TRUST IN MOBILE SOCIAL COMMERCE: A PERSPECTIVE FROM GEN X AND GEN Y

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APRIL 2018

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ΒY

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A research project submitted in partial fulfillment of the requirement for the degree of

BACHELOR OF COMMERCE (HONS) ACCOUNTING

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE DEPARTMENT OF COMMERCE AND ACCOUNTANCY

APRIL 2018

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DECLARATION

We hereby declare that:

- (1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (2) No portion of this research has been submitted in support of any application for any other degree or qualification of this or any other University, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the research project.
- (4) The word count of this research report is 13,977 words.

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ACKNOWLEDGEMENT

First and foremost, we would like to use this opportunity to express our gratitude to Universiti Tunku Abdul Rahman (UTAR) for providing us the facilities, equipment, journals database and necessary resources for this research project. We have gained experience on how to conduct a proper research and learn how to cope with challenges such as time management and teamwork during this research.

Besides, we would like to express our special thanks of gratitude and appreciation to our supervisor, Dr. Leong Lai Ying for her pearls of wisdom throughout this research project by giving her precious guidance, helpful advice, immense knowledge and continuous motivation. We are able to complete our project on time due to her patience and valuable comments which had been greatly assisted us in our research project. We could not have imagined having a better supervisor for our final year project. She always made herself available for consultation and gave full attention to our research.

Moreover, we would like to express our special appreciation to our lecturer, Dr. Shirley Lee Voon Hsien, and our beloved parents and friends for their physical and mental supports, therefore we have sufficient knowledge and confidence to complete this research. In addition, we appreciate all the respondents for spending their time to complete our survey questionnaire. We could not complete this research without their collaboration.

Last but not least, we would like to thank and appreciate to all of the teammates who have been supporting each other and contribute commitment to complete this project, especially our dedicated team leader for guiding us to accomplish each and every task of the whole final year project.

DEDICATION

We would like to dedicate this dissertation work to our beloved supervisor, Dr. Leong Lai Ying and our research coordinator, Dr. Lee Voon Hsien, who guided us throughout this research. Without their assistance, it would not be impossible for us to complete this research project. Besides, we appreciate the boundless support and sincere advices from our family and friends. They have provided us the motivation to overcome all the challenges that we faced. Furthermore, we also dedicate this dissertation to the respondents who have spent their precious time to complete the questionnaires. In a nutshell, we would like to dedicate this dissertation to our group members who had contributed to this research project.

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LIST OF ABBREVIATIONS

S-COMMERCE	Social Commerce
M-COMMERCE	Mobile Commerce
MS-COMMERCE	Mobile Social Commerce
E-WOM	Electronic Word-of-Mouth
GEN X	Generation X
GEN Y	Generation Y
TBAM	Trust Based Acceptance Model
OCR	Online Consumer Reviews
SAS	Statistical Analysis System
IT	Information Technology
SNSs	Social Networking Sites
MP	Mobile Payment
TRA	Theory of Reasoned Action
IS	Information System
RA	Recommendation Agent
IVs	Independent Variables
DV	Dependent Variable
MCMC	Malaysia Communications and Multimedia Commissions
CIA	Central Intelligence Agency
MLR	Multiple Linear Regression
СМР	Cognitive Trust in Mobile Payment

EMP	Emotional Trust in Mobile Payment
РР	Profile Photo
LS	Linguistic Style
RE	Reported Experience
TMS	Trust in Mobile Social Commerce
SPM	Sijil Pelajaran Malaysia
STPM	Sijil Tinggi Persekolahan Malaysia
Pre-U	Pre-University
PhD	Doctor of Philosophy
ACCA	Association of Chartered Certified Accountants
СРА	Certified Practising Accountants

PREFACE

With the development of the mobile, Web 2.0, and internet technologies in today's digital era, a new business concept which refer as mobile social commerce (ms-commerce) is formed and developed by uniquely combined both social commerce and mobile commerce. Nowadays, social network sites (SNSs) are been widely involved in m-commerce and e-commerce, showing high ms-commerce penetration.

Trust is anticipated as a vital role in ms-commerce as building trust is important for both s-commerce and m-commerce. Lack of trust is the dominant factor that affects the relationship between the online retailers and customer. Besides, mobile payment is a main empowering part in m-commerce while e-WOM is one of the main dimension of s-commerce.

Therefore, this study is to be conducted to examine the factors that affect the trust in ms-commerce of Generation X and Generation Y.

ABSTRACT

With the growing popularity and increase sophistication in social commerce (scommerce) and mobile commerce (m-commerce), a new business model which refers as mobile social commerce (ms-commerce) is formed by uniquely combining both scommerce and m-commerce. Trust is always an issue in any type of commerce especially in ms-commerce, where higher risk and uncertainty exist. Lack of trust and distrust are the major inhibitors that causes online retailers fail to establish positive relationships with consumers. In addition, as mobile payment is a crucial enabling part in m-commerce while e-WOM is one of the core dimensions of s-commerce, a study is conducted to examine how they affect trust in the ms-commerce, a new online paradigm.

The purpose of this research is to study the determinants that influencing the trust of Generation X (Gen X) and Generation Y (Gen Y) in ms-commerce. In this study, an enhanced conceptual model was developed by combining Trust Based Acceptance Model (TBAM), Trust Transference Theory and Online Consumer Review (OCR) aspects to establish a comprehensive study about the factors influencing trust in ms-commerce environment from the perspective of Gen X and Gen Y. We propose that trust in cognitive and emotional trust in mobile payment, together with three OCR aspects (i.e. profile photo, linguistic style, & reported experience) will have significant effects on trust in ms-commerce.

This research is a cross-sectional study. 500 sets of questionnaires were circulated to targeted Malaysia ms-commerce users who are Gen X and Gen Y, from five selected shopping malls which were rated as top shopping malls by Tripadvisor in Selangor, Federal Territory of Kuala Lumpur, Perak, Johor and Kedah in Malaysia by purposive sampling technique. Analysis of data collected were carried out by using SAS Enterprise Guide 7.1.

CHAPTER 1: INTRODUCTION

1.1 Research Background

According to "We Are Social" (2017), 81% of the Malaysia population own a smartphone, and 65% are active mobile social users. Ms-commerce is a new-fangled concept in today's digital era that has emerged in the event of the development of the mobile, Web 2.0, and internet technologies (Kucukcay, 2014). It was first defined by Kucukcay (2014) as the set of e-commerce activities performed by using mobile technology with the participation of users in information generation and sharing, which uniquely combines characteristics of m-commerce and s-commerce simultaneously.

M-commerce is defined as the use of mobile access to computer-mediated networks by using an electronic device to initiate and complete any transaction (Lee & Wong, 2016). Its ubiquity allows users to access information anytime and anywhere (Chong, Chan, & Ooi, 2012; Krotov, Junglas, & Steel, 2015), customizes connectivity to service station and enriches the shopping accessibility (Coursaris & Kim, 2011; Fuentes & Svingstedt, 2017). S-commerce is the application of Web 2.0 technologies to enhance users' interaction in e-commerce (Lin, Li, & Wang, 2017). Generally, it is defined as the use of social media for people to trade, compare, and share information about products and services in internet-based communities (Busalim & Hussin, 2016). In fact, social network sites (SNSs) such as Facebook, Twitter and LinkedIn are nowadays been largely used in m-commerce and e-commerce (Lin & Lu, 2015), showing high ms-commerce penetration.

Kim and Park (2013) define trust as one's reliance on another's ability, and it expresses one's continuing beliefs from another's action. Komiak and Benbasat (2006) conceptualize trust in IT combines both cognitive and emotional trusts which contain extents of reliability and benevolence (Aiken & Boush, 2006). Cognitive trust explains the extent of one's belief and how one is willing to rely on another's capability and consistency, while emotional trust, as known as affective trust, is a one's emotionalbased belief about another's level of care and concerns (Kim & Park, 2013). Building trust in s-commerce is significant because it is built on SNSs (Kim & Park, 2013), as well as for m-commerce because more customers make transactions through mobile devices (Li & Yeh, 2010). Since ms-commerce is combination of s-commerce and m-commerce, therefore it can be anticipated that trust will have significant role to play in ms-commerce. This study investigates the trust in ms-commerce of Gen X and Gen Y as they possessed higher Internet adoption rates among all age groups (Lissitsa & Kol, 2016). Gen X refers to those born from 1965 to 1979, while Gen Y is known as millennial, includes those born from 1980 to 1999 (Beaven, 2014; Newbold & Scott, 2017).

1.2 Problem Statement

Malaysia is ranked 4th in Asia by having 65% of active mobile social media penetration (Statista, 2017). As per PricewaterhouseCoopers (2016), almost every Malaysian shops online; however, only 31% of Malaysian online shoppers said they purchase directly via a social media channel. The phenomenon indicates high online shopping penetration but low participation in s-commerce transaction.

Trust is always an issue in any type of commerce especially in s-commerce where higher risk and uncertainty exists (Emaeili, Mutallebi, Mardani, & Golpayegani, 2015). In addition, mobile channels were said to be more unreliable than online channels as the frequencies of information asymmetry and eavesdropping are higher, leading to distrust in mobile payment (Lu, Yang, Chau, & Cao, 2011). While ms-commerce is derived from s-commerce with mobile technologies (Kucukcay, 2014), it is predicted that trust plays vital role in it as well.

Moreover, existing literature mostly focused on consumer trust in e-commerce (Koh, Fichman, & Kraut, 2013; Oliveira, Alhinho, Rita, & Dhillon, 2017). With the growing popularity and increase sophistication of m-commerce (Shang & Wu, 2017; Lu, Yu, Liu, & Wei, 2017) and s-commerce (Hajli, Sims, Zadeh, & Richard, 2017), researchers or practitioners should pay more attention on the development of trust in such highly interactive online business environment (Chow & Shi, 2014). Kim and Park (2013)

added that there is a need to understand what influence trust in s-commerce as it is a new online paradigm. Similarly, since ms-commerce which combined both mcommerce and s-commerce, is a newly emerged business model that has started to gain popularity, a study on the determinants of trust in ms-commerce would be very useful to scholars and practitioners.

Moreover, the research on understanding of how trust is developed and transferred in s-commerce context is still limited (Chen & Shen, 2015; Chen & Wang, 2016; Lu, Fan, & Zhou, 2016), not to mention s-commerce in mobile environment. Besides, previous studies that used TBAM to investigate either purchase intention or intention to use (Zhang, Gong, Zhao, & Lee, 2015; Gong, Zhang, Zhao, & Lee, 2016; Macik, 2016; Zhang, Cheung, & Lee, 2014) were deficient as the samples used were limited to certain cultures or countries. In addition, empirical study on trust in ms-commerce is still limited in Malaysia context (e.g. Hew, Lee, Ooi, & Lin, 2016).

Nielsen (2015) presented that one-seventh of those respondents alleged they believe the comments and reviews (i.e. e-WOM) they read on social media platforms. However, risks exist because consumers and e-WOMers seldom meet and are unknown to each other (Park, Xiang, Joisam, & Kim, 2013). In fact, online consumer review (OCR) is one form of e-WOM (Filieri, 2016; Ortega, 2017) where e-WOM on s-commerce context influences consumers the most especially on their trust (Hajli, Lin, Featherman, & Wang, 2014). Since ms-commerce is a subset of s-commerce as aforementioned, we anticipate that OCR will have an imperative role to play in ms-commerce. Moreover, past researchers (Ortega, 2017; Xu, 2014; Karimi, & Wang, 2017) focused on how reviewer's attributes affect their reviews in terms of credibility and trustworthiness in e-commerce. However, no past study has studied the connection between reviewers' characteristics and trust, especially in ms-commerce platform, where the nature of reviewer characteristic will be different compared to e-commerce.

General Research Objective General Research Question To identify the determinants that What are the determinants that influence trust in mobile social commerce? influence trust in mobile social commerce. Specific Research Objectives Specific Research Questions 1. What is the relationship between To examine the relationship between cognitive trust in mobile payment and cognitive trust in mobile payment and trust in mobile social commerce. trust in mobile social commerce? 2. To analyze the association between 2. What is the association between emotional trust in mobile payment and emotional trust in mobile payment and trust in mobile social commerce. trust in mobile social commerce? 3. What is the relationship between To investigate the relationship on profile photos of online reviewers affect profile photos of online reviewers and trust in mobile social commerce. trust in mobile social commerce? To examine the impact of linguistic What is the impact between linguistic style of online reviewers on trust in style of online reviewers and trust in mobile social commerce. mobile social commerce? To determine the correlation between 5. What is the correlation between reported experience of online reviewers reported experiences of online reviewers and trust in mobile social commerce. and trust in mobile social commerce? To analyze the linkage between What is the linkage between cognitive cognitive trust in mobile payment and trust in mobile payment and emotional emotional trust in mobile payment. trust in mobile payment?

1.3 Research Questions and Objectives

1.4 Significance of Study

1.4.1 Practical Contribution

By understanding how trust is developed in ms-commerce, ms-commerce sellers can optimize their s-commerce strategies more effectively to attract mobile shoppers and understand online shoppers' behaviors comprehensively by market segmentation and targeting to enhance their trust in ms-commerce. Moreover, this research can provide some useful insights about ms-commerce to government and help in government's initiatives and regulations on this digital environment in Malaysia. This study also presents information for mobile app developers to develop social media apps by recognizing the opportunities rooted from the significance of ms-commerce.

Malaysia is still in the embryonic stage towards ms-commerce and this study specifically aims to inspire more researchers to conduct research in this area, contributing their knowledge and findings at the same time. Future researchers who are interested in studying similar topic may use it as references by tracking the ms-commerce's development to conduct a better research after overcoming the limitations of the study.

1.4.2 Theoretical Contribution

Although OCR has been investigated from different specialties, it is believed to be one of the first few empirical studies that address the theoretical gap in the context of trust in ms-commerce.

Scholars have claimed that combination of emotional and cognitive trust should be involved in trust decisions as cognitive trust solely is insufficient to account for decision making on whether to trust or not if without emotional trust (Komiak & Benbasat, 2006). This is because people's rational decisions overstate their cognitive capacities and the decisions have insignificant effect to emotional and social impacts on trust decisions (Komiak & Benbasat, 2006). The research makes contribution by combining TBAM, Trust Transference Theory and OCR aspects which consists of profile photo, linguistic style and reported experience to develop an enhanced theoretical model, providing a comprehensive study to demonstrate the impacts of cognitive and emotional trust in mobile payment (MP) and OCR aspects on the trust in ms-commerce.

Lastly, this study extends the applicability of the TBAM to ms-commerce. Ecommerce studies has been broadly used TBAM (Zhang et al., 2015) and place significant effects on intention to use MP (Gong et al., 2016), but it has not been applied in ms-commerce. By using TBAM, this study verifies the participation behavior of users in ms-commerce.

1.5 Chapter Layout

In Chapter 1, the overview of this research which comprises background, problem statement, objectives, and significance of study were discussed. In Chapter 2, an enhanced conceptual framework was proposed and the hypotheses were developed. In Chapter 3, the research design was introduced. Then, target population, sampling procedures, sample size, data collection method, variables and measurement, data analysis technique were identified.

In Chapter 4, the outcomes of pilot test and final survey were justified. Then, the results of descriptive analysis, measurement of scale and inferential analysis for the final survey were illustrated and interpreted accordingly. In Chapter 5, the descriptive analysis, scale measurement as well as the inferential analysis results were summarized. Moreover, the major findings, managerial and theoretical implications, limitations and recommendations of study were explained.

