

Determining The Factors Of Consumer's Attitudes And Its Influence On Continuous Usage Of Mobile Shopping Applications

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Abstract – This study investigated the consumer's attitude factors that influence continuous usage of mobile shopping applications in Malaysia. The study used self-administrated questionnaire to collect data from 384 respondents using online form who had previous experience on using mobile shopping applications to purchase products. The findings show that privacy, security, perceived usefulness, perceived ease of use and electronic words of mouth are positively related with the consumer's attitudes to continuously use the mobile shopping application. This study enhances the researcher's understanding on how the perceived usefulness, privacy and security, electronic words of mouth and perceived ease of use in influencing the consumer's attitudes to continuously use the mobile shopping applications. This study extends the application of expectation-confirmation model (ECM) and technology acceptance model (TAM) which can provides the theoretical understanding on the various factors that influencing consumer's attitudes to continuously use the mobile shopping applications. The managers should focus on those factors in order to encourage more people for using the mobile shopping application to purchase the products.

Keywords: perceived usefulness, privacy and security, electronic words of mouth, design aesthetics and perceived ease of use, consumer's attitudes toward continuous use of mobile shopping applications

1. INTRODUCTION

The mobile shopping applications have become increasingly popular in the recent year due to the wide acceptance of the mobile devices in the life of the people (Gandhi, 2016; Kanaanm, 2017). The users are likely to shop online through the mobile shopping apps such as Lazada, Zalora, Shopee, 11 Street, Hermo, and Taobao. However, according to Wong (2014), the Malaysians is still reluctant to shop online because they lack of trust especially in term of reliability and process security as they cannot touch and feel the products when purchasing through online. According to Mamonov & Benbunan-Fich (2015), the consumers who shopping online will more concern about the privacy and security of the online stores as they perceived more uncertainties and risks if compare to the traditional physical stores. This is because they need to provide their personal information and the detail of their debit or credit card when purchase through the online shop. Although the shopping through the mobile devices was popular but the phenomenon of shopping cart abandonment is much higher than the desktop-based online shopping. The consumers often leave before complete

the purchase because there are many hidden cost such as shipping fees, taxes and other additional fees. According to Al-Qeisi, Dennis, Alamanos and Jayawardhena (2014), the companies apply the Internet technology to improve the design of the websites to ensure the quality in consumer's interaction experience. The consumers are more likely to visit and repurchase from the well-designed online stores and they are unlikely to purchase from the website where the process of buying is complex. This research is to study the factors (perceived usefulness, privacy and security, electronic words of mouth, design aesthetics and perceived ease of use) that influencing consumer's attitudes to continuously use the mobile shopping applications.

2. LITERATURE REVIEW

This research is using Expectation-Confirmation Model (ECM) which is proposed by Anol Bhattacharjee in 2001. According to Chong (2013), the ECM can be used to make the comparison between the pre-adoption and post-adoption behavior of the users and their level of satisfaction on using the information system. The expectation-confirmation model posits that the continuance intention of consumers on using the information system is influenced by the three variables which are the level of satisfaction, the confirmation of expectation and the post-adoption of the expectations in form of perceived usefulness. This research also using Technology acceptance model (TAM) proposed by Davis (1989) to explain how the users accept and apply the technology. According to Davis et al. (1989), before the consumers decided how and when to use the new technology that introduced to them, they will be influence by numerous of factors such as perceived usefulness and perceive ease of use.

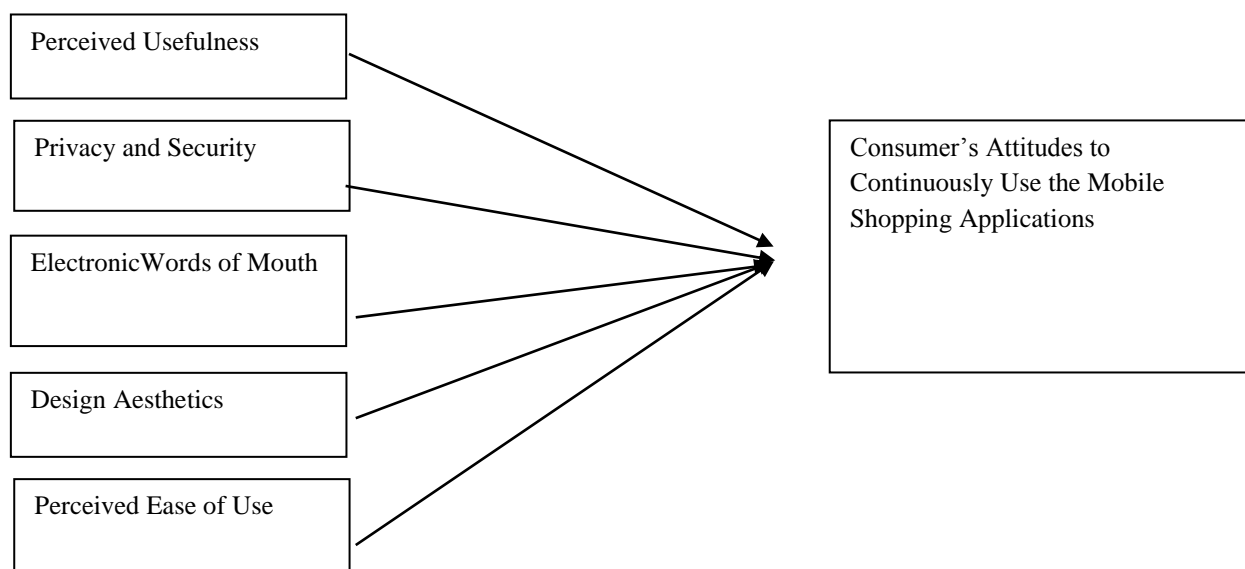


Figure 1 shows that the proposed conceptual framework based on the literature review in this research

2.1 Perceived Usefulness

The study from the Detlor, Hupfer, Ruhi and Zhao (2013) show that the perceived usefulness is the significant factors that will influence the acceptance and continuous usage of the new technology. The consumers will continuously use the same technology if the

applications are able to enhance their purchasing performance. The study from Holmes, Byrne and Rowley (2014) has reveal that the simplicity, convenience and accessibility of the mobile shopping can encourage more consumers to continue shopping by using the mobile shopping applications as they consider that using the mobile shopping apps can be useful to them. With the access of internet, the consumers are able to buy the products from mobile shopping applications in any location and anytime with no time constraint and geographical restrictions. When purchasing through the mobile shopping applications, the consumers can make the online payment more easily by using the mobile wallet such as Paypal and they are also able to receive the confirmation email from the sellers and to track the products which make the payment process become simple. To further study about the relationship between the perceived usefulness and the consumer's attitudes to continuously using the mobile shopping applications, this study proposed that:

H1₁: The perceived usefulness will affect the consumer's attitudes to continuously use the mobile shopping applications.

