online shop or website? | Ordinal |
| How often you purchase goods through online | Ordinal |
| Which online shopping website did you used the most? | Nominal |
| B-E | Website Design  Delivery Service  Security | Interval (5- point Likert Scale) |

The nominal scale is a scale that used to classify and distinguish the data collected into different groups and it does not involve any sorting or ranking between the projects. One of the nominal scale examples in this study is Gender and normally the researcher expressed male as “1” and female as “2”. Furthermore, the ordinal scale is the scale that helped the studier to classify the data collected into different categories of ranking while the number “2” used as ranking does not mean it rank below the number “1” because the number are used to be recognised as different group only. One of the examples of ordinal scale that been used in this research is Age. In this study, the age data of the respondents were categorised as 5 groups which included “1” = 13-22 years old, “2” = 23-32 years old, “3” = 33- 42 years old, “4” = 43- 52 years old and “5” = 3- 62 years old. Moreover, the interval scale which is five-point Likert scale was used in section B to E which is 1 = strongly agree, 2 = agree, 3 = neither agree nor disagree, 4 = disagree and 5 = strongly disagree in this study.

**Data Collection**

Primary data and secondary data were used to collect the data in this study. Questionnaire data was used as primary data collection method and distributed to the targeted respondents which are the online shoppers in Kuching, Sarawak through Google form. Besides, the secondary data like article, journal, report, news, and also published thesis are used to collect data for most part of the study. 300 sets of questionnaires were distributed through Google form thus the google form link will be post to Facebook and WhatsApp. This is because according Malaysian Communications and Multimedia Commission (MCMC)’s Internet Users Survey 2017, there are around 97.3% where 23.83 million of Malaysian having a Facebook account. So, using Facebook to distribute questionnaire will be more efficiency and less limitations compare to questionnaire distributed face to face.

**Data Analysis: Descriptive Analysis, Reliability Analysis, Inferential Analysis (Pearson Correlation Coefficient, Multiple Linear Regressions Analysis)**

**Descriptive Analysis**

According to William (2003), descriptive analysis is the analysis that rearranging, ordering and manipulating data by transforming the data into a form so that the data of the research is easy to understand and to interpret by people. General view on the demographic data was showed in Descriptive analysis by using pie chart to show the percentage of particular questions and table which contain the frequency and percentage in each question in section A after transform all the collected data in SPSS.

**Reliability Analysis**

In the reliability analysis in this study, Cronbach alpha test was employed to examine all of the factors in this study so that the questionnaire outcome will have consistency result. Statistical Package for the Social Sciences (SPSS) was been employed to carried out the Cronbach alpha test. There is greater reliability if the coefficient alpha value which closer to 1 and 0.6 of coefficient alpha value is the minimum value that can be accepted as reliable while the value that less than 0.6 is counted as unreliable.

Table 2: Coefficient Alpha Ranges

|  |  |
| --- | --- |
| Coefficient Alpha Value | Strength of Association |
| 0.80 to 0.95 | Very Good Reliability |
| 0.70 to 0.80 | Good Reliability |
| 0.60 to 0.70 | Fair Reliability |
| < 0.60 | Poor Reliability |

**Inferential Analysis**

In this study, Pearson Correlation Coefficient and Multiple Regression in Inferential Analysis were used to analyse the relationship between dependent variable- Customer Satisfaction and three independent variables- Website Design, Delivery Service and Security.

**Pearson Correlation Coefficient**

Pearson Correlation Coefficient is the test that used to measure the significance value of independent variables to dependent variables (William, 2003). When the value +1 means there is a strongest degree of positively relationship that independent variable positively affect dependent variables. In the other hands, the independent variable is negatively impacting the dependent variable when value -1 found in this analysis is equal to negatively relationship. Cronbach alpha test was employed by using Statistical Package for the Social Sciences (SPSS) in this study.

**Multiple Linear Regressions Analysis**

According to Jim Higgins (2005), Multiple linear regressions analysis enables the researchers to analyse the relationship between multiple independent variables with the dependent variable. The studier can use the information to make an accurate and powerful predictions about why things are the way there are once how these multiple dependent variables relate to the dependent variable been identified. The formula for Multiple Regression model is stated as below:

Y=b\_0+b\_1 X\_1+b\_2 X\_2+⋯+b\_(p X\_P )

Where,

Y = Expected value of dependent variable

bp = The regression coefficient associated with variable, X

Xp = The independent variable, where p = 1, 2, 3...

**RESULTS**

Table3: Summary on Demographic Profile of Respondents

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percentage (%)** |
|  | **Gender** |  |
| **Male** | 114 | 38.0 |
| **Female** | 186 | 62.0 |
|  | **Age** |  |
| 13-22 years old | 96 | 32.0 |
| 23-32 years old | 114 | 38.0 |
| 33-42 years old | 36 | 12.0 |
| 43-52 years old | 30 | 10.0 |
| 53-62 years old | 24 | 8.0 |
|  | **Income** |  |
| less than RM1000 | 142 | 47.3 |
| RM1000- RM2000 | 44 | 14.7 |
| RM2001- RM3000 | 48 | 16.0 |
| RM3001- RM4000 | 48 | 16.0 |
| More than RM4001 | 18 | 6.0 |
| **How often you visit online shop or website?** | | |
| Every day | 36 | 12.0 |
| Weekly | 91 | 30.3 |
| Monthly | 95 | 31.7 |
| Once within several months | 78 | 26.0 |
| **How often you purchase goods through online?** | | |
| Every day | 1 | 0.3 |
| Weekly | 44 | 14.7 |
| Monthly | 98 | 32.7 |
| Once within Several Months | 157 | 52.3 |
| **Which online shopping website did you used the most?** | | |
| Lazada | 32 | 10.7 |
| Shopee | 100 | 33.3 |
| Taobao | 87 | 29.0 |
| 11 Street | 28 | 9.3 |
| Aliexpress | 19 | 6.3 |
| Others | 34 | 11.3 |