CHAPTER 2: LITERATURE REVIEW

2.1 Theoretical Foundation

2.1.1 Trust Based Acceptance Model (TBAM)

TBAM is initially drawn from Theory of Reasoned Action (TRA), which describes a background for understanding the relationships among beliefs, attitude, intentions and subjective norms (Fishbein & Ajzen, 1975). TRA is broadly used in e-commerce studies (Zhang et al., 2014) and used by IS researchers to explain IT adoption (Komiak & Benbasat, 2006).

Drawing upon TRA, Komiak and Benbasat (2004) founded TBAM by investigating how trust affect e-commerce dependence. They examined two types of trust in the model: (1) cognitive trust, which is conceptualized as trusting belief. It focuses on the trustor's perception that the trustee has attributes (e.g. competence, benevolence, and integrity) which can be counted on; (2) emotional trust, also viewed as affective trust, is a form of trusting attitude which is defined as the trustor's attitude and emotional feelings toward the security and comfort about relying on the trustee. Past researchers (Gong et al., 2016; Zhang et-al., 2015; Macik, 2016) applied TBAM which conceptualized trust in IT as a combination of cognitive and emotional trust, which assumed that reasoning and feeling are both involved in trust decisions. Based on Gong et-al. (2016), this research investigates how both cognitive and emotional trust in MP will influence the trust in ms-commerce in a trust transfer process.

Cognitive trust is essentially distinct from emotional trust. It is customer's cognition based on rational appraisal of the trustee's attributes while emotional trust is an emotional security which enables customers to feel assured and comfortable about relying on the trustee beyond available evidence (Komiak &

Benbasat, 2004). Based on Lewis and Weigert (1985) (as cited in Komiak & Benbasat, 2006), cognitive trust is established when there are acceptable logics that have been believed and recognised by trustor, while emotional trust urges consumers to conduct trusting behaviour merely based on their feelings (Sun, 2010). Consumers often evaluate trusting behaviour affectively in online surroundings and when the level of emotional trust is high, they are perceived to perform certain behaviour enthusiastically (Komiak & Benbasat, 2006). If there is negligence of emotional dimension, the understanding of consumers' behavioural decision may be impeded (Komiak & Benbasat, 2004).

2.1.2 Trust Transference Theory

According to Ng (2013), an individual's trust towards a trusted source can be transferred to relatively unknown target if the unknown target has a close relationship toward trusted source. Wondoko, Abbas, Budiastuti and Kosala (2016) argued that trust can be transferred from different kinds of sources and situations. This theory is described as a mechanism which involved three parties that are (1) trustor who choose to trust others, (2) trustee which trustworthiness was assessed by trustor and (3) third party which act as a center-man in the trust transfer process. When the trustor believes the third party, ultimately the trustor will believe the trustee if the third party had close connection with the trustee (Wang, Shen, & Sun, 2013).

However in marketing and e-commerce research, researchers mostly investigated two types of trust transference, namely intra-channel trust transfer and inter-channel trust transfer (Lin, Lu, Liang, & Wei, 2011). Intra-channel trust transfer occurs when consumer's trust moved from one to another entity within the same channel (e.g. online to online, offline to offline), while trust is transferred through inter-channel when it shifted to different context (e.g. online to offline, offline to online) (Buntain & Golbeck, 2015; Lin et-al., 2011). There are past studies that examined interchannel trust transfer which occurred from

online to mobile context (Giovannini, Ferreira, Silva, & Ferreira, 2015; Lu etal., 2011; Wang & Shan, 2013) and intrachannel trust transfer which occurred from online to online context (Ballester & Espallardo, 2008; Stewart, 2003), offline to offline context (Wu, Chen, Chien, & Wu, 2016).

As the importance of mobile-based channels to commercial transactions and business practices is growing rapidly (Ho, 2012), how trust is transferred and built within them has barely been investigated, especially in ms-commerce which is a new business trend. In this research, trust transference theory is applied to discover whether trust is able to be transferred through intra-channel within mobile context, where cognitive and emotional trust in mobile payment as trust in source while trust in ms-commerce as trust in target.

2.1.3 Online Consumer Review Aspects

Adopted from Ortega (2017), we propose that OCR aspects (i.e. profile photo, linguistic style, & reported experience) give indirect information about the reviewer and lead reader to perceive interpersonal similarity in reviewer, thus influence his/her trusting behavior towards ms-commerce. The three aspects were chosen because they are included in every social media platform (Ortega, 2017).

2.2 Review of the Prior Empirical Studies

2.2.1 Trust in Mobile Social Commerce

Trust is a vital concept in communications and significant for companies to create and maintain relationship with sellers (Hajli et al., 2017). Jones and Leonard (2008) argued that distrust is the major factor which causes online

retailers fail to establish positive relationships with consumers and difficult for mobile vendors to build trust with customers (Li & Yeh, 2010).

From a behavioral perspective, trust is the willingness of a trustor to be defenseless to the trustee's actions, expecting those actions will be important and reliable to him, even without controlling and monitoring (Aiken & Boush, 2006; Cabanillas, Fernandez, & Leiva, 2014). It acts as a reducer of social complexity by subjectively ruling out undesirable yet possible behaviors from the trustee (Komiak & Benbasat, 2006). According to Lin and Lu (2015), the usage of some social media (e.g. LinkedIn, Facebook) have been developed into mobile applications in this high mobile technology era. Hence, trust in ms-commerce is vital to be investigated and studied further as trust plays a key part in influencing commercial transactions on ms-commerce.

In this research, we adopt the definition of online trust by Kim and Peterson (2017) to regard trust in ms-commerce as users' reliance on ms-commerce sellers with respect to their business activities in the mobile social platform and website.

2.2.2 The Effects of Cognitive and Emotional Trust in Mobile Payment on Trust in Mobile Social Commerce

Gong et al. (2016) define cognitive trust in mobile payment as users' expectations that the attributes of mobile payment services can be relied upon. Trustor's willingness and intention to trust (trusting intention) cognitively are depending on trustees' certain behavior (Komiak & Benbasat, 2006; McKnight, Choudhury, & Kacmar, 2002).

Past studies proved that cognitive trust in mobile payment has a positive relationship to intention to use MP in China (Gong et al., 2016; Lu et al., 2011) and Malaysia (Eze, Gan, Ademu, & Tella, 2008). Idemudia and Raisinghani

(2014) further proved that cognitive trust in integrity for smartphones positively affect the continuance usage of smartphones in United States.

Gong et al. (2016) define emotional trust in mobile payment as a user's feelings of being comfortable as well as secured to conduct mobile payments. Emotional trust expresses one's evaluation of emotional feelings about relying on another (Aiken & Boush, 2006). Therefore, it can be perceived as trusting attitude, which in TRA, can affect individual's behavioral intention (e.g. adoption, intention to use, continued use).

Past studies aforementioned also investigated emotional trust in mobile payment in other aspects. Gong et al. (2016) conclude that emotional trust in MP positively affects the intention to adopt MP in China. Based onZhang et al. (2015), emotional trust enhances individuals' intention to use MP in China by increasing perceptions on value. In mobile context, Idemudia, Raisinghani and Ojo (2013) also showed that emotional trust on smartphones is positively related to continuance usage of smartphone in North America.

Under a trust transfer environment, trust can be transferred when source and target have a strong relationship (Steward, 2003). Chen and Wang (2016) proved that trust can be transferred from e-commerce to s-commerce as they have common fate. Wang and Shan (2013) also supported that trust in online banking can be transferred to mobile banking. Additionally, Gong et al. (2016) show that cognitive and emotional trust in online payment can be transferred to mobile payment since consumer perceived close relationship between them. In addition to trust transference theory studies by Lin et al. (2011), trust can be transferred through intra-channel when customer's trust is being shifted to another entity within the same channel, which in this study, within mobile channel. Therefore, according to prior studies aforementioned, it can be hypothesized that:

H1: There is a positive relationship between cognitive trust in mobile payment and trust in mobile social commerce.

H2: There is a positive relationship between emotional trust in mobile payment and trust in mobile social commerce.

2.2.3 The Relationship between Profile Photos of Online Reviewer and Trust in Mobile Social Commerce

According to Xu (2014), profile photo is a self-created fictitious image that shows how the reviewer looks like to others in the online environment. It also reveals one's social presence (Xu, 2014). The study examines the perceived interpersonal similarity by the receiver in the reviewer when one assesses the reviewer's photo (Ortega, 2017).

Several scholars have investigated on how the presence and absence of the reviewer's photo in OCRs can affect receiver's responses. Park and Nicolau (2014) evidenced that profile picture is positively related to credibility of reviewer. Moreover, Ortega (2017) discovered that profile photo has significant effect on receiver's responses (i.e. perceived credibility, perceived usefulness, expectations of service quality, purchase intention). Based on Lee and Shin (2013), the effect of review quality on website evaluation is significant in the presence of reviewers' photo which will influence reader's purchase intention. The study also demonstrated that reviewer's photo smooths the process of review, thus increased the receiver's perceived credibility and intentions to purchase. Based on the research conducted by Xu (2014), Profile photos have significant effect on affective trust in e-WOMer and the perceived credibility in e-WOM message.

By investigating in different perspective in profile photo, Ortega (2017) further proved that perceived interpersonal similarity in reviewer based on profile photo positively affect the receiver's perceptions on OCR (i.e. credibility and usefulness), and OCR is one of the dimensions in ms-commerce. Therefore, based on the prior studies above, it can be posited that:

H3: There is a positive relationship between profile photo of online consumer reviewer and trust in mobile social commerce.

2.2.4 The Relationship between Linguistic Style of Online Reviewer and Trust in Mobile Social Commerce

Linguistic style means the method of how message is written, referring to the type of language adopted, syntactic and semantic elements included, and the rhetorical strategies used (Liu & Park, 2015; Ortega, 2017). Past study proved that when information is sufficient, linguistic style has close relationship with the ability to read and understand the text, which results in the acceptance of information by individual (Liu & Park, 2015). Thus, the adoption of language of a reviewer plays a significant role in making decision (Aerts, Smits, & Verlegh, 2017).

Prior research done by Jimenez and Mendoza (2013) discovered that concrete and complete content is more reliable and convincing than nonconcrete information. Interviewees suggested that long reviews need to be truthful which consists of factual, detailed and relevant information (Mudambi & Schuff, 2010). Aerts et al. (2017) show that OCR which has concrete content would be more trustworthy and influential than the broad reviews (e.g. "the best product", "amazing", "nice in use"). Wu, Shen, Fan and Mattila (2017) proved that reviewer's expertise level has significant relationship between consumer attitudes and reservation intention.

In this research, we emphasize on the impact of linguistic style of online reviewers based on interpersonal similarity perceived by receiver in reviewer. Ortega (2017) proved that interpersonal similarity caused by linguistic style positively influenced receivers' perceptions on the reviews and purchase intention. Therefore, according to prior studies above, it can be hypothesized that: H4: There is a positive relationship between linguistic style of online reviewers and trust in mobile social commerce.

2.2.5 The Relationship between Reported Experience of Online Reviewer and Trust in Mobile Social Commerce

Experience-based product review is described by a general assessment of a central product that provide receivers emotional and subjective opinions reflecting consumers' feeling which receivers are able to understand at a glance (Huang, Tan, Ke, & Wei, 2014; Pan & Zhang, 2011; Xia & Bechwati, 2008).

Prior studies have demonstrated how experience-based reviews affect other dependent variables. Ortega (2017) shows that experience-based review is positively related to purchase intention in online context. Park and Lee (2008) added that simple recommendation (emotional, subjective, and abstract) reviews is positively related to purchasing intention in online context. When the reviews are experiential (vivid than factual), it has a positive effect with higher affect intensity (people's emotional responses to various events) in online consumer review (Xia & Bechwati, 2008).

In this study, we concentrate on the effect of experienced-based review of online reviewers and trust in ms-commerce context according to receiver's perception of interpersonal similarity in reviewer. If the receiver read reviews that are similar to his/her experience, he/she will emotionally and psychologically feel more intense and close to the reviewer (Maglio, Trope, & Liberman, 2012; Mauri & Minazzi, 2013) (as cited in Ortega, 2017). This proximity will enhance the receiver's perceptions of credibility and usefulness, and vice versa (Ortega, 2017). As ms-commerce integrate s-commerce which involve social interaction where users deal with OCR (Ahmad & Laroche, 2017); therefore, in line with the prior studies above, it can be hypothesized that:

H5: There is a positive relationship between reported experience and trust in-mobile-social-commerce

2.2.6 The Relationship between Cognitive Trust in Mobile Payment and Emotional Trust in Mobile Payment

The relationship among cognitive trust (trusting beliefs) and emotional trust (trusting attitude) fits well with the belief-attitude framework proposed in TRA (Komiak & Benbasat, 2006). In TRA (Fishbein & Ajzen, 1975), one's attitude towards a course of action is based on the evaluation and consideration of the overall impact of performing an action. When one believes that an action will lead to certain result, his attitude will be affected by the belief.

Prior studies had investigated the relationship between cognitive and emotional trust. Based on the research conducted by Macik (2016), there is a positive relationship between cognitive and emotional trust in online product comparison sites. Komiak and Benbasat (2006) first proved that in North America when customers believe that relying on recommendation agent (RA) will generate well customized and truthful recommendations (cognitive trust), they will feel strongly secured about relying RA (emotional trust). Study carried out by Sun (2010) at uBid.com also supported that cognitive trust in intermediary and buyer has a positive relationship with emotional trust in MP has a positive relationship with emotional trust in MP in China. Therefore, based on the prior studies above, it can be hypothesized that:

H6: There is a positive relationship between cognitive trust in mobile payment and emotional trust in mobile payment.

2.3 Proposed Conceptual Model

Based on the prior related studies, the proposed conceptual model of this research is demonstrated in Figure 2.1.



Figure 2.1 Proposed conceptual model

Adapted from: Gong et al. (2016) and Ortega (2017)

2.4 Hypotheses Development

H1	There is a positive relationship between cognitive trust in mobile payment
	and trust in mobile social commerce.
H2	There is a positive relationship between emotional trust in mobile payment
	and trust in mobile social commerce.
H3	There is a positive relationship between profile photo of online consumer
	reviewers and trust in mobile social commerce.
H4	There is a positive relationship between linguistic style of online consumer
	reviewers and trust in mobile social commerce.
H5	There is a positive relationship between reported experience of online
	consumer reviewers and trust in mobile social commerce.
H6	There is a positive relationship between cognitive trust in mobile payment
по	There is a positive relationship between cognitive trust in mobile payment
	and emotional trust in mobile payment.

Table 2.1: Hypotheses of the	study
------------------------------	-------

Source: Developed for the research

2.5 Conclusion

TBAM and trust transference theory together with the review of past literature studies had been reviewed in details in this chapter to explore the association between the 5 IVs and DV. The adopted research methodology will be discussed in next chapter.
CHAPTER 3: METHODOLOGY

3.1 Research Design

This research is aimed to investigate the impacts of cognitive and emotional trust in MP, together with OCR aspects (i.e. profile photo, linguistic style and reported experience) on trust in ms-commerce. According to Saunders, Lewis and Thornhill (2009), cross-sectional study is the study of a specific event at a particular period. Thus, this research is a cross-sectional study as it shows relationships that may exist and allow researchers to make comparison between certain variables at the same time (Levin, 2006). Therefore, it is useful to establish hypotheses for future research.

This is a quantitative study as it focuses on numerical data and measurable variables which are suitable to explain particular attributes of a large group of people, objects, or organizations and to understand current situations through survey questionnaire (Park & Park, 2016). Besides, it is used to test hypotheses, relationships between variables and make predictions (Johnson & Christensen, 2008).