H1₀: The perceived usefulness will not affect the consumer's attitudes to continuously use the mobile shopping applications.

2.2 Privacy and Security

According to Tode (2013), the online shopping is always linked with the privacy and security issue. The consumers feel that using the mobile shopping is unsecure as the purchase through the mobile apps will involve the financial transaction. The consumers will be continuous to use the mobile shopping applications if the apps have the better privacy policy as it can help the sellers to convinced the consumers to purchase through the apps and thus can help the seller to generate sales. Besides that, the marketers also need to more focus on the online security system to better serve the consumers and can increase profit by selling to the potential consumers (Alwarimi, 2015). Using an official mobile shopping application such as Lazada, Taobao, 11Street, Shopee is more secure and safety as all the personal information of the consumers is protect well. The official mobile shopping apps have the greater security management which can ensure that the private information of the consumers not disclosure to the third-party during payment. Thus, the following hypothesis is proposed:

H2₁: The privacy and security will affect the consumer's attitudes to continuously use the mobile shopping applications.

H2₀: The privacy and security will not affect the consumer's attitudes to continuously use the mobile shopping applications.

2.3 Electronic Words of Mouth

According to Jalilvand and Samiei (2012), the electronic words of mouth have rising with the widespread use of internet. The internet enable the consumers to collects the information from the website such as experience and opinions that are shared by the other consumers. The products in the mobile shopping applications have the reviews from the previous users and if the recommendation and rating are high about the products, the consumers are willing to purchase the products and the existing consumers will continue using the mobile shopping applications to purchase the products. Before deciding on using the mobile shopping applications to purchase the products, the consumers will refer the products related experiences and the review that are made by the other online users through the mobile shopping apps, blog, user groups or internet forum (Cheng and Huang, 2013). The consumers seek to continuous use the mobile shopping applications to purchase because the products available in the apps have the feedback and the review from the previous users. Hence, the following hypothesis is proposed:

H3₁: The electronic words of mouth will affect the consumer's attitudes to continuously use the mobile shopping applications.

H3₀: The electronic words of mouth will not affect the consumer's attitudes to continuously use the mobile shopping applications.

2.4 Design Aesthetics

According to Luo, Ba and Zhang (2012), the features of the information system plays an important role in shaping the customer's shopping experience as the customers will interact with the seller through the information system. According to Kim and Lennon (2011), the consumers will exit from the website due to ineffective design aesthetics and lack of relevant information of the products. So, the design of mobile shopping applications must be simple, ease of site navigation and the users are easy to control it. It is important to design the storefront properly to attract more potential consumers to visit the stores. Good aesthetics and graphic can draw more attention from the consumers for using the mobile shopping applications. According to Douban (2014), the online user's buying decision will be affected by the overall functionality of the system, the decoration of the mobile sites and the comprehensive information of the products which at the end will influence the sales of the sellers. In order to investigate the relationship between the design aesthetics and the consumer's attitudes toward continuous use of mobile shopping applications, the following hypothesis is proposed:

H4₁: The design aesthetics will affect the consumer's attitudes to continuously use the mobile shopping applications.

H4₀: The design aesthetics will not affect the consumer's attitudes to continuously use the mobile shopping applications.

2.5 Perceived Ease of Use

The consumer's purchase intention toward mobile shopping was affected by the perceived ease of use and perceived usefulness (Honarbakhsh, Hooi, Kavianpour and Shadkam, 2013). If the users find that using the mobile shopping application to purchase the products can be easily done without the additional effort, they will consider using the mobile shopping applications for purchasing the products. According to Rezaei and Amin (2013), the repurchase intention of the consumers will influence by the perceived ease of use. The mobile shopping applications should be ease to ordering, ease to search the information of the products and the payment should be easy to proceed in order to attract the consumers from the different gender and age group. The following hypothesis is proposed to analyze the relationship between perceived ease of use and the continuous intention of consumers toward mobile shopping applications:

H5₁: The perceived ease of use will affect the consumer's attitudes to continuously use the mobile shopping applications.

H5₀: The perceived ease of use will not affect the consumer's attitudes to continuously use the mobile shopping applications.

3. RESEARCH METHODOLOGY

In order to measure the variables, the quantitative approach is used in this study to determine the factors influencing consumer's attitudes to continuously use the mobile shopping applications. The data collected is numeric which can allow the researcher to collect data from the large sample size and the numerical results can be better interpreted by using graph, table, charts and other format. Harwell (2011) indicates that the quantitative research often use the deductive logic in which the researcher will come out with the hypotheses and then collect the data. According to Zikmund, Babin, Carr and Griffin (2013), the quantitative approach is the approach that can be used by researcher to gain the precise results that can be used for the future research as the relationship between the variables are tested by using the measureable constructs. The quantitative research can use to test and validate theories about

why the phenomena and it can enable the researcher to generalize the research findings (Johnson and Christensen, 2014). The researcher can test the proposed conceptual framework and define the relationship between perceived usefulness, privacy and security, electronic word of mouth, design aesthetics, perceived ease of use and the consumer's attitudes to continuously use the mobile shopping applications. Questionnaires were distributed to people who are above 18 years old and had the experience shopping using the mobile shopping applications. The quantitative data that were collected was analyzed through Statistical Package for the Social Science (SPSS) software version 23.0. The result that derived from the SPSS will determine the acceptance or rejection of the proposed hypotheses.

3.1 Sampling Design

The target population in this research is the consumers who are 18 years old and above which have experienced in mobile shopping and had using the mobile shopping applications to purchase the products in Melaka. The people that fulfill these criteria are known as the eligible respondents. Melaka is chosen as the sampling location as the Melaka is the state with a rich historical and cultural background. There are many private and government universities that are available in Melaka such as Universiti Teknikal Malaysia Melaka (UTeM), Universiti Teknologi Mara (UiTM), Multimedia Universiti (MMU), Melaka-Manipal Medical College and so on. Besides that, Melaka is the multiracial states where the researcher can get the feedback from the respondents from different races. The researcher target students, workers and online shoppers as the respondents because they have some understanding about the online shopping and have the experience on purchasing the products through the mobile shopping applications. The respondents are required to have the basic understanding in English as the questions stated in the questionnaire are written in English. This can ensure the respondents to answer the questionnaire with less effort and less time consuming.

According to Department of Statistics Malaysia, the estimated population for Melaka state is 0.92 million. The safe decision for the standard deviation for the sample size is 0.5 because the research is not actually administered. According to Medina and Portilla (2015), the margin of error that between +/- 4% and +/- 8% are acceptable. The margin of error in this research is +/- 5%. The researcher used 95% confidence level where the Z-score at the 95% is 1.96. Thus, the approximate sample size in this research was suggested to be 384 respondents.