Table 4: Summary of Descriptive Analysis on Variables

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Dimensions | Mean | Standard Deviation |
| Dependent Variable | Customer Satisfaction | 3.692 | 0.8865 |
| Independent Variables | Website Design | 3.7050 | 0.9444 |
| Delivery Service | 3.7101 | 0.9182 |
| Security | 3.7101 | 0.9182 |

Table 5: Summary of Pearson Correlation Result

|  |  |  |  |
| --- | --- | --- | --- |
| Relationship | Correlation Coefficient, r | Sig (2 tailed), p | Result |
| Website Design and Consumer Satisfaction**.** | 0.629\*\* | 0.000 | Accepted  (p=0.000, r= 0.629) |
| Delivery Service and Consumer Satisfaction**.** | 0.660\*\* | 0.000 | Accepted  (p=0.000, r= 0.660) |
| Security and Consumer Satisfaction**.** | 0.599\*\* | 0.000 | Accepted  (p=0.000, r= 0.599) |

**DISCUSSION**

Research Objectives 1: To assess the profile of online shoppers in Kuching.

Based on the findings in Descriptive analysis, most of the online shoppers (186 respondents) were female and most of the online shoppers (114 respondents) were in the age range of 23-32 years old. Besides, most of the online shoppers (142 respondents) were getting the salary which is less than RM1000, most of them were visited online shop or website monthly (95 respondents) and purchase once within several months (157 respondents). Most of the online shoppers were using Shopee the most in online shopping.

Research Objectives 2: To examine the three factors (Website Design, Delivery Service and Security) that influencing customer satisfaction in online shopping.

According to the result of reliability analysis collected in this study, it can be concluded as very good reliable (0.8498). In Pearson Correlation Coefficient Analysis, all the independent factors (Website Design, Delivery Service and Security) showed a significant and moderate positive relationship with the dependent factors (Customer Satisfaction). In other words, Website Design, Delivery Service and Security will impact Customer Satisfaction positively. Moreover, this study found that the most influential factors is Website Design (0.283) because it showed the highest value of beta value in unstandardized coefficient under Multiple Regression Analysis. It means that 1 unit of Website Design will affect 0.283 of Customer Satisfaction in online shopping in Kuching, Sarawak.

**CONCLUSION**

In conclusion, the objectives of this study were achieved. In this study, all the three independent variables which included Website Design, Delivery Service and Security are significant and positive related to the customer satisfaction in online shopping in Kuching, Sarawak. Besides, among the three independent variables, Website Design is the most influential factors that affect customer satisfaction in online shopping in Kuching, Sarawak. Therefore, the Website Design quality should be more focused so that the customer satisfaction can be improved simultaneously can boost e commerce in Malaysia.

**REFERENCES**

Ahn. T., Seewon. R., Han. I. (2005). The Impact of Online and Offline features on the User Acceptance of Internet Shopping Malls. *Electronic Commerce Research and Applications.* 3(4), 405-420.

Anderson, E.W. (1994), “Cross- category Variation in Customer Satisfaction and Repurchase Likelihood,” *Marketing letters,* forthcoming.

Collier, J.E., Bienstock C.C (2006) Measuring service quality in e-retailing. Journal of Service Research, 8(3):.260-75.

Cyr, D. (2008). Modeling website design across culture: relationships to trust, satisfaction and E-loyalty. Journal of Management Information Systems, 24(4), 47-72. Retrieved from <http://dx.doi.org/10.2753/MIS0742-1222240402>

Essays, UK. (2018). Customer Satisfaction Towards Online Shopping. Retrieved from https://www.ukessays.com/essays/marketing/customer- satisfaction- toward-online- shopping-provider-marketing-essay.php?vref=1

Guo, X., Ling, K. C., & Liu, M. (2012). Evaluating Factors Influencing Consumer Satisfaction towards Online Shopping in China. Asian Social Science, 8(13), 40–50. Retrieved from <https://doi.org/10.5539/ass.v8n13p40>

Jim, H. (2005). Introduction to multiple regression. Retrieved from <http://www.biddle.com/documents/bcg_comp_chapter4.pdf>

Johnson, Fornell, C. (1991). “ A Framework for Comparing Customer Satisfaction Across Individuals and Product Categories,” *Journal of Economic Psychology,* 12(2), 267-286.

Nebojsa, V., Milorad, K., Tanja, K. (2018). The Influence of Online Shopping Determinants on Customer Satisfaction in the Serbian Market. Journal of Theoretical and Applied Electronic Commerce Research, 14, 2, 70-89.

William. G. Z. (2003). Research method. Basic Data Analysis: Descriptive Statistics. Retrieved from http://pioneer.netserv.chula.ac.th/~ppongsa/2900600/LMRM02.pdf

Yi, Y. (1991). A critical review of customer satisfaction. American Marketing Association, Chicago II.