3.2 Population, Sample, and Sampling Procedures

3.2.1 Target Population

Gen X and Gen Y who was born within 1965 to 1999 in Malaysia are the population chosen for this research. According to Malaysia Communications and Multimedia Commissions (MCMC) (2016), a total of 80.90% of internet users are aged from 20 to 54 and 82.6% of online shoppers are aged from 20 to 49. In addition, MCMC (2015) also showed a total 80.90% of smartphones users are aged from 20 to 54 years old. Thus, we can assume that Gen X and

Gen Y also constitutes more than 50% of population in ms-commerce users, which are significant sample to represent the ms-commerce users in Malaysia.

3.2.2 Sample Size

Sampling is vital as surveying the entire targeted population is impossible due to the time and cost constraints (Saunders et-al., 2009; Sekaran, 2003). According to statistic provided in Central Intelligence Agency (CIA) (2016), Malaysia's population was around 30.95 million in 2016, while the age group of 15 to 54 (i.e. includes Gen X and Gen Y) constitute 57.92% (17.93 million) of it, which is significant sample to represent all Malaysians. The population of 10,000,000 requires minimum of 384 samples with margin of error at 5% and confidence level of 95% (Saunders, Lewis, & Thornhill, 2016). Thus, in this research we adopt 500 sample size, which is in accordance with past studies in e-commerce (Al-Bakri & Katsioloudes, 2015; Ahmad, Bakar, Faziharudean, & Zaki, 2015) and internet banking (Fock & Koh, 2006).

3.2.3 Sampling Frame and Sampling Location

This study does not adopt any sampling frame due to difficulty to obtain a complete list of Generation X and Y in Malaysia. Sampling location for this research is based on MCMC's Internet Users Survey (2016) and Hand Phone Users Survey (2015), which show percentage distribution of Internet users and hand phone users of all states in Malaysia as below:





Figure 1: Percentage distribution of Internet users by state of residence compared with national projected population base, in bracket *includes W.P. Putrajaya; **includes W.P. Labuan

Source: MCMC, 2016

Figure 3.2 Hand phone users' percentage distribution by states in Malaysia



Source: MCMC, 2015

The following locations are chosen as they constitute 56% and 56.7% of all Malaysian Internet users and hand phone users respectively. According to Kucukcay and Benyoucef (2014), ms-commerce combined s-commerce which requires the use of Internet to access social media Internet (Hashim, Nor, & Janor, 2016) and m-commerce which involves the use of mobile devices to conduct transactions (Chong, 2013). Therefore, the statistics presented in Table 3.1 may also include the number of ms-commerce users in Malaysia.

Locations	Internet users	Hand phone users
	percentage	percentage
Kedah	6.8%	5.7%
Perak	8.1%	8.5%
Federal Territory of	9.0%	8.9%
Kuala Lumpur		
Selangor	21.3%	20.9%
Johor	10.8%	12.7%
Total	56%	56.7%

Table 3.1: Internet and handphone user percentage on chosen states

Source: MCMC, 2016; 2014

East Malaysia was precluded from this research due to time and budget constraints, which were also faced by researchers who investigate m-commerce in Gen Y in Malaysia (Moorty et al., 2014). Furthermore, we select shopping mall to conduct our surveys. Shopping malls are major economic ecosystem in a city (Mittal & Jhamb, 2016) which were dominated by those in 18 to 50 years old (Hami, Fazle, & Emami, 2016) who have purchasing power (Kire, 2014). Hence, they are most likely to involve in ms-commerce. Table 3.2 shows five shopping malls that we chose for research:

Table 3.2 Shopping malls chosen for research

States	Shopping Malls	Reason to choose
Kedah	Aman Central	1 st rating in Kedah
Perak	Ipoh Parade	1 st rating in Perak
	Shopping Centre	
Federal Territory of	Pavilion KL	1 st rating in Kuala
Kuala Lumpur		Lumpur

Selangor	Sunway Pyramid	1 st rating in Selangor
Johor	City Square	1 st rating in Johor

Source: Tripadvisor, 2017

3.2.4 Sampling Procedure

Due to unavailability of sampling frame, non-probability sampling technique was used (Maxfield, 2016). Purposive sampling is used in this research which involves selecting individuals based on a specific purpose (Teddlie & Yu, 2017) and established criterion (Sharkawi, Mohamad, & Roslin, 2016). The criteria applied in this study were ms-commerce user (primary criteria) and Gen X or Gen Y (secondary criteria).

In addition, the quotas that need to be met in the sample selection was estimated based on the Internet users' rate only as the data is more recent. Handphone users' rate was not used as the results did not differ much.

Locations	Internet users percentage	Data required to collect
Kedah	6.8%	6.8/56 x 500 = 61
Perak	8.1%	8.1/56 x 500 = 72
Federal Territory of Kuala Lumpur	9.0%	9.0/56 x 500 = 80
Selangor	21.3%	21.3/56 x 500 = 190
Johor	10.8%	10.8/56 x 500 = 97
Total	56.0%	56.0/56 x 500 = 500

Table 3.3: Data required to collect for each location chosen

3.3 Data Collection Method

3.3.1 Primary Data

Primary data is the first-hand data that is collected through appropriate procedure and structured for a specific research project at present (Saunders et al., 2016). In this research, survey questionnaire were distributed to target respondent to obtain primary data.

3.3.2 Pilot Test/ Pre-test

Pilot test is required to be conducted before questionnaire is distributed to target respondent to obtain the actual data and find out the flaws of questionnaire (Dhanapala, Vashub, & Subramaniam, 2015). This would be a very effective way to assess the reliability and validity of the survey questionnaire simultaneously to enhance the understandability, wording and relevance of the questions (Muda, Mohd, & Hassan, 2016; Saunders et-al., 2016; Bartlett, 2013). According to Bartlett (2013), the desired number to participate in a pilot test was between 25 and 50 persons. Therefore, 50 target respondents in Perak were selected to participate in the pilot test as Perak is one of the target locations in this research. Moreover, pre-test was carried out by distributing drafted questionnaires to 5 academicians that have relevant knowledge on this topic, which is corresponded with past study by Beatty & Willis (2007).

3.3.3 Questionnaire

A cross-sectional delivery and survey questionnaire were distributed to 500 Gen X and Gen Y in Kedah, Perak, Federal Territory of Kuala Lumpur, Selangor and Johor for a duration of 1 week from 16th September to 23th September 2017. Self-administered survey questionnaire was adopted to collect data

because it emphasizes cost effective, better quality, potential coverage of a large population, time efficiency; simultaneously this can reduce interviewer error (Jong, 2016; Meadows, 2003).

3.4 Variables and Measurement

	Variables	Manual	Sector of
	Variables	Measurement	Scale of
			Measurement
	Are you a mobile social	Nominal	-
	user?		
	Did you involve in	Nominal	-
	mobile social commerce		
	(purchase online through		
Demographic	social media by using		
Profile	mobile device) before?		
	Gender	Nominal	-
	Year of Birth	Ordinal	-
	Marital Status	Nominal	-
	Race	Nominal	-
	Education Level	Ordinal	-
	Monthly Income Level	Ordinal	-
Independent	Cognitive Trust in	Interval	5-point Likert Scale
Variables	Mobile Payment		
	Emotional Trust in	Interval	5-point Likert Scale
	Mobile Payment		
	Profile Photo	Interval	5-point Likert Scale
	Linguistic Style	Interval	5-point Likert Scale
	Reported Experience	Interval	5-point Likert Scale
Dependent	Trust in Ms-commerce	Interval	5-point Likert Scale
Variable			
a	and from the second second		

Table 3.4 and table 3.5 explained the measurement of variables and also justified the definitions and sources of all IVs and DV respectively.

5-point Likert scale is applied in this study instead of 7-point Likert scale as it is convenient for those surveyed to view and choose based on the list of scale descriptors compared to 7-point Likert scale which is lengthier and confusing which may discourage respondents from completing the survey (Dawes, 2008). According to Willits, Theodori and Luloff (2016), 5-point Likert scale is coded from "1" for Strongly Disagree to "5" for Strongly Agree.

Variables	Definitions	Sources
Cognitive Trust	Consumers' expectations that mobile	Gong et al. (2016)
in Mobile	payment services have attributes to rely	
Payment	upon.	
Emotional Trust	Consumers' feelings of comfort and	Sun (2010); Gong et
in Mobile	security about relying on mobile	al. (2016)
Payment	terminals to conduct payment.	
Profile Photo	Self-created cue, a virtual image of an	Xu (2014)
	individual, showing how others see the	
	reviewers and reveals one's social	
	presence.	
Linguistic Style	Way how message is written, referring	Ortega (2017).
	to the type of language used, syntactic	
	and semantic elements included, and the	
	rhetorical strategies adopted.	
Reported	A general assessment of a central	Huang et al. (2014)
Experience	product that helps consumer to have	
	better understanding about a product.	
Trust in Ms-	Users' reliance on ms-commerce sellers	Kim and Peterson
commerce	with respect to their business activities	(2017)
	in the mobile social platform and	
	website.	
Courses Developed		

Table 3.5: Definitions and Sources of IVs and DV

3.5 Data Analysis Techniques

SAS Enterprise Guide 7.1. was used to perform data analysis.

3.5.1 Descriptive Analysis

Saunders et al. (2009) states that descriptive analysis is used to illustrate and define variables numerically which pay attention on two aspects: central tendency and dispersion. Mean and standard deviation serve the purpose of assessing the constructs in questionnaire while the demographic data of the target respondents can be described and analyzed by using frequency and percentage analysis.

3.5.2 Reliability Test

Reliability test measures the degree to which measurements are consistent and stable to produce findings over time under diverse circumstances (Drost, 2011). According to Nunnally (1978) (as cited in Filieri & McLeay, 2013), researchers used Cronbach's alpha broadly as a measure of reliability, the benchmark is 0.70 for Cronbach's alpha values.

3.5.3 Inferential Analysis

3.5.3.1 Normality Test

Normality test shows the skewness and kurtosis which involves examining a specific data complies with normal distribution (Nornadiah & Wah, 2011). The skewness should be within the range of -3 to +3 whereas the kurtosis should score within -10 to +10 in order to ensure the data is normally distributed (Kline, 2005).

3.5.3.2 Pearson's Correlation Coefficient

Pearson's correlation coefficient (r) can be used to measure the strength of relationship between two variables that contain numeric data (Saunders et al., 2009), illustrating the degree and direction of one variable which is linearly correlated to another (Jantschi, Pruteanu, Cozma, & Bolboaca, 2015).

It assumes the range from +1 to -1 theoretically, indicating a perfect positive or negative linear relationship respectively. When r equals to 0, there is no linear relationship (Ratner, 2009). Moreover, correlation coefficient value should not be greater than 0.90 to avoid multicollinearity problem among independent variables in the research which can distort statistical significance test (Hair, Black, Babin, & Anderson, 2010).

3.5.3.3 Multiple Linear Regression Analysis (MLR)

MLR is used to investigate the connection between multiple IVs and DV (Suki, 2011). The coefficient of determination, R2 measures the relationship between IVs and DV which is within the range from 0 to +1 (Saunders et-al., 2016). There are four criteria that the data set must meet which are linearity test between IVs and DV which can be examined by using residual plots to determine the outliers that are against the linearity assumption, homoscedasticity of data which is the changes of IVs lead to the changes in the variance of error term, absence of multicollinearity problem, and variables must be normally distributed (Saunders et al., 2016). Table 3.2 shows the equation for MLR:

$y = \alpha + \beta 1 x 1 + \beta 2 x 2 + \beta 3 x 3 + \beta 4 x 4 + \beta 5 x 5 + \varepsilon$
y = Trust in mobile social commerce
$\alpha = \text{Intercept}$
β = Slope of regression surface
x1 = Cognitive trust in mobile payment
x^2 = Cognitive trust in mobile payment
2 – Cognitive trust in moone payment
x3 = Profile photo
x4 = Linguistic style
x5 = Reported experience
$\varepsilon = \text{Error term}$
Source: Developed for the recentral

Table 3.6: Equation for Multiple Linear Regression Analysis

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

The pilot test and final survey data were presented. Meanwhile, the results of descriptive analysis, scale measurement and inferential analysis for the final survey had been demonstrated and justified correspondingly.

4.1 Pilot Test Analysis

The standard of reliability had been tested after the sample were collected. According to Bartlett (2013), the desired number to participate in a pilot test was between 25 and 50 persons. Therefore, there were 50 sets of questionnaire in total being distributed and collected in Ipoh Parade shopping mall located at Perak because it is one of the target locations for data collection. Out of the 50 sets of questionnaire, there were 43 sets of usable questionnaire.

4.1.1 Reliability Test

Variables	Constructs	Cronbach's alpha	Number of items
IV1	CMP	0.868733	3
IV2	EMP	0.920402	3
IV3	РР	0.830411	3
IV4	LS	0.814460	3
IV5	RE	0.857091	3
DV	TMS	0.907048	5

The result of reliability test is illustrated in Table 4.1. According to Nunnally (1978) (as cited in Filieri & McLeay, 2013), Cronbach's alpha is suggested to be at least 0.70 in the reliability test. Since the Cronbach's alpha values of all variables had surpassed the threshold of 0.70, therefore the result of reliability test was satisfied and all the variables were considered reliable. Linguistic Style (LS) had the lowest value which is 0.8145 whereas Emotional trust in mobile payment (EMP) had the highest value which is 0.9204.

4.2 Descriptive Analysis

Malaysia ms-commerce users aged from 19 to 53 (based on year 2018) are the target respondents of this study as they have purchasing power from income earned (Kire, 2014). The data collection approach used were self-delivery and self-collection. Then, 500 sets of survey questionnaire were distributed in popular shopping malls located in Selangor, Kuala Lumpur, Johor, Kedah and Perak. The survey took place from 13 January 2018 to 21 January 2018. As a result, a total of 469 sets of usable questionnaire were obtained while the other 31 sets were not usable due to missing cases and incomplete responses; therefore, they were excluded from the analysis of data.

4.2.1 Demographic Profile of the Respondents

Do you use social media through mobile device?	Frequency	Percentage (%)
Yes	469	100
Types of social media using		
Facebook	458	97.72
Instagram	385	82.19
WhatsApp	421	89.95
YouTube	377	80.37
Snapchat	182	38.81

Table 4.2: Mobile Social Media User

Line	92	19.63
Google+	94	20.09
Twitter	89	19.18
Viber	19	4.11
LinkedIn	27	5.94
WeChat	383	81.74
Other Social Media	9	1.83

Source: Developed for the research

Table 4.2 shows Facebook, Instagram, WhatsApp, Youtube, Snapchat, Line, Google+, Twitter, Viber, LinkedIn, Wechat are the social media with highest ranking that respondents use, which constitutes 97.72%, 82.19%, 89.95%, 80.37%, 38.81%, 19.63%, 20.09%, 19.18%, 4.11%, 5.94% and 81.74% respectively. Meanwhile, the remaining 1.83% of respondents are the users of other social media such as QQ, Skype, Weibo and Letterbox.

Table 4.3: Social Media Platforms Used in MS-Commerce

Social Media	Frequency	Percentage (%)
Platforms Used in		
MS-Commerce		
Facebook	351	74.89
Wechat	120	32.52
Instagram	90	19.19
WhatsApp	17	3.62
Google+	6	1.28
Youtube	2	0.43

According to Table 4.3, it demonstrates the frequency and percentage of the social media platforms used in ms-commerce based on the results from 469 responds. Facebook constitutes the highest percentage of social media platform used in ms-commerce, which is 74.89%. Youtube constitutes the lowest percentage at 0.43%. Wechat, Instagram, WhatsApp and Google+ are the remaining social media platforms used in ms-commerce which constitutes 32.52%, 19.19%, 3.62% and 1.28% respectively.