3.2 Research Instrument

The questionnaires are distributed through online and emails to identify the factors influencing consumer's attitudes to continuously use the mobile shopping applications. The questionnaire in this research consists of the cover letter and three parts: (A) demographic information, (B) factors influencing consumer's attitudes to continuously use the mobile shopping applications and (C) consumer's attitudes to continuously use the mobile shopping applications. The 5 points Likert-type scale (1=strongly disagree, 5= strongly agree) is use in this research to access the information. Every section in the questionnaire was using the Likert-type scale except the Section A.

The researcher will distribute the questionnaire in the Google form which can allow the respondents to do the questionnaire online. The hyperlink of the Google form is post at social medial such as Face book, Instagram, Wechat and Whatsapp to allow the collection of data from the respondents. The data can be obtained from the unlimited response from the respondents by using the Google form and the data can be easily to transfer to SPSS. Through the online questionnaire, the data are immediately saved in the electronic form and this can reduce the error when transfer the data from the hardcopy questionnaire to the electronic form.

After the questionnaire is done, the pre-testing will be conducted where 4-5 people in the target group are asked to pre-test the questionnaire to ensure that the respondents understood all the instructions and questions in the questionnaire. The pre-testing of the questionnaire can enable the researcher to identify all the problems in the questionnaire and thus can improve the quality of the questionnaire. According to Stangor (2014), it is necessary for the researcher to conduct the pilot testing before the distribution the actual questionnaire. In this research, the researcher conduct the pilot testing with 30 respondents to ensure the reliability and to reduce the error before distribute the actual questionnaire to the respondents. The pilot test can enable the researcher correct the mistake in the early stage and the researcher can save the time and effort as there are the lesser chance of unreliable results and the researcher don't have to start over again after conducting the research. The data that collected from the pilot test will be analyzed by using the SPSS software to enable the researcher to test the reliability of each variable.

3.3 Data Analysis

The researcher will use the SPSS software in this research to analyze the data. SPSS can generate the useful table and graph and can be used to test t-test, one-way ANOVA, cross tabulations, chi-square, and correlation analysis. The software program such as SPSS can allow the researcher to obtain the results for descriptive analysis, reliability and validity test, Pearson's correlation analysis and multiple regression analysis. The descriptive analysis is use to summarize the data collected from the respondents and transformed the raw data into the form that are more easily to understand and interpret. By using of descriptive statistic, the researcher can present the quantitative analysis of data in more simple and manageable form. The study from Jackson (2012) shows that the research must be reliable and not valid but the research will be reliable if it is valid. The reliability is usually estimated in two ways which are test-retest reliability and internal consistency.

The test-retest reliability can be done by distribute the same questionnaire to the same respondents in the different times and the responses of the respondents in two different times are compared. Cronbach's Alpha is used to measure the internal consistency of the research in order to determine the correlation among the items. The coefficient of the Cronbach's alpha is range from 0 to 1 and 0.7 is consider as good acceptable reliability. The closer Cronbach's alpha coefficient values to one, the greater the internal consistency of research.

The statistical relationship and the strength of the association between two continuous variables in this research are measured by Pearson's correlation analysis. The correlation coefficient of the Pearson's correlation analysis is range from -1 to +1 where -1 indicates the perfect negative correlation between the variables, a zero shows that there are no correlation between the variables and +1 represent the perfect positive correlation between the variables. Multiple regression analysis is the statistical tool that enables the researcher to finding the relationship between one dependent variable and a few independent variables by using the SPSS software. The multiple regression analysis can allow the researcher to identify the independent variables that have the highest impact to the dependent variable.

4. DATA ANALYSIS

4.1 Reliability Test

The reliability test can be done through the internal consistency which was measure through the Cronbach's Alpha to determine the correlation among the items.

Table 1: Reliability Test for the Survey

Variables	Cronbach's Alpha	Number of Items
Perceived Usefulness	0.874	6

Privacy and Security	0.906	6
Electronic Word of Mouth	0.906	7
Design Aesthetics	0.855	5
Perceived Ease of Use	0.851	5
Consumer's Attitudes to Continuously Use the Mobile Shopping Applications	0.857	5

Based on the Table 1, privacy and security and electronic words of mouth have the highest score of the reliability where the Cronbach's Alpha value of the both variables are 0.906, follow by perceived usefulness (value of Cronbach's Alpha is 0.874), consumer's attitudes to continuously use the mobile shopping applications (value of Cronbach's Alpha is 0.857), design aesthetics with the value of Cronbach's Alpha which is 0.855 and lastly is the perceived ease of use which have value of Cronbach's Alpha is 0.851. All the variables have the value of Cronbach's Alpha which more than 0.8 and it is exceed the acceptable value of 0.7, so all the variables are reliable.

4.2 Descriptive Analysis

In this research, there are 403 respondents that took part in the questionnaire survey but only 384 respondents who had experienced in using the mobile shopping application to purchase the products.

Table 2: Demographic of the Respondents

Characteristic	Number (N=384)	Percentage
Gender		
Female	195	50.8%
Male	189	49.2%
Age		
18-23 years old	96	25.0
24-29 years old	114	29.7
30-35 years old	69	18.0
36-41 years old	66	17.2
42 years old and above	39	10.2
Education Qualification		
Bachelor Degree	95	24.7
Diploma	90	23.4
Master	25	6.5
Others	8	2.1
SPM	72	18.8
STPM	94	24.5
Races		
Chinese	142	37.0

Indian	82	21.4
Malay	150	39.1
Others	10	2.6
<i>Employment Status</i>		
Employed	181	47.1
Students	159	41.4
Unemployed	44	11.5
<i>Current Household Income</i>		
Less than or equal to RM1500	157	40.9
RM1501-RM2500	46	12.0
RM2501-RM3500	104	27.1
RM3501 and above	77	20.1

4.3 Descriptive Statistic

Table 3: Descriptive Statistics

Variables	N	Mean	Standard Deviation
Perceived Usefulness	384	4.0078	1.01773
Privacy and Security	384	3.9214	1.11266
Electronic Word of Mouth	384	3.9803	1.06204
Design Aesthetics	384	3.8849	1.05136
Perceived Ease of Use	384	4.0292	1.00629
Consumer's Attitudes to Continuously Use the Mobile Shopping Applications	384	4.0802	.99388

Table 3 indicates the descriptive analysis for the independent variable and dependent variables. The minimum, maximum value, mean and standard deviation of the perceived usefulness are 1.00, 5.00, 4.0078 and 1.01773 respectively. The minimum and maximum value of the privacy and security is 1.00 and 5.00 respectively and the mean and standard deviation is 3.9214 and 1.11266 respectively. The electronic words of mouth has a minimum and maximum value which is 1.00 and 5.00 respectively and with the mean which are 3.9803 and standard deviation is 1.06204. For the design aesthetics, the minimum and maximum value, mean and standard deviation is 1.20, 5.00, 3.8849 and 1.05136 respectively. The minimum and maximum value for the perceived ease of use is 1.20 and 5.00 respectively while the mean and standard deviation is 4.0292 and 1.00629. Lastly, for the consumer's attitudes to continuously use the mobile shopping applications the minimum and maximum value is 1.20 and 5.00 respectively and the mean and standard deviation is 4.0802 and 0.99388 respectively.