Table 4.4 Gender of Respondents

Gender	Frequency	Percentage (%)
Male	179	38.17
Female	290	61.83

Source: Developed for the research

Based on Table 4.4, 38.17% of 469 respondents are male and the remaining 61.83% are female. Female respondents constitute higher percentage than male respondents with a difference of 23.66%. This is corresponding with several past studies on s-commerce where majority of the respondents are female (Huang & Benyoucef, 2017; Chen, Lu, & Wang, 2017; Gibreel, Aiotaibi, & Altmann, 2018).

Table 4.5: Year of Birth of Respondents

Year of Birth	Frequency	Percentage (%)
1965-1979	64	13.65
1980-1999	405	86.35

Table 4.5 shows the year of birth of target respondents. Respondents who were born between year 1980 to 1999 (Gen Y) comprise larger proportion which are 86.35%. Meanwhile, the remaining of 13.65% are born between year 1965 to 1979 (Gen X). Gen Y comprises higher percentage than Gen X with a difference of 72.70%. The result is corresponding with some prior studies on online shopping where majority respondents are Gen Y (Mosteller, Donthu, & Eriglu, 2014; Lee, Cheng, & Shih, 2017; Zhang, Zhao, & Gupta, 2018).

Marital Status	Frequency	Percentage (%)
Single	410	87.42
Married	57	12.15
Divorced	2	0.43

Table 4.6: Marital Status of Respondents

Source: Developed for the research

The marital status of respondents is shown in Table 4.6 above. Respondents who are single consist of 87.42%. The remaining respondents are married and divorced which comprise 12.15% and 0.43% respectively.

Race	Frequency	Percentage (%)
Malay	79	16.84
Chinese	354	75.48
India	31	6.61
Others	5	1.07

Table 4.7 depicts the race of respondents. Chinese respondents constitute the highest percentage which is 75.48%, followed by Malay and India, which constitute 16.84% and 6.61% respectively. This result is corresponding with prior researches in mobile payment where most of the respondents are Chinese (Aw, Khalil, Emad, & Janejira, 2009; Ting, Yusman, Liew, & Law; Yeow, Hilayana, & Devika). Meanwhile, 1.07% of 469 respondents are from other races such as Iban and Khadazan.

Highest Education Level Achieved	Frequency	Percentage (%)
	101	21.54
SPM	101	21.54
STPM/Pre-U	57	12.15
Diploma	68	14.50
Degree	232	49.47
Master	7	1.49
PhD	0	0
Other qualification	4	0.85

Table 4.8: Highest Education Level Achieved

Source: Developed for the research

The highest education level achieved by respondents is shown in Table 4.8. The highest percentage of highest education level achieved is degree, which constitutes 49.47% of 469 respondents while other qualifications such as ACCA and CPA Australia comprise the lowest percentage which is 0.85%. The remaining highest education level achieved are SPM, STPM/Pre-U, Diploma, and Master which constitute 21.54%, 12.15%, 14.50% and 1.49% respectively.

Monthly Income	Frequency	Percentage (%)
Level		
RM 1,000 or below	244	52.03
RM 1,000 to RM	132	28.14
3,000		
RM 3,001 to RM	68	14.50
5,000		
Above RM 5,000	25	5.33

Table 4.9: Monthly Income Level of Respondents

Source: Developed for the research

Table 4.9 represents the respondents' monthly income level. 52.03% of the target respondents with monthly income RM 1,000 or below constitutes the highest proportion while the monthly income above RM 5,000 constitutes the lowest proportion. Meanwhile, 28.14% and 14.50% of respondents fall under income group of RM 1,000 to RM 3,000 and RM 3,001 to RM 5,000 respectively.

Usage Rate	Frequency	Percentage (%)
1-3 times	196	41.79
4-6 times	128	27.29
7-9 times	51	10.87
≥ 10 times	94	20.04

Table 4.10: Ms-Commerce Usage Rate within One Year

Source: Developed for the research

Table 4.10 illustrates the usage rate of ms-commerce that respondents have within one year. 41.79% of respondents have used ms-commerce between 1 to

3 times within one year, followed by 4-6 times, 7-9 times, more than 10 times, which constitute 27.29%, 10.87% and 20.04% respectively.

4.2.2 Central Tendencies Measurement of Constructs

Central tendency measurement is a central value that is widely used to identify the central point within the data set. The most familiar measurement is mean which is known as average, but there are others such as median and mode. Nevertheless, the standard deviation is adapted to compute the degree of variation of data set. A low standard deviation represents a closed dispersion between data and mean. Means and standard deviation for every question item are computed in this section.

Variables	Items	Means	Standard
			Deviation
Cognitive Trust In	CMP1	3.74	0.68
Mobile Payment (CMP)	CMP2	3.67	0.70
	CMP3	3.52	0.78
Emotional Trust In	EMP1	3.49	0.83
Mobile Payment (EMP)	EMP2	3.66	0.82
	EMP3	3.58	0.77
Profile Picture (PP)	PP1	3.21	0.86
	PP2	3.02	1.00
	PP3	3.20	0.91
Linguistic Style (LS)	LS1	3.58	0.77
	LS2	3.47	0.80
	LS3	3.37	0.82

Table 4.11: Central Tendencies Measurement of Construct

Reported Experience	RE1	3.48	0.75
(RE)	RE2	3.50	0.78
	RE3	3.55	0.80
Trust In Mobile Social	TMS1	3.61	0.76
Commerce (TMS)	TMS2	3.49	0.79
	TMS3	3.54	0.81
	TMS4	3.57	0.83
	TMS5	3.65	0.77

Source: Developed for the research

For cognitive trust in mobile payment, the highest and lowest mean was belonging to CMP1 and CMP3 respectively. Essentially, all items have the mean range from 3 to 4, this implied that the data gathered is neutral and agree with the question. Furthermore, the highest and lowest of standard deviation were recorded by CMP3 and CMP1 at 0.78 and 0.68 respectively. In short, the 5 item's standard deviation were ranging from 0.6 to 1.

For emotional trust in mobile payment, the highest and lowest mean was belonging to EMP2 and EMP1 at 3.66 and 3.49 respectively. Basically, the 3 items are ranging from 3 to 4. This signifies that most of the respondents have emotional trust in mobile payment. Additionally, the highest and lowest standard deviation was belonging to EMP1 and EMP3 with the value of 0.83 and 0.77 respectively. The highest standard deviation EMP1 implied that it had relatively wide dispersion to mean. In short, the results indicated that most of the respondents have emotional trust in mobile payment.

In term of profile photos, PP1 and PP2 have the highest and lowest mean with the value of 3.21 and 3.02 respectively. This indicates respondents are neutral with the questions. The standard deviation of PP1, PP2 and PP3 was 0.86, 1.00 and 0.77 respectively and this shows that the data collected had widely

dispersion to the mean. Among all variables, PP possessed highest standard deviation which indicates the lowest consistency among the variables.

In term of linguistic style, the highest and lowest mean was recorded by LS1 and LS3 with the value of 3.58 and 3.37 respectively. This proves that most of the data collected agreed with the items of linguistic style. Other than that, the highest and lowest standard deviation was belonging to LS3 and LS1 at 0.82 and 0.77. The higher standard deviation of LS1 shows that it is widely dispersed to the means. In a few words, most of the data collected agree that linguistic style influences trust in ms-commerce.

As for reported experience, the highest and lowest mean was achieved by RE3 and RE1 with the value of 3.55 and 3.48 respectively. Basically, all the data collected ranges from 3 to 4, which demonstrates that the data collected is either neutral or agree with items. Besides, the highest and lowest standard deviation was recorded by RE3 and RE1 at 0.80 and 0.75. In short, majority of the target respondents show either neutral or agree that reported experience impacts trust in ms-commerce.

Eventually, in term of trust in ms-commerce, TMS5 and TMS2 have the highest and lowest mean with the value of 3.65 and 3.49 respectively. The mean values of all items are ranging from 3.49 to 4. This signifies that majority respondents are either in neutral or agreed with the items. However, the highest and lowest standard deviation was owed by TMS4 and TMS1 at 0.83 and 0.76 respectively. TMS1 has high consistency as it has lowest standard deviation. In conclusion, most of the data collected are averagely ranged between neutral and agree.

4.3 Scale Measurement

4.3.1 Reliability Test

Variable	Construct	Cronbach's alpha	Number
			of item
IV1	CMP	0.868830	3
IV2	EMP	0.909732	3
IV3	РР	0.886097	3
IV4	LS	0.862197	3
IV5	RE	0.878010	3
DV	TMS	0.922739	5

Table 4.12: Cronbach's alpha reliability test

Source: Developed for the research

Table 4.12 shows the result of reliability test. The highest and lowest Cronbach's alpha value are belong by TMS and LS at 0.9227 and 0.8622 respectively. All the variables had exceeded the Cronbach's alpha values of 0.70, which satisfied the acceptable threshold of reliability test (Nunnally, 1978) (as cited in Filieri and McLeay, 2013). Thus, it indicates that the scale is reliable and valid.

4.3.2 Normality Test

Table 4.13 Normality Test

Variables	Items	Skewness	Kurtosis
CMP	CMP1	-0.3098	0.4060
	CMP2	-0.3666	0.4924
	CMP3	-0.1989	0.0637

EMP1	-0.3406	-0.1470
EMP2	-0.3592	0.0399
EMP3	-0.3645	0.3831
PP1	-0.0179	-0.3418
PP2	-0.0385	-0.4381
PP3	-0.0959	-0.2142
LS1	-0.4849	0.5296
LS2	-0.1888	0.1506
LS3	-0.3251	0.2407
RE1	-0.3983	0.6077
RE2	-0.2114	0.2836
RE3	-0.2756	0.2178
TMS1	-0.2804	-0.0774
TMS2	-0.0652	-0.0393
TMS3	-0.2161	0.1794
TMS4	-0.2648	-0.0321
TMS5	-0.3175	0.2341
	EMP2 EMP3 PP1 PP2 PP3 LS1 LS2 LS3 RE1 RE2 RE3 RE3 TMS1 TMS2 TMS3 TMS4	EMP2-0.3592EMP3-0.3645PP1-0.0179PP2-0.0385PP3-0.0959LS1-0.4849LS2-0.1888LS3-0.3251RE1-0.3983RE2-0.2114RE3-0.2756TMS1-0.2804TMS2-0.0652TMS3-0.2161TMS4-0.2648

Source: Developed for the research

Table 4.13 illustrates the results of normality test of the constructs. According to Kline (2015), the skewness values are within ± 3 whereas the kurtosis values are within ± 10 , then the distribution of data is normal. As shown in Table 4.13, skewness values range between -0.0179 and -0.4849 while the kurtosis values range between -0.0321 and 0.6077. Since the skewness and kurtosis value falls within ± 3 and ± 10 , all the constructs were normally distributed.

4.4 Inferential Analysis

4.4.1 Linearity











Source: Developed for the research



Figure 4.1.3: Scatter Plot for PP and TMS

Source: Developed for the research

|--|

1=Strongly	Diasgre	e, 2=Di	sagree, 3	3= Neutr	al, 4=A	gree, 5=	Strongly	Agree				
5.0 -								0	0	0	0 0	C
						0			0	0	0	0
							0	0	0			
4.5 -				00	0 0	00	00	00	0	0 0	0	0
				0	0	0	0	0	0 0	0		
4.0 -			0		0	0	0	0	0		0	
			0		0	0	0	0	0	0	0	
3.5					0	0	0	0	0	0 0	00	
3.5				0	0	0	0	0	0	0	0	
		0	0 0		0	0	0	00	0 0	00	0	
3.0 -			0	0	0	0	0	0	0	0		<
				0	0	0	0	0				
0.5					0	0		00				
2.5 -					0			0	0			
					0	0			0			0
2.0 - 0	0	0	0	0				0				
					0							
1.5 - 0												
1.0 - 0												
1.0	1	5	2.0	2	5	3.0	2	.5	4.0	4.	-	5.

Source: Developed for the research

					Scat	ter Plo	t					
1=Strongl	y Diasgre	e, 2=Di	sagree, 3	3= Neuti	al, 4=Ag	gree, 5=s	Strongly	Agree				
5.0 -											0 0	0
				00						0	0	
4.5				0		0			0		0	
4.5						00	00	0	0	00	00	
					0	0	0	0	0	0	0	
4.0 -			0	0	0	0	0	0	0	0		
			0		00	0 0	0	0	0		00	
3.5 -		0			0	0	0	0	0	0	0	
3.5	0		0	0	0	0	0	0	0	0		
					0	0	0	0	0	0		
3.0 -			0	0	0	0	0	0	0			
				0	00	0		0		0		
2.5 -			0		0	0 0	0					
2.5						0	0		0			
0			0					0	0			
2.0 -			0	0	0	0						
								0				
1.5 -												
1.5			0									
1.0-0												
1.0		5	2.0	0	5	3.0	2	5	4.0	4.	-	5.0

In Figure 4.1.1 to 4.1.5, the scatter plots show CMP, EMP, PP, LS, RE are positively correlated to TMS and the effects fall along the straight line. CMP, EMP, PP, LS, RE have significant and positive linear relationships with TMS which achieved the linearity assumption for MLR analysis to be conducted.

4.4.2 Normality



Figure 4.2: Distribution of Residual for TMS

Source: Developed for the research

In Figure 4.2, the distribution of residuals is used to examine whether residuals are complied with normal distribution. The value of x (IVs) and y (DV) are normally distributed as shown in the distribution of residuals. Hence, the normality assumption for MLR analysis to be performed is met.

4.4.3 Homoscedasticity



Source: Developed for the research

The residuals plots versus predicted value are used to test whether the homoscedasticity assumption can be fulfilled. In Figure 4.3, the variables shown are in order, which satisfied the homoscedasticity assumption.

4.4.4 Pearson's Correlation Coefficient Analysis

Pearson Correlation Coefficients, N=469 Prob >r under H0: Rho=0								
Variables	СМР	EMP	PP	LS	RE	TMS		
СМР	1.0000							
EMP	0.7994	1.0000						
	< 0.0001							

Table 4.14: Pearson Correlation Coefficient Analysis

PP	0.6566	0.6712	1.0000			
	< 0.0001	< 0.0001				
LS	0.6281	0.6534	0.7247	1.0000		
	< 0.0001	< 0.0001	< 0.0001			
RE	0.6803	0.6894	0.7021	0.7172	1.0000	
	< 0.0001	< 0.0001	< 0.0001	< 0.0001		
TMS	0.7744	0.7845	0.6677	0.6453	0.6955	1.0000
	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.000	
					1	

Source: Developed for the research

Table 4.14 shown all IVs are positively correlated as the correlation values (r) range from 0.6281 to 0.7994. Since none of the correlation values higher than 0.90, there is no multicollinearity problem was detected (Hair et al., 2010). Moreover, the IVs have moderate positive relationship with DV as the correlation values range from 0.6453 to 0.7744. All the p-values are less than 0.05. Thus, the variables have a significant relationship with each other.

4.4.5 Multiple Linear Regression

Table 4.15: MLR model analysis

Root MSE	0.37892	R-Square	0.7045
Dependent Mean	3.57271	Adjusted R-Square	0.7013
Coefficient Variance	10.60598		

Source: Developed for the research

Table 4.15 shows R-square value is 0.7045. This means that all 5 IVs can explain 70.45% of the variation in DV. In other words, approximately 29.55%

of the variation in DV is determined by other factors that are not the studies in this research.

Root MSE	0.44586	R-Square	0.6391
Dependent Mean	3.57567	Adjusted R-Square	0.6383
Coefficient Variance	12.46925		

Table 4.16: MLR model analysis for EMP and CMP

Source: Developed for the research

Table 4.16 shows R-square value is 0.6391. This means 63.91% of the variation in CMP can be described by EMP. In other words, approximately 36.09% of the variation in CMP is determined by other factors that are not the studies in this research.

Table 4.17: ANOVA table

	Analysis of Variance									
Source	DF	Sum of Mean		F Value	$\mathbf{Pr} > \mathbf{F}$					
		Squares	Square							
Model	5	158.45266	31.69053	220.72	<.0001					
Error	463	66.47800	0.14358							
Corrected	468	224.93066								
Total										

Source: Developed for the research

The F-value (220.72) shown in Table 4.17 is large, p-value< 0.0001 is less than 0.05. This means at least one of the IVs can be used to model DV. Hence, model fit is achieved.

	Parameter Estimates								
IVs	Parameter	t	P-value	-value Standardized Tolerance		VIF			
	Estimate	Value		Estimate					
Intercept	0.28065	2.57	0.0104	0		0			
CMP	0.33226	6.87	< 0.0001	0.30670	0.31985	3.12651			
EMP	0.31426	7.33	< 0.0001	0.33606	0.30340	3.29598			
PP	0.07893	2.30	0.0217	0.09543	0.37197	2.68837			
LS	0.05867	1.45	0.1480	0.05978	0.37507	2.66620			
RE	0.14397	3.45	0.0006	0.14525	0.36103	2.76985			

Table 4.18: MLR analysis

Source: Developed for the research

From the Table 4.18, multiple regression equation is formed as:

TMS = 0.28065 + 0.33226CMP + 0.31426EMP + 0.07893PP + 0.05867LS + 0.14397RE

Cognitive trust in mobile payment (CMP) has the greatest effect on trust in mscommerce (TMS) as a unit increase in CMP will cause TMS to increase by 0.33226 unit. Subsequently, every one unit increase in emotional trust in mobile payment, TMS will rise by 0.31426 unit. Next, TMS will increase in 0.14397 unit when reported experience (RE) increased by one unit. Then, one unit increase in profile picture (PP) will have an impact on TMS to rise by 0.07893 unit. Finally, linguistic style (LS) has the least significant impact on TMS as TMS only increase by 0.05867 when LS increase by one unit.

Moreover, the hypothesis testing suggests H0 to be rejected if the p-value less than 0.05.

Hypothesis 1 (H1): Accepted

P-value for the relationship between cognitive trust in mobile payment and trust in ms-commerce is less than 0.05 (p-value <0.0001). Therefore, H0 (There is no positive relationship between cognitive trust in mobile payment and trust in ms-commerce) is rejected and H1 is accepted. In short, there is significant and positive relationship between cognitive trust in mobile payment and trust in mscommerce.

Hypothesis 2 (H2): Accepted

The p-value for the relationship between emotional trust in mobile payment and trust in ms-commerce is less than 0.05 (p-value <0.0001). Therefore, H0 (There is no positive relationship between emotional trust in mobile payment and trust in ms-commerce) is rejected and H2 is accepted. Based on the findings, emotional trust in mobile payment is significantly and positively related to trust in ms-commerce.

Hypothesis 3 (H3): Accepted

The p-value for the relationship between profile picture and trust in mscommerce is less than 0.05 (p-value = 0.0217). Therefore, H0 (There is no positive relationship between profile picture of online reviewer and trust in mscommerce) is rejected and H3 is accepted. Based on the findings, profile picture of online reviewer is significantly and positively related to trust in mscommerce.

Hypothesis 4 (H4): Rejected

The p-value for the relationship between linguistic style of online reviewer and trust in ms-commerce is more than 0.05 (p-value = 0.1480). Therefore, H0 (There is no positive relationship between linguistic style of online reviewer and trust in ms-commerce) is accepted and H4 is rejected. Therefore, there is no significant relationship between linguistic style of online reviewer and trust in ms-commerce.

Hypothesis 5 (H5): Accepted

The p-value for the relationship between reported experience of online reviewer and trust in ms-commerce is less than 0.05 (p-value = 0.0006). Therefore, H0 (There is no positive relationship between reported experience of online reviewer and trust in ms-commerce) is rejected and H5 is accepted. In conclusion, Reported experience of online reviewer is significantly and positively related to trust in ms-commerce.

Variable Standardized Parameter t $\mathbf{Pr} > |\mathbf{t}|$ Tolerance VIF Value Estimate Estimate 0.28065 2.57 0.0104 0 0 Intercept CMP 0.33226 6.87 < 0.0001 0.30670 0.31985 3.12651

Table 4.19: MLR analysis for CMP and EMP

Source: Developed for the research

Hypothesis 6 (H6): Accepted

From Table 4.19 above, the p-value for the relationship between cognitive trust in mobile payment and emotional trust in mobile payment is less than 0.05 (pvalue <0.0001). Therefore, H0 (There is no positive relationship between cognitive trust in mobile payment and emotional trust in mobile payment) is rejected and H6 is accepted. In conclusion, cognitive trust in mobile payment is significantly and positively related to emotional trust in mobile payment.

4.5 Conclusion

The pilot test analysis, descriptive analysis, scale measurement and inferential analysis had been discussed in this chapter.

<u>CHAPTER 5: DISCUSSION, CONCLUSION, AND</u> <u>IMPLICATIONS</u>

5.0 Introduction

In chapter five, we have summarized the descriptive analysis, scale measurement, and inferential analysis results. Besides, this chapter presented in-depth explanation and discussion of major findings, practical and theoretical implication, limitations and recommendations, and conclusion for this research.

5.1 Summary of Statistical Analysis

5.1.1 Summary of Descriptive Analysis

The data collected from 469 respondents showed that 100% of the respondents are ms-commerce user whereby 458 (97.72%) of them are using Facebook. This was followed by those who are using WhatsApp, Instagram, WeChat, YouTube, Snapchat, Google+, Line, Twitter, LinkedIn, and Viber, which consisted 421 (89.95%), 385 (82.19%), 383 (81.74%), 377 (80.37%), 182 (38.81%), 94 (20.09%), 92 (19.63%), 89 (19.18%), 27 (5.94%) and 19 (4.11%) respectively. A minority of respondents were using other social media such as QQ, Skype, Weibo and Letterbox which constituted only 9 (1.83%).

Moreover, the majority of respondents used Facebook as their social media platform in ms-commerce at 351 (74.89%), which was the highest percentage among those social media platforms whereas YouTube constituted the lowest percentage which was 2 (0.43%). The remaining social media platforms used in ms-commerce were WeChat, Instagram, WhatsApp and Google+ which constituted 120 (32.52%), 90 (19.19%), 17 (3.02%) and 6 (1.28%) respectively.

Furthermore, 179 (38.17%) out of 469 respondents are male and 290 (61.83%) are female. The respondents who were born between the year 1980 and 1999 which is Gen Y cover a large proportion which is 405 (86.35%) than Gen X which is 64 (13.65%) who were born between the year 1965 and 1979. As for the marital status of respondents, 410 (87.42%) of the respondents are single whereas 57 (12.15%) and 2 (0.43%) respondents are married and divorced respectively. In addition, for the race of the respondents, Chinese respondents comprise the highest percentage which is 354 (75.48%), followed by Malay and India, which constitute 79 (16.84%) and 31 (6.61%) respectively. Meanwhile, there are only 5 (1.07%) respondents are from other races such as the Iban and Kadazan.

The highest education level achieved is degree, which constitutes 232 (49.47%) out of 469 respondents, followed by the respondents who possess SPM, Diploma, STPM/Pre-U, and Master which constitute 101 (21.54%), 68 (14.50%), 57 (12.15%) and 7 (1.49%) respectively. Meanwhile, other qualifications such as ACCA and CPA Australia consist of the lowest percentage which was only 4 (0.85%). In terms of the monthly income level, most target respondents earn monthly income RM 1,000 or below which constitutes 244 (52.03%). The monthly income above RM5000 constitutes the lowest proportion which is 25 (5.33%). Meanwhile, 132 (28.14%) and 68 (4.50%) of respondents belong to income group of RM 1,000 to RM 3,000 and RM 3,001 to RM 5,000 respectively. Likewise, for the usage rate of ms-commerce within one year by the respondents, there are 196 (41.79%) respondents who used ms-commerce between 1 to 3 times, followed by 4 to 6 times, 7 to 9 times, more than 10 times, which constitute 128 (27.29%), 51 (10.87%) and 94 (20.04%) respectively.

5.1.2 Summary of Scale Measurement

The data are valid yet reliable as it satisfied both reliability and normality test. All the variables has surpassed the acceptable threshold of 0.70 as their Cronbach's Alpha value range from 0.8145 to 0.9204. Furthermore, none of the correlation values is higher than 0.90 as all IVs are positively correlated with the correlation values range from 0.6281 to 0.7994. Therefore, there is no multicollinearity problem being identified (Hair et al., 2010).

5.1.3 Summary of Inferential Analysis

5.1.3.1 Pearson's Correlation Coefficient Analysis

The result showed that all five IVs are positively correlated with the trust in ms-commerce (DV) as the correlation values range from 0.6281 to 0.7994.

5.1.3.2 Multiple Linear Regression Analysis

In multiple linear regression analysis, the model R-square value is 0.7045. This depicts that all five IVs in this research can explain 70.45% of the variation in trust in ms-commerce (DV). The analysis specifies that four IVs (CMP, EMP, PP, RE) had significant relationship with the DV (TMS) as all the p-values are less than 0.05. However, there was one IV (LS) did not significantly affect the TMS as the p-value shown is 0.1480. Also, the R-square for the relationship between CMP and EMP is 0.6391, and they are significantly and positively related as the p-value is less than 0.05.

5.2 Discussion of Major Findings

The purpose of conducting this research is to examine whether trust in mobile payment can be transferred within mobile channel, and how trust in ms-commerce will be affected in OCR aspects. In short, both cognitive and emotional trust in mobile payment were proved to have significant and positive relationship with trust in ms-commerce, in which trust can be transferred in this particular online context. Viewing into OCR aspects, both profile photo and reported experience of online consumer reviewers were proved to have significant and positive relationship with trust in ms-commerce; however, linguistic style of online consumer reviewers were not significantly related with trust in ms-commerce.

5.2.1 Cognitive and Emotional Trust in Mobile Payment and Trust in Mobile Social Commerce

The research findings show that there is a significant and positive relationship between cognitive trust in mobile payment and trust in ms-commerce. This implied that cognitive trust in mobile payment can enhance one's trust in mscommerce. The outcome is corresponding to the prior researches of Gong et al. (2016), Lu et al. (2011), and Eze et al. (2008) as all aforementioned studies proved that cognitive trust in mobile payment are positively affecting the intention to adopt MP.

Also, emotional trust in mobile payment is significantly and positively related to trust in ms-commerce. This signifies that one's emotional trust in mobile payment can influence his trust in ms-commerce. This outcome is corresponding to the researches of Gong et al. (2016); Zhang et al. (2015) and Idemudia, Raisinghani and Ojo (2013) in mobile context.

According to Gong et al. (2016), trust transference occurs when the relationship between trustor and trustee is close. Mobile payment and ms-commerce have close relationship as users mostly require to make payment online through
mobile device. Besides, trust transfer take place from one to another entity within same channel (Wu et al., 2016). As mobile payment and ms-commerce are within the same channel (mobile to mobile). Therefore, when users trust mobile payment, their trust will be transferred to ms-commerce platforms.

5.2.2 Profile Photo of Online Consumer Reviewers with Trust in Ms-Commerce

Based on the findings, profile photos will positively and significantly affect the trust in ms-commerce, which is corresponded with the past studies (Lee & Shin, 2013; Ortega, 2017; Park & Nikolau, 2014; Xu, 2014). This is mainly due to high perceived interpersonal similarity between receivers and reviewers. Real photos which enhanced the perceived similarity directly increased the credibility of information (Xu, 2014), causing users to gain trust on particular platform or seller.

Also, profile photos allow reviewer to have a more real and social presence as it removed the communication barriers occur within computer-mediated environment (Ortega, 2017). When receivers perceive a specific similarity to the reviewer, the social distance between them will become smaller, and thus it affects the credibility of OCRs. Indirectly, they will gain trust in ms-commerce when they believed in the OCRs.

5.2.3 Linguistic Style of Online Consumer Reviewers with Trust in Ms-Commerce

According to our data results, linguistic style of online consumer reviewers does not have significant and positive relationship with trust in ms-commerce. This indicates that perceived interpersonal similarity on type of language, vocabulary and writing style of reviewers are not significantly influencing Malaysian users' trust in ms-commerce. The results contradict with past findings in e-commerce context (Aerts et al., 2017; Jimenez and Mendoza, 2013; Ortega, 2017).

The difference may be caused by the unique characteristics of Malaysians which are multiracial (Mahadhir, Nor, & Azman, 2014) and multicultural (Seman, Ahmad, Aziz, & Ayudin, 2011; Noor & Leong, 2013). As Malaysians are used to the different types of languages, and mixed writing styles are widely used in their communication, it is unlikely to significantly affect the interpersonal similarity and gain trust merely based on the linguistic style.

5.2.4 Reported Experience of Online Consumer Reviewers with Trust in Ms-Commerce

Our findings show that reported experience has a significant and positive relationship with trust in ms-commerce, which was corresponded with the past studies in e-commerce context (Park & Lee, 2008; Ortega, 2017; Xia & Bechwati, 2008). The findings indicate that Malaysian users' trust in ms-commerce are significantly affected by the experiences shared by reviewers when receivers perceived interpersonal similarity. The comments about product and service experiences allowed users to know reviewers from the personal point of view.

From the experiences where users perceived that he/she felt the similar emotions and been through similar incidents to those described in OCRs, users will get more knowledge about the products and services provided by the ms-commerce sellers. Most importantly, the sharing between users will create communication of trust that reduces social distance between receivers and reviewers (Ortega, 2017). It increased receiver's perceived interpersonal similarity, thus it affects their trust in ms-commerce platforms or sellers.

5.2.5 Cognitive Trust in Mobile Payment and Emotional Trust in Mobile Payment

Based on the findings, cognitive trust will positively and significantly affected the emotional trust in mobile payment, which is corresponded with the past studies in e-commerce and m-commerce context (Komiak & Benbasat, 2006; Macik, 2016; Sun, 2010; Gong et al., 2016). This indicates that when Malaysian ms-commerce users expected that mobile payment services have attributes to rely upon, they will also feel comfortable and secured about making payment through mobile terminals.

The relationship can be explained by TRA developed by Fishbein and Ajzen (1975) which proved that beliefs (cognitive trust) positively affect attitude (emotional trust). In psychological context, it is also proved that emotions are always evoked by cognition (Curtin, Patrick, Lang, Cacioppo, & Birbaumer, 2001).

5.3 Implications of the Study

5.3.1 Managerial Implications

Our findings showed four out of five IVs (CMP, EMP, PP and RE) have significant and positive relationship with trust in ms-commerce. Also, there is a positive and significant relationship between cognitive trust and emotional trust in mobile payment. Hence, practitioners should be more focus on the importance of these aspects which would be beneficial in guiding them to identify consumers' new needs, implement effective marketing strategies and achieve competitive advantages in the market.