4.4 Pearson Correlation Analysis

Table 4: Pearson Correlation Analysis

Variables	Pearson Correlation	Sig (2-tailed)
Perceived Usefulness	0.787	.000
Privacy and Security	0.605	.000

Electronic Word of Mouth	0.783	.000
Design Aesthetics	0.728	.000
Perceived Ease of Use	0.859	.000

The correlation analysis for the variables is significant at two tailed with 0.01 level. From the result that are collected from the respondents, it showed that there are positive relationship between the independent variables (perceived usefulness, privacy and security, electronic word of mouth, design aesthetics, perceived ease of use) and dependent variable (consumer's attitudes to continuously use the mobile shopping applications).

According to Table 4, perceived ease of use has the strongest positive relationship with the consumer's attitudes to continuously use the mobile shopping applications where the value of correlation coefficient is 0.859, follow by perceived usefulness (value of correlation coefficient is 0.787), electronic word of mouth (value of correlation coefficient is 0.783), design aesthetics (value of correlation coefficient is 0.728) and lastly is privacy and security where the value of correlation coefficient is 0.605).

4.5 Multiple Regression Analysis

Table 5: Coefficients of the Multiple Regression

Analysis

Variables	Beta Value	t-value	Sig
Perceived Usefulness	.185	4.266	.000
Privacy and Security	.080	2.563	.011
Electronic Word of Mouth	.184	4.320	.000
Design Aesthetics	.038	.949	.343
Perceived Ease of Use	.491	10.053	.000

According to the Table 5, the value of standard coefficients of the perceived usefulness is 0.185, privacy and security 0.080, the electronic word of mouth 0.184, design aesthetics 0.038 and lastly, the standardized coefficients for the perceived ease of use is 0.491. Based on the result, perceived usefulness, privacy and security, electronic words of mouth and perceived ease of use have the significant value of 0.000, 0.011, 0.000, 0.000 respectively. The p-value of the perceived usefulness, privacy and security, electronic word of mouth and perceived ease of use is smaller than 0.05 thus the alternative of each independent variables is accepted. The p-value of the design aesthetics is greater than 0.05 (P=0.343). Thus the alternative hypothesis (H₄₁) of the design aesthetics is rejected and null hypothesis (H₄₀) is accepted. In this research, only the design aesthetics will not affect the consumer's attitudes to continuously use the mobile shopping applications.

The contribution of each of the independent variable to the dependent variable can be identified by the unstandardized coefficients. Table 4.12 shows that the perceived usefulness, privacy and security, electronic word of mouth and perceived ease of use have the positive relationship with the dependent variables and the design aesthetics has the insignificant value.

5. RESULTS AND DISCUSSION

5.1 Discussion on Major Findings

Table 6: Summary of Results for Hypothesis Testing

Variables	Hypothesis	Sig	Results
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Perceived Usefulness	H1₀ : The perceived usefulness will not affect the consumer's attitudes to continuously use the mobile shopping applications.	0.000	Rejected
	H1₁ : The perceived usefulness will affect the consumer's attitudes to continuously use the mobile shopping applications.		Accepted
Privacy and Security	H2₀ : The privacy and security will not affect the consumer's attitudes to continuously use the mobile shopping applications.	0.011	Rejected
	H2₁ : The privacy and security will affect the consumer's attitudes to continuously use the mobile shopping applications.		Accepted
Electronic Word of Mouth	H3₀ : The electronic word of mouth will not affect the consumer's attitudes to continuously use the mobile shopping applications.	0.000	Rejected
	H3₁ : The electronic word of mouth will affect the consumer's attitudes to continuously use the mobile shopping applications.		Accepted
Design Aesthetics	H4₀ : The design aesthetics will not affect the consumer's attitudes to continuously use the mobile shopping applications.	0.343	Accepted
	H4₁ : The design aesthetics will affect		Rejected

	the consumer's attitudes to continuously use the mobile shopping applications.		
Perceived Ease of Use	H5₀ : The perceived ease of use will not affect the consumer's attitudes to continuously use the mobile shopping applications.	0.000	Rejected
	H5₁ : The perceived ease of use will affect the consumer's attitudes to continuously use the mobile shopping applications.		Accepted

5.1.1 Perceived Usefulness and Consumer's Attitudes to Continuously Use the Mobile Shopping Applications

Based on the result, perceived usefulness has the positive relationship with the consumer's attitudes to continuously use the mobile shopping application because the value of correlation coefficient for the perceived usefulness is 0.787 and $p < 0.01$ ($p = 0.000$). According to the result of the multiple regression analysis, perceived usefulness have the Beta value of 0.185 which it is the second important factor influencing consumer's attitudes to continuously use the mobile shopping application and it is significant at the significant level of 0.05.

The result is consistent with the study of Zhang, Zhu and Liu (2012), Nassuora (2013) and Detlor, Hupfer, Ruhi & Zhao (2013) which revealed that perceived usefulness is the significant factor that affected the consumer's attitudes to adopt the new technology such as mobile commerce. In addition, according to Holmes, Byrne and Rowley (2014), the simplicity, convenience and accessibility of the mobile shopping can encourage more consumers to use the mobile shopping applications as they consider that using the mobile shopping apps can be useful to them. The consumers will continuous use the same mobile shopping application to purchase the products if the apps are able to enhance their purchasing performance by allowing them to search the desired products and allow them to make the payment by using the different payment system. The result from the previous study indicates that perceived usefulness will affect the consumer's attitudes to continuously use the mobile shopping applications, Hence, the hypothesis (H_{11}) is accepted and H_{10} is rejected. The proposed research question is answered and the research objective is achieved.

5.1.2 Privacy and Security and Consumer's Attitudes to Continuously Use the Mobile Shopping Application

The findings shows that privacy and security affects the consumer's attitudes to continuously use the mobile shopping applications where Beta value for the privacy and security is 0.080 and $p = 0.011$ where the p-value is less than 0.05. The findings are similar with the previous study from Gao & Bai (2014), Hong & Thong (2013) and Tode (2013) which show that the privacy and security of the mobile shopping applications was the main

inhibitor to encourage more people to use the mobile shopping apps to purchase the products. According to Kim, Chung and Lee (2011) and Egelman, Cranor, & Acquisti (2011), the consumers were more concern about the privacy and security of the mobile shopping applications as they worry about their personal information and the payment security will be disclose to the third part since have the high probability involve in the problem such as fraud, financial loss, data collection and error. The consumers were more sensitive to the privacy and security of the apps before they decided to use the mobile shopping applications to purchase the products as they fear that their personal data will be access and misuse by the unauthorized person. Thus, H_{2_1} is accepted and rejected H_{2_0} which show that the privacy and security will affect the consumer's attitudes to continuously use the mobile shopping applications.