Cognitive trust in MP (CMP) refers to the consumers' expectation that mobile payment services have attributes to rely upon (Gong et al., 2016). Therefore,

MP developers and practitioners should improve technology and services that could give timely mobile alerts and information services such as strong customer authentication tools to reduce security threats and fraud. Besides, mobile payment developers should reinforce network safety and security by providing features such as transaction identifier and effective repudiation management. Besides, mobile payment service developers should provide quality assurance by ensuring all functions and features are clickable to avoid typos and grammar mistakes on webpage. Through this, users would perceive more safety and security in MP channel to conduct online transactions. Moreover, there is a probability of mobile network connection failure during a transaction which may cause repeated purchases and duplicate charges. Hence, mobile service providers should ensure their network are fast, wide and strong by providing better and sufficient in-building coverage throughout every area where service is desired and ensuring its signal can penetrate walls well. As a result, consumers will trust MP and lead their trust in ms-commerce. Meanwhile, the doubts associated with technology disruption during transaction process can be reduced. On the other hand, consumers will gain emotional trust in mobile payment when they cognitively trusted mobile payment.

Emotional trust in MP (EMP) is defined as user's feelings of comfort and secure to rely on MP (Sun, 2010 & Gong et al., 2016). Service providers may consider developing users' emotional trust by disclosing its security and privacy assurances and service guarantee policies. Service providers may try to understand the various customers' behaviour and adjust their strategies to enhance the comparability of their services to ensure the services meet customers' emotional needs and lifestyle. Service providers should provide solutions to solve user problems associated with the service by communicating regularly with them and making improvements accordingly. Furthermore, mobile service providers and vendors should have honest and ethical conducts by disclosing information to consumers on how they mobile technology is implemented in order to lower consumers' uncertainties level. Policymakers should also develop adequate mobile technology-related regulations and safeguards to protect consumers' financial transactions and personal data. Hence, these help to establish consumer's trust in conducting mobile payment in ms-commerce participation.

Profile photo (PP) is a self-created fictitious image that shows how the reviewer looks like to others in the online environment (Ortega, 2017). A proper profile photo not only could help a business to reinforce its brand, it also creates a sense of trust between reviewer and receiver as it reveals one's social presence. Therefore, practitioners may consider only allowing reviewers with profile photo to write reviews as presence of profile photo could reduce discomfort of receivers due to uncertainty and removes the barriers caused by computermediated communication so that receivers would feel like they are communicating with a real social entity. Online reviewers who use images to represent themselves in online consumer community should be more conscious on how influential of profile photo could be on receivers' perceptions of trustworthy on them. Moreover, social media application developers may only permit those social media users with their real profile photo to sign up an account and reject those with cartoon image or artists' photo. By displaying a real profile photo, it will reduce the social distance as well as reviewers with profile photo will lead to more open and transparent reviews to receivers. Government may consider reinforcing laws and regulations by verifying the authenticity of user profile with their identity card to avoid fake social presence which may lead to deception. Thus, government's involvement would increase the reliability and trustworthiness in ms-commerce.

Experienced based review refers to the general assessment of a central product that provide receivers emotional and subjective opinions reflecting consumers' feeling which reviewers are able to understand immediately. (Park & Lee, 2008; Xia & Bechwati, 2008; Pan & Zhang, 2011; Huang, Tan, Ke, & Wei, 2014). A more informative review allows consumers to enhance their purchase decision as they are more knowledgeable about the consumption experience of a product. Thus, ms-commerce sellers may consider establishing better strategies to

increase the usability of online consumer communities by working proactively on encouraging users to share their past purchase experience and reward whoever that contributes. Besides, sellers should be more responsive to the feedback about their products and be aware of the importance of social interaction in forming their trust in online marketplaces and tend to involve in the social interactions with buyers as well as gaining social support from others. This helps companies to manage their relationships with potential customers and eventually improve quality of their products and services. Application developers should improve user interface that allows users to track comments from other users with common interest easily with just one click in online community. Moreover, ms-commerce service providers may intercept a negative review before it goes public by responding promptly and delivering good reply to negative review in a polite and not defensive way. Hence, trust and respect from consumers can be earned by admitting the mistakes and promising to correct them genuinely. Although it is inevitable to have negative review from consumers, they may also ask consumers to remove it, or post a new positive review to neutralize the original negative review after fixing with the consumers.

5.3.2 Theoretical Implications

Theoretically, this study contributes to research on OCRs aspects on mscommerce. Unlike previous researches that only concentrated on OCRs aspects associated with the review such as valence and sequence, this study investigate OCRs aspects that provide indirect information about the reviewer and go beyond the reviewers' demographic profiles. The research findings act as a basis for future researches to investigate OCRs aspects impacts on trust in mscommerce.

Moreover, this study verifies the explanation of trust transference theory in mscommerce platform. This study is corresponded with Komiak and Benbasat (2004), whose research proves that trust will transfer from web payment to mobile payment. Our study applies the trust transference theory in the context on ms-commerce, where users' trust in mobile payment will be transferred to trust in ms-commerce. This can be used as a fundamental for future researches to investigate more trust transference relations in ms-commerce.

We have extended the applicability of TBAM model in ms-commerce context and add in OCRs as an additional aspect. However, the result showed that LS has no positive relationship with trust in ms-commerce which contradicts with past studies. We believe that EMP, CMP, PP and RE can provide a better and richer insight than TBAM model alone in affecting trust in ms-commerce context.

Furthermore, there are newly developed significant relationships between CMP, EMP, PP, RE and TMS. These IVs can be used by future researchers to investigate other DV in ms-commerce context. Oppositely, the insignificant relationship between LS and TMS may act as a reference for future researchers in similar context. Thus, all the relationships may be useful to future researchers in developing their conceptual framework.

This study shows that the conceptual model is appropriate in the study of trust in ms-commerce. The R2 value of 0.7045 shows that the variation in trust in ms-commerce can be determined by all IVs. Besides, the R2 value of 0.6391 represents 63.91% of the changes in EMP can be explained by CMP. Four out of five IVs were verified to have significant connection with trust in mscommerce. The CMP has the most significant relationship with TMS, followed by EMP, RE and PP. Meanwhile, it concludes that linguistic style has the least significant impact to the trust in ms-commerce.

5.4 Limitations of the Research

During this research, there were a few of limitations encountered that should be taken into considerations for future study. This study only took into considerations respondents from West Malaysia due to time and budget constraints. Therefore, samples taken merely from West Malaysia may not sufficient to represent the population of ms-commerce users in Malaysia accurately.

Besides, this research is a cross-sectional study which study certain event at a particular time. The data are assembled to investigate the association between IVs and DV at the same time. Hence, it is a limitation as the IVs and DV may be varied from time to time. Therefore, the results may be not representative and might be different if compared to the results in a longitudinal study.

Moreover, the survey questionnaires have been developed without feedback section. Some respondents were unable to present their genuine response to the questions when they faced the problem of misinterpret or misunderstood some words or sentences used in the survey questions. Also, the researchers cannot capture their comments and thoughts based on their perceptions as well as cannot collect more precise results. Thus, the results may be affected regarding to the reliability and accuracy of the data.

Furthermore, the survey questionnaires were developed in English medium and this may result in the respondents might not fully understand the questions in the survey questionnaires if the respondents' dominant language is Chinese, Tamil or other languages. Consequently, the results obtained may deviate from the accurate results. Additionally, some survey questions require the respondents to recall their feelings, past experience involved in ms-commerce and beliefs and this revealed a limitation as the respondents' feelings at the time of answering the questions may be affected and bias which can affect the results. Thus, the data collected tend to be unreliable and inaccurate.

In addition, this research did not include any moderator and merely study the relationship between five IVs and one DV. Moderator affects the correlation of IVs and DV. With the use of moderator, the direction or strength of relationship between IV

and DV might be affected. As a result, it might also different when compared to the results with the adoption of moderator.

Although there were several limitations that may influence the analysis results were being encountered and addressed during this research, these limitations did not detract the significance of the research. Nevertheless, the shortcomings identified in this research may aid in conducting a better research that consists of more in-depth analysis and discussion in future.

5.5 Recommendations for future study

For future research and study on ms-commerce, it is suggested to cover wider geographical area including East Malaysia such as Sabah and Sarawak. It gives us a better insight to study ms-commerce users' behaviors which represent the whole Malaysia.

Also, future study can have their questionnaires designed to have more open-ended questions which require more thoughts and more than a simple one-word answer. A quality questionnaire should include feedback session too in order to get some comments from respondents regarding the readability and understandability of all questions. After all, data would be invalid if respondents simply filled up the questions when they do not understand the questions thoroughly.

Besides, the quality of questionnaires can be improved by adding other language versions such as in Chinese, Malay as well as Tamil. The multi-version will be more suitable for Malaysia as it is a multicultural and multiracial country. Respondents will be feeling ease to fill up the questionnaire in their native language without the help of researchers to explain words by words.

Moreover, as this study is cross-sectional in nature, therefore the users' trusting behaviors were captured on a particular point of time only. It will be interesting if a longitudinal study is carried out where comparison between pre and post-adoption could be done to determine the changes in trusting behaviors over a period of time. Next, the R-square is 0.7045 in this research, this indicates that there are more determinants that can be investigated to effectively study the trust in ms-commerce. In future studies, other relevant variables can be tested to improve the research model in a more meaningful approach. For instance, seller's rating and perceived risk could have significant and positive effects on trust in ms-commerce.

5.6 Conclusion

In short, this study helps us to have a better understanding on CMP, EMP, PP and RE as they have significant and positive relationship with the DV. There were few explanations stated to justify why LS does not significantly related with TMS. This research outcomes are practical for the business practitioners and government by optimizing their strategies and initiatives in ms-commerce industry. Furthermore, the future researchers should investigate other significant variables that will affect the trust in ms-commerce and overcoming the limitations of study.

REFERENCES

- Aerts, G., Smits, T., & Verlegh, P. W. J. (2017). How online consumer reviews are influenced by the language and valence of prior reviews: A construal level perspective. *Computers in Human Behavior*, 75, 855-864.
- Ahmad, S. Z., Bakar, A. R. A., Faziharudean, T. M., & Zaki, K. A. M. (2015). An empirical study of factors affecting e-commerce adoption among small-and medium-sized enterprises in a developing country: Evidence from Malaysia. *Information Technology for Development*, 21(4), 555-572.
- Ahmad. S.N., & Laroche, M. (2017). Analyzing electronic word of mouth: A social commerce construct. *International Journal of Information Management*, 37, 202-213.
- Aiken, K. D., & Boush, D. M. (2006). Trustmarks, objective-source ratings, and implied investments in advertising: Investigating online trust and the context specific nature of internet signals. *Journal of the Academy of Marketing Science*, 34(3), 308-323.
- Al-Bakri, A. A., & Katsioloudes, M. I. (2015). The factors affecting e-commerce adoption by Jordanian SMEs. *Management Research Review*, 38(7), 726-749.
- Aw, W. Y., Khalil, M. N., Emad, A. S., & Janejira S. (2009). Factors that affect mobile telephone users to mobile payment solution. *International Journal of Economics and Management*, 3(1), 37-49.
- Ba, S., & Pavlou, P. A. (2002). Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behavior. *MIS Quarterly*, 26(3), 243-268.
- Ballester, E. D., & Espallardo, M. H. (2008). Building online brands through brand alliances in internet. *European Journal of Marketing*, 42(9), 954-976.
- Bansal, H. S., & Voyer, P. A. (2000). Word-of-Mouth processes within a services purchase decision context. *Journal of Service Research*, *3*(2), 166-177.
- Bartlett, L. (2013). Pilot test for reliability and validity of a new assessment cool measuring relationships between individual health and environmental sustainability. *Health and Sustainability Assessment Tool*, 1-51.

- Beatty, P. C., & Willis, G. B. (2007). Research synthesis: The practice of cognitive interviewing. *Public Opinion Quarterly*, *71*, 287-311.
- Beaven, M. (2014). Generational differences in the workplace: Thinking outside the boxes. *Contemporary Journal of Anthropology and Sociology*, 4(1), 68-80.
- Brant, R. (2007). *Multiple Linear Regression*. Retrieved July 27, 2017, from http://www.stat.ubc.ca/~rollin/teach/BiostatW07/reading/MLR
- Buntain, C., & Golbeck, J. (2015). Trust transfer between contexts. *Journal of Trust Management*, 2(6). 1-16.
- Busalim, A. H., & Hussin, A. R. C. (2016). Understanding social commerce: A systematic literature review and directions for further research. *International Journal of Information Management*, 36, 1075-1088.
- Cabanillas, F. L., Fernández, J. S., & Leiva, F. M. (2014). The moderating effect of experience in the adoption of mobile payment tools in Virtual Social Networks:
 The m-payment acceptance model in Virtual Social Networks (MPAM-VSN). *International Journal of Information Management*, 34, 151-166.
- Cabanillas, F. L., & Santos, M. A. D. (2017). Factors that determine the adoption of Facebook commerce: The moderating effect of age. *Journal of Engineering and Technology Management*, 44, 1-18.
- Central Intelligence Agency. (2017). The world factbook. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/geos/my.html
- Chen, J., & Shen, X. L. (2015). Consumers' decisions in social commerce context: An empirical investigation. *Decision Support Systems*, 79, 55-64.
- Chen, L., & Wang, R. (2016). Trust development and transfer from electronic commerce to social commerce: An empirical investigation. *American Journal of Industrial and Business Management*, *6*, 568-576.
- Chen, A., Lu, Y., & Wang, B. (2017). Customers' purchase decision-making process in social commerce: A social learning perspective. *International Journal of Information Management*, 37(6), 627-638.
- Chong, A. Y. (2013). Predicting m-commerce adoption determinants: A neural network approach. *Expert Systems with Applications*, 40, 523-530.
- Chong, A. Y. L., Chan, F. T. S., & Ooi, K. B. (2012). Predicting consumer decisions to adopt mobile commerce: Cross country empirical examination between China and Malaysia. *Decision Support Systems*, *53*, 34-43.

- Chow, W. S., & Shi, S. (2014). Understanding consumer trust in social commerce websites. *Pacific Asia Conference on Information Systems 2014 Proceedings*, 94.
- Coursaris, C. K., & Kim, D. J. (2011). A meta-analytical review of empirical mobile usability studies. *Journal of Usability Studies*, 6(3), 117-171.
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5 point, 7 point and 10 point scales. *International Journal of Market Research*, 50(1), 61-77.
- Dhanapala, S., Vashub, D., & Subramaniam, T. (2015). Perceptions on the challenges of online purchasing: A study from "baby boomers", generation "X"and generation "Y" point of views. *Contaduríay Administración*, 60(1), 107-132.
- Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer seller relationships. *Journal of Marketing*, *61*, 35-51.
- Drost, E. A. (2011). Validity and reliability in social science research. Education Research and Perspectives, *38*(1), 105-123.
- Emaeili, L., Mutallebi, M., Mardani, S., & Golpayegani, S. A. H. (2015). Studying the affecting factors on trust in social commerce. *International Journal of advanced studies in Computer Science and Engineering*, *4*(6), 41-46.
- Eze, U. C., Gan, G. G. G., Ademu, J., & Tella, S. A. (2008). Modelling user trust and mobile payment adoption: A conceptual framework. *International Journal of Information Technology and Business Management*, 3, 224-231.
- Filieri, R. & McLeay, F. (2013). E-WOM and accommodation: An analysis of the factors that influence travelers' adoption of information from online reviews. *Journal of Travel Research*, *53*(1), 44-57.
- Filieri, R. (2016). What makes an online consumer review trustworthy?. Annals of *Tourism Research*, 58, 46-64.
- Fishbein, M. E., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Boston, USA: Addison-Wesley.
- Fock, S. T., & Koh, H. C. (2006). Conceptualization of trust, commitment, and understanding the relationships between trust, commitment, and willingness to try internet banking services. *International Journal of Business and Information*, 1(2), 194.