5.1.3 Electronic Words of Mouth and Consumer's Attitudes to Continuously Use the Mobile Shopping Application

Based on the result obtained from the research, there is positive relationship between the electronic words of mouth and consumer's attitudes to continuously use the mobile shopping applications. Based on the result from the Person correlation analysis, the value of correlation coefficient of electronic words of mouth is 0.783 with the significant value of 0.000 which is smaller than 0.01. According to the result from the multiple regression analysis, the electronic words of mouth has the Beta value of 0.184 and p-value is 0.000. The results are consistent with the study from Alman and Mirza (2013), Lin, Wu and Chen (2013) where the study indicates that the electronic words of mouth will influence the consumer's behavior to use the mobile commerce to purchase the merchandise. The electronic words of mouth becomes the source of information which can allow the users to post their experiences, view and comments after using the products and services.

The previous study from Mander (2014) shows that the online users are likely to rely on the online review and if the recommendation and rating are high about the products, the consumers are willing to purchase the products and the existing consumers will continue using the mobile shopping apps to purchase the products. The electronic words of mouth has the higher credibility, relevance and empathy if compared to the marketer-created sources of information that provides by the sellers. Hence, H_{3_1} is accepted and H_{3_0} is rejected. This implied that the electronic word of mouth is very important in influencing the consumer's attitudes to continuously use the mobile shopping applications.

5.1.4 Design Aesthetics and Consumer's Attitudes to Continuously Use the Mobile Shopping Application

The design aesthetics does not affect the consumer's attitudes to continuously use the mobile shopping application since the result of multiple regression analysis show that the p-value of design aesthetics is 0.343 which is greater than 0.05. The result is not similar with the previous research from Kim and Lennon (2013) and Douban (2014) which shows that the design aesthetics of the mobile shopping application attracted the customers to use the mobile apps to purchase the products. The consumers will exit from the website due to ineffective design aesthetics and lack of relevant information of the products.

The results implied that the design aesthetics does not affected the consumer's attitudes to continuously use the mobile shopping applications due to the consumers are more concern about the usability of the mobile shopping application rather than the design of the apps. Majority of the respondents are the employed people so that they prefer to use the mobile shopping applications that are useful and can bring the convenience to their lifestyle. It is the basic for the mobile shopping application to have the attractive design but it does not influence the consumer's attitudes to continuously use the mobile shopping application. Some of the apps have the attractive design but the customers need to pay a lot of time and effort to engage with the complicated design of the apps. The customers are prefer the mobile shopping applications that are useful and easy to use where the customers can easily find the

desired products and the payment can be made through the apps without worry about the privacy problem. Thus, H_{40} is accepted and H_{41} is rejected.

5.1.5 Perceived Ease of Use and Consumer's Attitudes to Continuously Use the Mobile Shopping Application

According to the result of the multiple regression analysis, perceived ease of use is the strongest factor that influencing the consumer's attitudes to continuously use the mobile shopping applications. This is because perceived ease of use has the highest Beta value which is 0.491 and the p-value is smaller than 0.05 ($p=0.00$). The result is consistent with the previous study from Gao & Bai (2014), Li (2013) and Jiang, Zhilin and Jun (2013) which state that buying behavior of the customers influenced by the perceived ease of use of the system. The consumers will adopt the online shopping if the apps is easy to use and can bring convenience to their lifestyle . In addition, according to Rahman, Khan and Islam (2013), the business needs to take into consideration of the simple checkout process, use the languages that can be easily understand by the customers in order to make the online shopping perceived ease of use.

The study from Honarbakhsh, Hooi, Kavianpour and Shadkam (2013) also show that the consumers will continue use the mobile commerce if they find that using the mobile shopping application to purchase the products can be easily done without the additional effort. The mobile shopping applications should be perceived ease of use so that it can be use by the customers from the different gender and age group. Hence, the alternative hypothesis (H_{51}) is accepted and rejected the null hypothesis (H_{50}). The research question is answer and the research objective is achieved.

5.2 Implications of the Study

5.2.1 Theoretical Implications

This study enhances the researcher's understanding on how the perceived usefulness, privacy and security, electronic words of mouth and perceived ease of use in influencing the consumer's attitudes to continuously use the mobile shopping applications. This study extend the application of expectation-confirmation model (ECM) and technology acceptance model (TAM) which are used in this research to understand the continuous usage of the consumers. In Melaka area, there are lacking the similar study that are related to the mobile shopping applications. Thus, ECM and TAM are use in this research which can provides the theoretical understanding on the various factors that influencing consumer's attitudes to continuously use the mobile shopping applications.

5.2.2 Practical Implications

From the results also, the managers should focus on those factors in order to encourage more people for using the mobile shopping application to purchase the products. For the perceived usefulness, the consumers are more willing to use the mobile shopping applications if they perceived that the mobile shopping applications are useful for them and can improve their lifestyle. Thus, the managers should design the mobile shopping applications to be more useful to their consumers such as enable the consumers to make the price comparison, provide infinite choices of products to be choose by the consumers, allow the consumers to navigate the nearest stores based on their location which can allow the consumers to shop anytime and everywhere. Besides that, the consumers are sensitive and alert about the privacy and security of the apps if they purchase the products from the mobile shopping application. The managers needs ensure the security of the mobile shopping applications to prevent the security threat thus the personal information of the consumers will not be disclosed to the unauthorized people. For the electronic words of mouth, the online users are more focus on the review that provides by the previous users rather than the advertising from the company. The managers should provide the online feedback form to the

customers after they purchase the products so that they can provide the recommendation and review based on the products. This can help the managers to boost the sales as more and more people will share the products on the social media and they are willing to purchase that particular product from the mobile shopping applications. Lastly, the perceived ease of use is the most important factors that will affect the consumer's attitudes to continuously use the mobile shopping applications. Hence, the marketers need to pay more attention by designing the mobile shopping application easy to use by the people from different age group. The mobile shopping applications should allow the consumers to easily find their desired products and the simple checkout process. The consumers are likely to continuously use the mobile shopping applications if they perceived that the mobile shopping application is easy to use.

6. CONCLUSION

The research is conducted to identify the factors influencing consumer's attitudes to continuously use the mobile shopping applications. The results from the research have achieved the research objectives. Through the results that have been analyzed, it indicated that all the independent variables have the positive relationship with dependent variable. Among the independent variables, perceived ease of use is the strongest factors that affecting the consumer's attitudes to continuously use the mobile shopping applications. All the independent variables will affect the consumer's attitudes to continuously use the mobile shopping applications except design aesthetics which will not affect the consumer's attitudes to continuously use the mobile shopping applications. In addition, the managerial implications and recommendation for future research also include in this chapter. This can provide the reference for the managers to develop the best strategy to attract more potential customers to continuously use the mobile shopping applications and can enable the future researcher to make the improvement and to study the consumer's behavior from the different races, education level and age group.

7. RECOMMENDATIONS FOR FUTURE RESEARCH

The mobile shopping applications are the mobile technology which can help to improve the lifestyle of the consumers. This study is focus on the factors influencing consumer's attitudes to continuously use the mobile shopping applications. The researcher provides several recommendation and suggestion which are useful in the future research.

First, due to the time and budget constraint, this study is conducted in Melaka where the population is unable to represent the entire Malaysia. For the future research, the future researcher can select the other state in Malaysia to collect the data. The state with the large population can choose to conduct the research where the population can represent customer's perception from the entire Malaysian population. The data collected from the large population can produce more precise and accurate results. Second, this research is using the quantitative approach to collect the data from the respondents. In the future research, the future researcher can use the qualitative approach where the researcher can select the most influencing people in the mobile shopping applications so that the future researcher is able to identify more consumer's behavior in using the mobile shopping applications and thus can encourage the people to continuously use the mobile shopping applications. Third, the result that obtains from this research show that most of the respondents are the people in the age between 24-29 years old. The researcher suggest that in the future research, the study can be focus on the behavior of the consumers from the different age groups, races, education and income level.

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9. REFERENCES

- [1] Agwu, M. Edwin; Carter, A.L. and Murray, P.J. (2014), "Downsizing as a strategic tool for effective organizational management", *International Journal of Research in Management, Science & Technology*, Vol. 2, No. 1, pp.1-9.
- [2] AjeetSingh. (2012), "A Review: Secure Payment System for Electronic Transaction", *International Journal of Advanced Research in Computer Science and Software Engineering*, 236-243.
- [3] Al-Qeisi K, Dennis C, Jayawardhena C and Alamanos E (2014), "Website design quality and usage behaviour: an application of the UTAUT model", *Journal of Business Research*, 67(11): 2282-2290.
- [4] ALrawimi, A. A. (2015), "Influence of Online Security, Protection, Website Credibility and Previous After Sales Experience on the Intention to Purchase Online", *European Journal of Business and Innovation Research*, Vol. 3, No. 2, pp. 1-10.
- [5] Bhattacharjee, A. (2001), "Understanding Information Systems Continuance: An Expectation Confirmation Model", *MIS Quarterly*, Vol. 25 No. 3, pp. 351-370.
- [6] Cantalops, A. S., & Salvi, F. (2014), "New Consumer Behavior: A Review of Research on Ewom and Hotels", *International Journal of Hospitality Management*, 36, 41-51.
- [7] Cheng, H.-H., & Huang, S.-W. (2013), "Exploring Antecedents and Consequence of Online Group Buying Intention: An Extended Perspective on Theory of Planned Behavior", *International Journal of Information Management*, 33, 185-198.
- [8] Chiu, C. M., Wang, E. T., Fang, Y. H., & Huang, H. Y. (2014), "Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk", *Information Systems Journal*, 24(1), 85-114.
- [9] David G. Taylor, Michael Levin (2014), "Predicting Mobile App Usage for Purchasing and Information-Sharing", *International Journal of Retail & Distribution Management*, Vol. 42 Issue: 8, pp.759-774.
- [10] Davis, F. (1989), "Perceived Usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly*, 13(3), 319-339.
- [11] Goh KY, Chu J, Wu J. (2015), "Mobile advertising: an empirical study of temporal and spatial differences in search behavior and advertising response", *Journal of Interactive Marketing*, 30:34-45.
- [12] Ha, S., and Stoel, L. (2012), "Online Apparel Retailing: Roles of E-Shopping Quality and Experiential E-Shopping Motives", *Journal of Service Management*, 23(2), 197-215.
- [13] Honarbakhsh, S., Hooi, L.W., Kavianpour, S., & Shadkam. M. (2013), "Antecedents of consumers' intention to shop online", *Australian Journal of Basic and Applied Sciences*, 7(13), 190-197.
- [14] Jiménez, F. R., & Mendoza, N. A. (2013), "Too Popular to Ignore: The Influence of Online Reviews on Purchase Intentions of Search and Experience Products", *Journal of Interactive Marketing*, 27(3), 226-235.
- [15] Kala, D. V., Chee, W. M., & Muhammad, L. O. H. (2013), "Online Shopping and Customer Satisfaction in Malaysia", *International Journal of Marketing Practices*, 1(1), 43-51.

- [16] Khan, S. A., Liang, Y., & Shahzad, S. (2015), "An Empirical Study of Perceived Factors Affecting Customer Satisfaction to Re-Purchase Intention in Online Stores in China", *Journal of Service Science and Management*, pp. 291-305.
- [17] Kim, M., Kim, J. H., & Lennon, S. J. (2011), "E-Service Attributes Available on Men's and Women's Apparel Web Sites", *Managing Service Quality*, 21(1), 25-45.
- [18] Kim, M.-J., Chung, N., & Lee, C.-K. (2011), "The Effect of Perceived Trust on Electronic Commerce: Shopping Online For Tourism Products and Services In South Korea", *Tourism Management*, 32(2), 256–265.
- [19] Köksal, Y. & Penez, S. (2015), "An Investigation of the Important Factors Influence Web Trust in Online Shopping", *Journal of Marketing and Management*, 6(1), pp. 28-40.
- [20] Larissa Carine Becker, Cristiane Pizzutti (2017), "C2C value creation: social anxiety and retail environment", *Journal of Research in Interactive Marketing*, Vol. 11 Issue: 4, pp.398-415.
- [21] Li, Y. (2012), "Theories in online information privacy research: A critical review and an integrated framework", *Decision Support Systems*, 54(1), 471-481.
- [22] Lin, C., Wu, Y.-S., & Chen, J.-C. V. (2013), "Electronic Word-of-mouth: The Moderating Roles of Product Involvement and Brand Image", *Proceedings of 2013 International Conference on Technology Innovation and Industrial Management*, pp. 39-47.
- [23] Ling (Alice) Jiang, Zhilin Yang & Minjoon Jun (2013), "Measuring consumer perceptions of online shopping convenience", *Journal of Service Management*, Vol. 24 Issue: 2, pp.191-214.
- [24] Lingling Gao, Xuesong Bai, (2014), "An Empirical Study on Continuance Intention of Mobile Social Networking Services: Integrating the IS Success Model, Network Externalities and Flow Theory", *Asia Pacific Journal of Marketing and Logistics*, Vol. 26 Issue: 2, pp.168-189.
- [25] Luo, Jifeng, Ba, Sulin and Zhang, Han (2012), "The Effectiveness of Online Shopping Characteristics and Well-Designed Websites on Satisfaction", *MIS Quarterly*, Vol. 36 No. 4, pp. 1131-1144.
- [26] Magrath, V. and McCormick, H. (2013), "Marketing Design Elements of Mobile Fashion Retail Apps", *Journal of Fashion Marketing and Management: An International Journal*, 17(1), 115-134.
- [27] Mamonov, S., & Benbunan-Fich, R. (2015), "An Empirical Investigation of Privacy Breach Perceptions among Smartphone Application Users", *Computers in Human Behavior*, 49(August), 427–436.
- [28] Medina, M. and Portilla, I. (2015), "Media Market Research on Immigrant Audiences: Lessons Learned From a Critical Analysis of the Spanish Media Survey", *International Journal of Communication*, 9, 22.
- [29] Oliver, Richard L. (1977), "Effect of expectation and disconfirmation on post-exposure product evaluations: an alternative interpretation", *Journal of Applied Psychology*, 62, 480-486.
- [30] Oliver, Richard L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions", *Journal of Marketing Research*, 17, 460-469.
- [31] Pourabedin, Z. & Migin, M.W. (2015), "Hotel Experience and Positive Electronic Word of Mouth (e—WOM)", *International Business Management*, Vol. 9 No. 4, pp. 596–600.
- [32] Rahman, M., Khan, A., & Islam, N. (2013), "An Empirical Study on Revealing the Factors Influencing Online Shopping Intention Among Malaysian Consumers", *Journal of Human and Social Science Research*, 1(1), 9-18.