- Fuentes, C., & Svingstedt, A. (2017). Mobile phones and the practice of shopping: A study of how young adults use smartphones to shop. *Journal of Retailing and Consumer Services*, *38*, 137-146.
- Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-commerce and the importance of social presence: Experiments in e-Products and e-Services. *The International Journal of Management Science*, *32*(6), 407-424.
- Gibreel, O., Aiotaibi, D. A., & Altmann, J. (2018). Social commerce development in emerging markets. *Electronic Commerce Research and Applications*, 27(1), 152-162.
- Giovannini, C. J., Ferreira, J. B., Silva, J. F. D., & Ferreira, D. V. (2015). The effects of trust transference, mobile attributes and enjoyment on mobile trust. *Brazilian Administration Review*, *12*(1), 88-108.
- Gong, X., Zhang, Z. K., Zhao, J., & Lee, K. O. (2016). The effects of cognitive and emotional trust on mobile payment adoption: A trust transfer perspective. *PACIS 2016 proceedings*, *35*.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis: A global perspective (7th ed.). New Jersey: Pearson.
- Hajli, N., Lin, X., Featherman, M., & Wang, Y. (2014). Social word of mouth: How trust develops in the market. *International Journal of Market Research*, 56(5), 673-689.
- Hajli, N., Sims, J., Zadeh, A. H., & Richard, M. O. (2017). A social commerce investigation of the role of trust in a social networking site on purchase intentions. *Journal of Business Research*, 71, 133-141.
- Hami, A., Fazle, F., & Emami, F. (2016). Factors affecting people preferences toward environment landscape, case study: Shopping mall in Kuala Lumpur. *International Journal of Construction Engineering and Management*, 5(4), 108-117.
- Hashim, N. A, Nor, S. M., & Janor, H. (2016). Riding the waves of social commerce: An empirical study of Malaysian entrepreneurs. *Malaysian Journal of Society and Space*, 12(2), 83-94.
- Hew, J. J., Lee, V. H., Ooi, K. B., & Lin, B. (2016). Mobile social commerce: The booster for brand loyalty?. *Computers in Human Behavior*, 59, 142-154.
- Ho, S. Y. (2012). The effects of location personalization on individuals' intention to use mobile services. *Decision Support Systems*, 53, 802-812.

- Hong, I. B., & Cho, H. (2011). The impact of consumer trust on attitudinal loyalty and purchase intentions in B2C E-Marketplaces: Intermediary trust vs. seller trust. *International Journal of Information Management*, 31(5), 469-479.
- Huang, L., Tan, C. H., Ke, W., & Wei, K. K. (2014). Product review information display? How?. *Information & Management*, 51, 883-894.
- Huang, Z., & Benyoucef, M. (2017). The effects of social commerce design on consumer purchase decision-making: An empirical study. *Electronic Commerce Research and Applications*, 25(1), 40-58.
- Idemudia, E. C., & Raisinghani, M. S. (2014). The influence of cognitive trust and familiarity on adoption and continued use of smartphones: An empirical analysis. *Journal of International Technology and Information Management*, 23(2), 69-94.
- Idemudia, E. C., Raisinghani, M. S., & Ojo, O. S. (2013). The influence of IT-Related beliefs on emotional trust for a smartphone and smartphone continuance usage:
 An empirical study. *International Journal of Technology Diffusion*, 4(2), 31-48.
- Jantschi, L., Pruteanu, L. L., Cozma, A. C., & Bolboaca, S. D. (2015). Inside of the linear relation between dependent and independent variables. *Computational and Mathematical Methods in Medicine*, *1*, 1-11.
- Jensen, M. L., Averbeck, J. M., Zhang, Zhu, & Wright, K. B. (2013) Credibility of anonymous online product reviews: A language expectancy perspective. Journal of Management Information Systems, 30(1), 293-324.
- Jimenez, 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, 226-235.
- Johnson, B., & Christensen, L. (2008). Educational research: Quantitative, qualitative, and mixed approaches. Retrieved from http://www.xavier.edu/library/students/documents/qualitative_quantitative.pdf
- Jones, K., & Leonard, L. N. K. (2008). Trust in consumer-to-consumer electronic commerce. *Information and Management*, 45, 88-95.
- Jong, J. D. (2016) Data collection: Self-administered surveys. Retrieved from: http://ccsg.isr.umich.edu/index.php/chapters/data-collection-chapter/self administered-surveys

- Karimi, S., & Wang, F. (2017). Online review helpfulness: Impact of reviewer profile image. *Decision Support Systems*, 96, 39-48.
- Kim, D. J., Ferrin. D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic ecommerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, 44(2), 544-564.
- Kim, S., & Park, H. (2013). Effects of various characteristics of social commerce (scommerce) on consumers' trust and trust performance. *Information Journal* of Information Management, 33, 318-332.
- Kim, Y., & Peterson, R. (2017). A meta-analysis of online trust relationships in E commerce. *Journal of Interactive Marketing*, 38, 44-54.
- Kire, K. (2014). Understanding consumer behavior towards shopping mall in Chennai. International Journal of Interdisciplinary Research, 1(8), 1-4.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.).New York, US: Guilford Publications.
- Koh, T. K., Fichman, M., & Kraut, R. (2013). Trust across borders: Buyer-supplier trust in global B2B E-commerce. *Journal of the Association for Information Systems*, 13(11), 886-922.
- Komiak, S. Y. X., & Benbasat, I. (2004). Understanding customer trust in agentmediated electronic commerce, web-mediated electronic commerce, and traditional commerce. *Information Technology and Management*, 5, 181-207.
- Komiak, S. Y. X., & Benbasat, I. (2006). The effects of personalization and familiarity on trust and adoption of recommendation agents. *MIS Quarterly*, *30*(4), 941-960.
- Krotov, V., Junglas, I., & Steel, D. (2015). The mobile agility framework: An exploratory study of mobile technology enhancing organizational agility. *Journal of Theoretical and Applied Electronic Commerce Research*, 10(3), 1-17.
- Kucukcay, I. E. (2014). A design framework for mobile social commerce. Unpublished master's thesis, University of Ottawa, Ottawa, Ontario, Canada.
- Kucukcay, I. E., & Benyoucef, M. (2014). Mobile social commerce implementation. In Proceedings of the 6th international conference on management emergent digital Ecosystems-MEDES'14 (pp.1-8). Association for Computing Machinery.

- Lee, W. I., Cheng, S. Y., & Shih, Y. T. (2017). Effects among product attributes, involvement, word-of-mouth, and purchase intention in online shopping. *Asia Pacific Management Review*, 22(4), 223-229.
- Lee, E. J., & Shin, S. Y. (2013). When do consumers buy online product reviews? Effects of review quality, product type, and reviewer's photo. *Computers in Human Behavior*, 31, 356–366.
- Lee, V. H., Alex, F. T. L., Leong, L. Y., & Ooi, K. B. (2016). Can competitive advantage be achieved through knowledge management? A case study on SMEs. *Expert system with applications*, 65, 136-151.
- Lee, W. O., & Wong, L. S. (2016). Determinants of mobile commerce customer loyalty in Malaysia. *Procedia Social and Behavioral Sciences*, 224, 60-67.
- Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence Based Dentistry*, 7, 24-25.
- Li, Y. M., & Yeh, Y. H. (2010). Increasing trust in mobile commerce through design aesthetics. *Computers in Human Behavior*, 26, 673-684.
- Lin, J., Lu, Y., Wang, B., & Wei, K. K. (2011). The role of inter-channel trust transfer in establishing mobile commerce trust. *Electronic Commerce Research and Applications*, 10(6), 615-625.
- Lin, K. Y., & Lu, H. P. (2015). Predicting mobile social network acceptance based on mobile value and social influence. *Internet Research*, 25(1), 107-130.
- Lin, X., Li, Y., & Wang, X. (2017). Social commerce research: Definition, research themes and the trends. *International Journal of Information Management*, 37, 190-201.
- Lissitsa, S., & Kol, O. (2016). Generation X vs. Generation Y A decade of online shopping. *Journal of Retailing and Consumer Services*, *31*, 304-312.
- Liu, Z., & Park, S. (2015). What makes a useful online review? Implication for travel product websites. *Tourism Management*, 47, 140-151.
- Lu, B., Fan, W. & Zhou, M. (2016). Social presence, trust, social commerce purchase intention: An empirical research. *Computers in Human Behavior*, 56, 225-237.
- Lu, J., Yu, C. S., Liu, C., & Wei, J. (2017). Comparison of mobile shopping continuance intention between China and USA from an espoused cultural perspective. *Computers in Human Behavior*, *75*, 130-146.

- Lu, Y., Yang, S., Chau, P. Y. K., & Cao, Y. (2011). Dynamics between the trust transfer process and intention to use mobile payment services: A cross-environment perspective. *Information and Management*, 48, 393-403.
- Macik, R. (2016). Consumer decision-making styles extension to trust-based product comparison site usage model. *Management*, 11(3), 213-237.
- Mahadhir, M., Nor, N. F. M., & Azman, H. (2014). Communication accommodation strategies in malaysian multiracial family interactions. *Procedia - Social and Behavioral Sciences*, 118, 259-264.
- Malaysia Communications and Multimedia Communication. (2015). Hand phone users survey 2016. Retrieved from https://www.mcmc.gov.my/skmmgovmy/media/ General/pdf/MCMC-Hand Phone-User19112015.pdf
- Malaysia Communications and Multimedia Communication. (2016). Internet users survey 2016. Retrieved from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/IUS2016.pdf
- Maxfield, M. G., & Babbie, E. R. (2016). *Basics of research methods for criminal justice & criminology* (4th ed.). Boston, USA: Cengage Learning.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. Academy of Management Review, 20, 709-734.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information System Research*, 13(3), 334-359.
- Meadows, K. A. (2003). So you want to do research? 5: Questionnaire design. *British Journal of Community Nursing*, 8(12), 562-570.
- Mittal, A., & Jhamb, D. (2016). Determinants of shopping mall attractiveness: The Indian context. *Procedia Economics and Finance*, *37*, 386-390.
- Mosteller, J., Donthu, N., & Eroglu, S. (2014). The fluent online shopping experience. *Journal of Business Research*, 67(11), 2486-2493.
- Moorty, M. K., Chan, W. S., Chan, Y. L., Tee, P. Y., Wan, K. Y., & Yip, Y. E. (2014). Adoption of mobile commerce in Malaysia: A Generation Y perception. *International Journal of Research*, 1(8), 825-845.
- Muda, M., Mohd, R., & Hassan, S. (2016). Online purchase behavior of Generation Y in Malaysia. *Procedia Economics and Finance*, *37*, 292-298.

- Mudambi, S. M., & Schuff, D. (2010). What makes a helpful online review? A study of customer reviews on Amazon.com. *MIS Quarterly*, *34*(1), 185-200.
- Newbold, K. B., & Scott, D. M. (2017). Driving over the life course: The automobility of Canada's millennial, Generation X, baby boomer and greatest generations. *Travel Behaviour and Society*, *6*, 57-63.
- Ng, C. S. P. (2013).Intention to purchase on social commerce websites across cultures:cross-regional study. *Information & Management*, 50, 609-620.
- Nielsen. (2015). Global trust in advertising: Winning strategies for an evolving media landscape. Retrieved from https://www.nielsen.com/content/dam/nielsenglobal/apac/docs/reports/2015/ni eln-global-trust-in-advertising-report-september-2015.pdf
- Noor, N. M., & Leong, C. H. (2013). Multiculturalism in Malaysia and Singapore: Contesting models. *International Journal of Intercultural Relations*, 37, 714-726.
- Oliveira, T., Alhinho, M., Rita, P., & Dhillon, G. (2017). Modelling and testing consumer trust dimensions in E-commerce. *Computers in Human Behavior*, *71*, 153-164.
- Ortega, B. H. (2017). Don't believe strangers: Online consumer reviews and the role of social psychological distance. Information and Management.
- Pan, Y., & Zhang, J. Q. (2011). Born unequal: A study of the helpfulness of user generated product reviews. *Journal of Retailing*, 87(4), 598–612.
- Park, D. H., & Lee, J. (2008). EWOM overload and its effect on consumer behavioural intention depending on consumer involvement. *Electronic Commerce Research* and Applications, 7, 386-398.
- Park, H., Xiang, Z., Josiam, B., & Kim, H. (2014). Personal profile information as cues of credibility in online travel reviews. An International Journal of Tourism and Hospitality Research, 25(1), 13-23.
- Park, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery or justification? *Journal of Marketing Thought*, 3(1), 1-7.
- Park, S., & Nicolau, J. L. (2014). Asymmetric effects of online consumer reviews. Annals of Tourism Research, 50, 67-83.

- PricewaterhouseCoopers. (2016). Total retail survey 2016. Retrieved from https://www.pwc.com/gx/en/retail-consumer/publications/assets/totalretailglobal report.pdf
- PYMNTs. (2016). Why Mobile Matters In Restaurant Payments. Retrieved from http://www.pymnts.com/news/mobile-payments/2016/mobile-payment restaurant ordering/
- Ratner, B. (2009). The correlation coefficient: Its values range between +1/-1, or do They?. *Journal of Targeting, Measurement and Analysis for Marketing, 17*(2), 139-142.
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling* and Analytics, 2(1), 21-33.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students (5th ed.). Harlow, UK: Pearson Education.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). Research methods for business students (7th ed.). Harlow, England: Pearson Education.
- Schurr, P. H., & Ozanne, J. L. (1985). Influences on exchange processes: Buyers' preconceptions of a seller's trustworthiness and bargaining toughness. *Journal* of Consumer Research, 11(4), 939-953.
- Sekaran, U. (2003). Research methods for business: A skill building approach (4th ed.). New York: John Wiley & Sons, Inc.
- Seman, A. A., Ahmad, A. R., Aziz, Z., & Ayudin, A. R. (2011). The effectiveness of teaching and learning history based on multicultural towards national integration in Malaysia. *Procedia Computer Science*, 3, 1588-1596.
- Shang, D., & Wu, W. (2017). Understanding mobile shopping consumers' continuance intention. *Industrial Management & Data Systems*, 117(1), 213 227.
- Sharkawi, S., Mohamad, S. J. A. N. S., & Roslin, R. (2016). Leaders we prefer: Perspectives from Malaysian Gen Y employees. *Polish Journal of Management Studies*, 14(2), 192-201.
- Siau, K. & Shen, Z. (2014). Building consumer trust in mobile commerce. Communications of the ACM, 46(4).
- Statista. (2017). Active mobile social media penetration in Asian countries as of January 2017. Retrieved from

https://www.statista.com/statistics/295631/active-mobile-social-media-penetration-in-asian-countries/

- Stewart, K. J. (2003). Trust transfer on the World Wide Web. Organization Science, 14(1), 5-17.
- Suki, N. M. (2011). Subscribers' intention towards using 3G mobile services. *Journal* of Economics and Behavioral Studies, 2(2), 67-75.
- Sun, H. (2010). Seller's trust and continued use of online marketplaces. *Journal of the Association for Information Systems, 11*(4), 182-211.
- Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. Journal of Mixed Methods Research, 1(1), 77-100.
- Ting, H., Yusman, Y., & Liew, L., & Lau, W. M. (2016). Intention to use mobile payment system: A case of developing market by ethnicity. *Social and Behavioral Sciences*, 224, 368-375.
- Tripadvisor. (2017). Retrieved July 15, 2017 from https://www.tripadvisor.com.my/
- Wang, B., & Shan, C. (2013). The effect of online-to-mobile trust transfer on the foundation of mobile banking trust. *Communications and Network*, *5*, 112-115.
- Wang, C., & Zhang, P. (2012). The evolution of social commerce: the people, management, technology, and information dimensions. *Communications of the Association for Information Systems*, 31(1), 105-127.
- Wang, N., Shen, X. L., & Sun, Y. (2013). Transition of electronic word-of-mouth services from web to mobile context: A trust transfer perspective. *Decision Support Systems*, 54(3), 1394-1403.
- We Are Social. (2017). Digital in 2017: Southeast Asia regional overview. Retrieved from https://wearesocial.com/special-reports/digital-southeast-asia-2017
- Willits, F. K., Theodori, G. L., & Luloff, A. E. (2016). Another look at Likert scale. *Journal of Rural Social Science*, *31*(3), 126-139.
- Wondoko, W., Abbas, B. S., Budiastuti, D., & Kosala, R. (2016). Online trust building through third party trust transfer and third party protection. *Journal of Physics*, 801(1), 1-8.
- Wu, J. J., Chen, Y. H., Chien, S. H., & Wu, W. K. (2016). Attachment relationship study of trust and trust transfer. *Journal of Service Theory and Practice*, 26(5), 681-695.