- [33] Roy, R., Rabbanee, F.K. and Sharma, P. (2016), “Antecedents, outcomes, and mediating role of internal reference prices in pay-what-you-want pricing”, *Marketing Intelligence & Planning*, Vol. 34, pp. 117-136.
- [34] Santouridis, I., Trivellas, P., & Tsimonis, G. (2012), “Using E-S-Qual to Measure Internet Service Quality of E-Commerce Web Sites in Greece”, *International Journal of Quality and Service Sciences*, 4(1), 86-98.
- [35] Saunders, M., Lewis, P., & Thornhill, A. (2009), “Research methods for business students (5th ed.)”, Prentice Hall: Financial Times.
- [36] Taylor, J. F., Ferguson, J., Ellen, P. S., & Biswas, D. (2015), “From trait to state: Understanding privacy concerns”, *Journal of Consumer Marketing*, 32(2).
- [37] Venkatesh, V., Thong, J. Y., & Xu, X. (2012), “Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology”, *MIS quarterly*, 36(1), 157-178.
- [38] Victoria Magrath, Helen McCormick (2013), “Marketing design elements of mobile fashion retail apps”, *Journal of Fashion Marketing and Management: An International Journal*, Vol. 17 Issue: 1, pp.115-134.
- [39] W Wirtz, Bernd, Piehler, Robert & Ullrich, Sebastian (2013), “Determinants of social media website attractiveness”, *Journal of Electronic Commerce Research*, 14. 11-33.
- [40] Wei-Hung Hsiao & Tsung-Sheng Chang (2014), “Understanding consumers’ continuance intention towards mobile advertising: a theoretical framework and empirical study”, *Behaviour & Information Technology*, 33:7, 730-742.
- [41] Weng Marc Lim & Ding Hooi Ting (2014), “Consumer Acceptance and Continuance of Online Group Buying”, *Journal of Computer Information Systems*, 54:3, 87-96.
- [42] Wong, C. H., Tan, G. W. H., Ooi, K. B., & Lin, B. (2014), “Mobile Shopping: The Next Frontier of the Shopping Industry? An Emerging Market Perspective”, *International Journal of Mobile Communications*, 13(1), 92–112.
- [43] Xu, J., Forman, C., Kim, J. B., & Van Ittersum, K. (2014), “News Media Channels: Complements or Substitutes? Evidence from Mobile Phone Usage”, *Journal of Marketing*, 78(4), 97-112.
- [44] Yang, L., & Mao, M. (2014), “Antecedents of Online Group Buying Behavior: From Price Leverage and Crowd Effect Perspectives”, *Proceedings of 2014 Pacific Conference on Information System (PACIS)*. Chengdu, China.
- [45] Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013), “Business research methods (9th ed.)”, Mason, OH: South-Western / Cengage Learning.
- [46] Qureshi, M.I., Hassan, M. A., Hishan, S. S., Rasli, A. M., & Zaman, K. (2017). Dynamic linkages between sustainable tourism, energy, health and wealth: Evidence from top 80 international tourist destination cities in 37 countries. *Journal of Cleaner Production*, 158, 143–155. <https://doi.org/10.1016/j.jclepro.2017.05.001>
- [47] Qureshi, M.I., Iftikhar, M., Bhatti, M. N., Shams, T., & Zaman, K. (2013). Critical elements in implementations of just-in-time management: Empirical study of cement industry in Pakistan. *SpringerPlus*, 2(1), 1–14. <https://doi.org/10.1186/2193-1801-2-645>
- [48] Qureshi, M.I., Iftikhar, M., Janjua, S. Y., Zaman, K., Raja, U. M., & Javed, Y. (2015). Empirical investigation of mobbing, stress and employees’ behavior at work place: quantitatively refining a qualitative model. *Quality and Quantity*, 49(1), 93–113. <https://doi.org/10.1007/s11135-013-9976-4>
- [49] Qureshi, M.I., Khan, K., Bhatti, M. N., Khan, A., & Zaman, K. (2012). Quality function deployment in higher education institutes of Pakistan. *Middle East Journal of Scientific Research*, 12(8), 1111–1118. <https://doi.org/10.5829/idosi.mejsr.2012.12.8.1639>
- [50] Qureshi, M.I., Md. Rasli, A., Jusoh, A., & Kowang, T. O. (2015). Sustainability: A new

- manufacturing paradigm. *Jurnal Teknologi*, 77(22), 47–53. <https://doi.org/10.11113/jt.v77.6661>
- [51] Qureshi, M.I., Yusoff, R. M., Ahmed, A. R., Isa, K., & Imran, A. (2017). Linking quality of work life with sustainable manufacturing performance. *Advanced Science Letters*, 23(9), 8232–8235. <https://doi.org/10.1166/asl.2017.9867>
- [52] Qureshi, M.I., Yusoff, R. M., Hishan, S. S., Alam, A. F., Zaman, K., & Rasli, A. M. (2019). Natural disasters and Malaysian economic growth: policy reforms for disasters management. *Environmental Science and Pollution Research International*, 26(15), 15496–15509. <https://doi.org/10.1007/s11356-019-04866-z>
- [53] Qureshi, M I, & Awang, K. W. B. (2020). Editorial. *International Journal of Business Continuity and Risk Management*, 10(2–3), 95–98. <https://doi.org/10.1504/ijbcmr.2020.10.issue-2-3>
- [54] Qureshi, M I, Khan, N., Qayyum, S., Malik, S., Sanil, H. S., & Ramayah, T. (2020). Classifications of sustainable manufacturing practices in ASEAN region: A systematic review and bibliometric analysis of the past decade of research. *Sustainability (Switzerland)*, 12(21), 1–19. <https://doi.org/10.3390/su12218950>
- [55] Qureshi, M I, Parveen, S., Abdullah, I., & Dana, L.-P. (2020). Reconceptualizing the interventions of open innovation systems between the nexus of quadruple organization cultural dynamics and performance. *Quality and Quantity*. <https://doi.org/10.1007/s11135-020-01078-3>
- [56] Qureshi, Muhammad Imran, Janjua, S. Y., Zaman, K., Lodhi, M. S., & Tariq, Y. Bin. (2014). Internationalization of higher education institutions: Implementation of DMAIC cycle. *Scientometrics*, 98(3), 2295–2310. <https://doi.org/10.1007/s11192-013-1163-9>
- [57] Qureshi, Muhammad Imran, Khan, N., Gillani, S. M. A. H., & Raza, H. (2020). A Systematic Review of Past Decade of Mobile Learning: What we Learned and Where to Go. *International Journal of Interactive Mobile Technologies (IJIM)*, 14(06), 67–81.
- [58] Qureshi, Muhammad Imran, Khan, N. U., Rasli, A. M., & Zaman, K. (2015). The battle of health with environmental evils of Asian countries: promises to keep. *Environmental Science and Pollution Research*, 22(15), 11708–11715. <https://doi.org/10.1007/s11356-015-4440-8>
- [59] Qureshi, Muhammad Imran, Qayyum, S., Nassani, A. A., Aldakhil, A. M., Qazi Abro, M. M., & Zaman, K. (2019). Management of various socio-economic factors under the United Nations sustainable development agenda. *Resources Policy*, 64, 101515. <https://doi.org/10.1016/j.resourpol.2019.101515>
- [60] Qureshi, Muhammad Imran, Rasli, A. M., Awan, U., Ma, J., Ali, G., Faridullah, ... Zaman, K. (2015). Environment and air pollution: health services bequeath to grotesque menace. *Environmental Science and Pollution Research*, 22(5), 3467–3476. <https://doi.org/10.1007/s11356-014-3584-2>
- [61] Qureshi, Muhammad Imran, Rasli, A. M., & Zaman, K. (2016). Energy crisis, greenhouse gas emissions and sectoral growth reforms: Repairing the fabricated mosaic. *Journal of Cleaner Production*, 112, 3657–3666. <https://doi.org/10.1016/j.jclepro.2015.08.017>
- [62] Rahim, N. S. A., Zahir, M. A., Wan Azman, W. N., Ayyub, M., & Qureshi, M. I. (2019). Transformational leadership style towards the quality of service in forwarding activity. *International Journal of Recent Technology and Engineering*, 8(1), 411–414.
- [63] Ramakrishna, S., Ahmad, H., Qureshi, M. I., & Khan, N. (2020). Review on nexus between economic growth and environmental quality. *International Journal of Psychosocial Rehabilitation*, 24(1), 739–746. <https://doi.org/10.37200/IJPR/V24I1/PR200177>
- [64] Rashid, M., Tasmin, R., Qureshi, M. I., & Shafiq, M. (2019a). A PLS analysis on the relationship between servant leadership and academicians OCB in MTUN universities.

- International Journal of Engineering and Advanced Technology*, 8(5), 1360–1368.
<https://doi.org/10.35940/ijeat.E1194.0585C19>
- [65] Rashid, M., Tasmin, R., Qureshi, M. I., & Shafiq, M. (2019b). A proposed framework of mediating role of interpersonal employee conflict between the relationship of servant leadership and academicians OCB, using PLS. *International Journal of Engineering and Advanced Technology*, 8(5), 1369–1374.
<https://doi.org/10.35940/ijeat.E1195.0585C19>
- [66] Rasli, A., Jusoh, A., & Qureshi, M. I. (2017). Selected peer-reviewed articles from the ASIA international conference (AIC-2016) on emerging issues in economics and finance (EIEF) and future of marketing and management (FMM), Universiti Teknologi Malaysia, 10–11 December 2016. *Advanced Science Letters*, 23(9), 8021–8022.
<https://doi.org/10.1166/asl.2017.9828>
- [67] Rasli, A. M., Qureshi, M. I., Isah-Chikaji, A., Zaman, K., & Ahmad, M. (2018). New toxics, race to the bottom and revised environmental Kuznets curve: The case of local and global pollutants. *Renewable and Sustainable Energy Reviews*.
<https://doi.org/10.1016/j.rser.2017.08.092>
- [68] Safdar, M. Z., Awan, M. Z., Ahmed, Z., Qureshi, M. I., & Hasnain, T. (2016). What does matter? Liquidity or profitability: A case of sugar industry in Pakistan. *International Journal of Economics and Financial Issues*, 6(3), 144–152.
- [69] Sami, A., Jusoh, A., Nor, K. M., Irfan, A., Irum, S., Qureshi, M. I., & Ishfaq, M. (2018). Professionalism is the key to create public value. *International Journal of Engineering and Technology(UAE)*, 7(3.30 Speci), 583–586.
- [70] Sami, Abdul, Jusoh, A., & Qureshi, M. I. (2016). Does ethical leadership create public value? Empirical evidences from banking sector of Pakistan. *International Review of Management and Marketing*, 6(4), 262–270.
- [71] Shafiq, M., Tasmin, R., & Qureshi, M. I. (2019). A developed framework of mediating role of inbound innovation strategy between bos and innovation performance. *International Journal of Engineering and Advanced Technology*, 8(5), 1375–1381.
<https://doi.org/10.35940/ijeat.E1196.0585C19>
- [72] Shafiq, M., Tasmin, R., Qureshi, M. I., & Takala, J. (2019). A new framework of blue ocean strategy for innovation performance in manufacturing sector. *International Journal of Engineering and Advanced Technology*, 8(5), 1382–1389.
<https://doi.org/10.35940/ijeat.E1197.0585C19>
- [73] Shafiq, Muhammad, Tasmin, R., Takala, J., Imran Qureshi, M., & Rashid, M. (2018). Mediating Role of Open Innovation Between the Relationship of Blue Ocean Strategy and Innovation Performance, a Study of Malaysian Industry. *International Journal of Engineering & Technology*, 7(2.29), 1076. <https://doi.org/10.14419/ijet.v7i2.29.14316>
- [74] Shahverdi, M., Ismail, K., & Qureshi, M. I. (2018). The effect of perceived barriers on social entrepreneurship intention in Malaysian universities: The moderating role of education. *Management Science Letters*, 8(5), 341–352.
<https://doi.org/10.5267/j.msl.2018.4.014>
- [75] Yasir, M., Rasli, A., & Qureshi, M. I. (2017). Investigation of the factors that affect and gets affected by organizational ethical climate. *Advanced Science Letters*, 23(9), 9351–9355. <https://doi.org/10.1166/asl.2017.10479>
- [76] Zahid, M., Rahman, H. U., Ali, W., Khan, M., Alharthi, M., Imran Qureshi, M., & Jan, A. (2020). Boardroom gender diversity: Implications for corporate sustainability disclosures in Malaysia. *Journal of Cleaner Production*, 244.
<https://doi.org/10.1016/j.jclepro.2019.118683>