- Wu, L., Shen, H., Fan, A., & Mattila, A. S. (2017). The impact of language style on consumer's reactions to online review. *Tourism Management*, 59, 590-596.
- Xia, L., & Bechwati, N. N. (2008). Word of mouse: The role of cognitive personalization in online consumer reviews. *Journal of Interactive Advertising*, 9(1), 3-13.
- Xu, Q. (2014). Should I trust him? The effect of reviewer profile characteristics on eWOM credibility. *Computers in Human Behavior*, *33*, 136-144.
- Yeow, P. M., Haliyana, K., & Devika, N. (2017). Millennials perception on mobile payment services in Malaysia. *Procedia Computer Science*, 124, 397-404.
- Zakaluk, B. L., & Samuels, S. J. (1988). Readability: Its past, present and future. Newark, Delaware: International Reading Association.
- Zhang, H., Zhao, L., & Gupta, S. (2018). The role of online product recommendations on customer decision making and loyalty in social shopping communities. *International Journal of Information Management*, 38(1), 150-166.
- Zhang, Z. (2008). Weighing stars: Aggregating online product reviews for intelligent e-commerce applications. *IEEE Intelligent Systems*, 23(5), 42–49.
- Zhang, Z. K. K., Gong, X., Zhao, S. J., & Lee, K. O. (2015). Cognitive trust, emotional trust and the value-based acceptance model in mobile payment adoption. *International Conference on Electronic Business*, 15, 166-174.
- Zhang, Z. K., Cheung, M. K., & Lee, K. O. (2014). Examining the moderating effect of inconsistent reviews and its gender differences on consumers' online shopping decision. *International Journal of Information Management* 34(2), 89-98.
- Zhou, L., Dai, L., and Zhang, D. (2007). Online shopping acceptance Model-A critical survey of consumer factors in online shopping. *Journal of Electronic commerce research*, 8(1), 41-62.

Appendix A

Summary of Past Empirical Studies

Study	Country	Data	Major Findings
Aerts,	Belgium	Mail survey of 101 respondents through	Reading abstract reviews
Smits and		a convenience sample from Dutch-	resulted in more abstract
Verlegh		speaking Belgian men and women.	review writing; while prior
(2017)			concrete review resulting in a
			subsequent concrete review.
Chen and	China	Sample data are collected through an	Trust can be transferred from
Wang		online survey, 478 questionnaires were	e-commerce to s-commerce
(2016)		answered by people from different	as they have common fate.
		stratums. 449 valid responses who have	
		online shopping experience were	
		received.	
Eze, Gan,	Malaysia	Select the sample of about 600 potential	There is positive
Ademu, &		mobile payment device users for this	relationship between
Tella		study using convenience sampling	cognitive trust in MP and
(2008)		method because there is no population	intention to use MP.
		frame to enable random sampling	
Gong,	China	A convenient sample of 273 university	Cognitive trust in mobile
Zhang,		students and faculties who had already	payment positively influence
Zhao, &		had some experience of using web	the intention to use mobile
Lee (2016)		payment services.	payment.
			There is positive
			relationship between
			emotional trust in MP and
			intention to use MP.
			Trust can be transferred from
			web payment to mobile
			<u>payment</u> since consumers

			perceive close relationship
			between them.
Idemudia	United	Data was collected from 251 students	Cognitive trust in integrity for
and	States	enrolled in a public university located in	smartphones positively
Raisinghani		the United States of America. A paper-	affect the continuance usage
(2014)		and-pencil survey was used to collect	of smartphones.
		data from active users of smartphones.	
Idemudia,	North	Data collected from 247 students	There is a positive
Raisinghani	America	enrolled in a public university in North	relationship between
and Ojo		America who use smart phones in their	emotional trust on
(2013)		daily activities such as communicating,	smartphones and continuance
		texting, playing video games, online	usage of smartphones.
		courses, school works, GPS for driving,	
		social media, recording etc.	
Jimenez	USA	201 business students from a	The level of detail in an
and		southwestern university participated in	online review was positively
Mendoza		a 2 (level of detail: general, detail) \times 3	related to purchase intention.
(2013)		(reviewer agreement: low, moderate,	
		high) between-subjects experimental	
		design, in exchange for extra credit.	
Lee and	Seoul,	Web-based experiments participated by	Reviewer's photo increases
Shin (2013)	South	252 undergraduates from 8 different	the receiver's perceived
	Korea	universities in Seoul, South Korea.	credibility and purchase
			intention.
Lin, Lu,		Mobile brokerage services users were	Trust can be transferred
Wang, and		targeted where 600 questionnaire were	through intra-channel when
Wei (2011)		sent through e-mail to those who agreed	customer's trust is being
		to participate and received 476 in	shifted to another entity
		return.	within the same channel
			within the same channel

Lu, Yang,	China	A survey hyperlink was placed on the	There is positive
Chau, &		AliPay forum homepage to target	relationship between
Cao (2011)		AliPay users. With 2 rounds of data	cognitive trust in MP and
		collection, a total of 961 responses were	intention to use MP.
		received.	
Ortega	Spain	A total of 522 responses were received.	There is a positive effect of
(2017)		A total of 401 usable questionnaires	profile photo on receiver's
		were obtained.	response comprising of
			perceived credibility, and
			purchase intention.
			Experience-based review has
			positive impacts on purchase
			intention in online context.
			Interpersonal similarity
			caused by linguistic style
			positively influenced
			receivers' perceptions on the
			reviews and purchase
			intention.
Park and	South	334 college students participated in 2×3	intention. Experience-based review has
Park and Lee (2008)	South Korea	334 college students participated in 2×3 × 2 factorial design voluntarily.	
			Experience-based review has
			Experience-based review has positive relationship with
			Experience-based review has positive relationship with purchase intention in online
Lee (2008)	Korea	\times 2 factorial design voluntarily.	Experience-based review has positive relationship with purchase intention in online context.
Lee (2008) Park and	Korea London	× 2 factorial design voluntarily. Secondary data of 35 restaurants in	Experience-based review has positive relationship with purchase intention in online context. Profile photo is positively
Lee (2008) Park and Nicolau	Korea London and New	× 2 factorial design voluntarily. Secondary data of 35 restaurants in London with 2500 reviews and 10	Experience-based review has positive relationship with purchase intention in online context. Profile photo is positively related to the credibility of
Lee (2008) Park and Nicolau	Korea London and New	× 2 factorial design voluntarily. Secondary data of 35 restaurants in London with 2500 reviews and 10 restaurants in New York with 2590	Experience-based review has positive relationship with purchase intention in online context. Profile photo is positively related to the credibility of
Lee (2008) Park and Nicolau (2014)	Korea London and New York	× 2 factorial design voluntarily. Secondary data of 35 restaurants in London with 2500 reviews and 10 restaurants in New York with 2590 reviews.	Experience-based review has positive relationship with purchase intention in online context. Profile photo is positively related to the credibility of reviewer.

		banking. In all, 313 respondents were	
		selected from them.	
Wu, Shen,	USA	Experiment of 134 US based adult	Expertise level of reviewer
Fan and		consumer participants were recruited	was positively related to
Anna		from Amazon Mechanical Turk	consumer responses toward
(2016)		(MTurk).	the online review.
Xia and	Bahrain	85 undergraduate students participated	Experiential review has a
Bechwati		in a 2×2 mixed factorial design	positive effect with higher
(2008)		experiment.	affect intensity (people's
			emotional responses to
			various events) in online
			consumer review.
Xu (2014)	United	Online questionnaire survey of 152	Profile picture <u>influences</u>
	States	participants from several undergraduate	significantly affective trust in
		level communication courses at a	eWOMer and the perceived
		southern university.	credibility in eWOM
			message.
Zhang,	China	An online survey method was used	Emotional trust enhance
Gong,		which collected 273 of convenient	consumers' intention to use
Zhao, &		sample of a Chinese university students	MP by increasing value
Lee (2015)		and faculties who had knowledge about	perceptions.
		MP services	

Appendix B

Variables & Measurement

Variable	No.	Description of Items	Measurement	Sources
	of			
	items			
Independent				
<u>variable</u>				
Cognitive	3	Mobile Payment always provides	Five-point	Gong, Zhang,
trust in mobile		accurate financial services.	Likert scale	Zhao, and Lee
payment		Mobile payment always provide	•	(2016)
		reliable financial services.		
		Mobile payment always provide	-	
		safe financial services.		
Emotional	3	I feel secure about using Mobile	Five-point	Gong, Zhang,
trust in mobile		Payment for my payment.	Likert scale	Zhao, and Lee
payment		I feel comfortable about using	-	(2016)
		Mobile Payment for my payment.		
		I feel content about using Mobile		
		Payment for my payment.		
Profile photo	3	Based on my past experience	Five-point	Ortega (2017)
		involved in ms-commerce, taking	Likert scale	
		into account only the photo		
		displayed in the profile, I believe		
		that the people who wrote		
		reviews have a similar age to me.		
		Based on my past experience	•	
		involved in ms-commerce, taking		
		into account only the photo		
		displayed in the profile, I believe		

		that the people who wrote		
		reviews look similar to me.		
		Based on my past experience		
		involved in ms-commerce, taking		
		into account only the photo		
		displayed in the profile, I believe		
		that the people who wrote		
		reviews have a same social status		
		as me.		
Linguistic	3	Based on my past experience	Five-point	Ortega (2017)
style		involved in ms-commerce, the	Likert scale	
		reviews I read contain a similar		
		language to that which I use when		
		I write.		
		Based on my past experience		
		involved in ms-commerce, the		
		reviews I read employ a similar		
		vocabulary to that which I use		
		when I write.		
		Based on my past experience		
		involved in ms-commerce, the		
		reviews I read apply a similar		
		writing style to that which I use		
		when I write.		
Reported	3	Based on my past experience	Five-point	Ortega (2017)
experience		involved in ms-commerce, the	Likert scale	
		reviews I read describe incidents		
		similar to those I could tell.		
		Based on my past experience		
		involved in ms-commerce, the		

		reviews I read narrate experiences similar to my own. Based on my past experience involved in ms-commerce, the reviews I read show consumer emotions that I have also felt.		
Dependent				
<u>variable</u>				
Trust in	5	I believe that ms- commerce	Five-point	Cabanillas and
mobile social		platforms will keep the promises	Likert scale	Santos, (2017)
commerce		and commitments they make.		
		Ms-commerce platforms are		
		trustworthy.		
		I would rate ms-commerce		
		platforms as honest.		
		I think that the ms-commerce is		
		responsible.		
		Generally speaking, I have		
		confidence in the ms-commerce		
		platforms.		



Appendix C: Mobile Social Media User

Source: Developed for the research



Appendix D: Social Media Platforms Used in MS-Commerce



Source: Developed for the research







Appendix G: Marital Status of Respondents

Source: Developed for the research



Appendix H: Race of Respondents



Appendix I: Highest Education Level Achieved





Appendix J: Monthly Income Level of Respondents



Appendix K: MS-commerce Usage Rate within one year

Appendix L

Permission to Conduct Survey



UNIVERSITI TUNKU ABDUL RAHMAN Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

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15th August 2017

To Whom It May Concern,

I hereby certify this to be a true copy of the original which has been predicted hafere me

Dear Sir/Madam,

Permission to Conduct Survey

TY PLANACICO CENANCE FACULTY OF RUS UNIVERSITI TUNKU ABDUL RAHMAN

This is to confirm that the following students are currently pursuing their *Bachelor of Commerce (Hons) Accounting* program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

Name of Student	Student ID
Ang Wat Chin	14ABB02086
Koh Yee Fon	14ABB04579
Lim Rong Rong	14ABB03171
Lim Yun Yan	14ABB02196
Tung Zi Hsien	15ABB05905

If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely,

Ms Theresa Wong Lai Har Head of Department, Faculty of Business and Finance Email: wonglh@utar.edu.my

Ms Leong Lawing Supervisor, Faculty of Business and Finance Email: leongly@utar.edu.my

Idress: Jalan Sg. Long, Bandar Sg. Long, Cheras, 43000 Kajang, Selangor D.E. Postal Address: P O Box 11384, 50744 Kuala Lumpur, Malay Tel: (603) 9086 0288 Fax: (603) 9019 8868 Homepage: http://www.utar.edu.my

Appendix M

Survey Questionnaire



UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF BUSINESS AND FINANCE **BACHELOR OF COMMERCE (HONS) ACCOUNTING** FINAL YEAR PROJECT

Trust in mobile social commerce:

A perspective from Gen X and Gen Y

Survey Questionnaire

Dear respondents,

We are final year undergraduate students of Bachelor of Commerce (Hons) Accounting, from Universiti Tunku Abdul Rahman (UTAR).

The purpose of this survey is to investigate the factors that affecting the trust of Generation X and Generation Y in mobile social commerce (ms-commerce) by using trust-based acceptance model, trust transference theory and online consumer reviews aspects. Mobile social commerce is defined as a set of e-commerce activities performed by using mobile technology with the participation of users in information generation and sharing. In general, when you use mobile devices to conduct transactions through social media platforms, you are involved in ms-commerce (e.g. Shopping via Facebook and make payment to Facebook vendors by using smartphone/tablet)

Please answer all questions to the best of your knowledge. There is neither correct nor wrong response to any of these statements. All responses are strictly confidential and collected for academic research purpose only.

Thank you for your participation.

Instructions:

1) There are **THREE (3)** sections in this questionnaire. Please answer **ALL** questions in **ALL** sections.

2) Completion of this questionnaire will take you approximately 5 to 10 minutes.

3) The contents of this questionnaire will be kept strictly confidential.

Voluntary Nature of the Study

Participation in this research is entirely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. There is no foreseeable risk of harm or discomfort in answering this questionnaire. This is an anonymous questionnaire; as such, it is not able to trace response back to any individual participant. All information collected is treated as strictly confidential and will be used for the academic purpose of this study only.

I have been informed about the purpose of the study and I give my consent to participate in this survey. Yes () No () Note: If yes, you may proceed to the next page or if no, you may return the questionnaire to researchers and thanks for your time and cooperation

Section A: Demographic Profile

In this section, we would like you to fill in some of your personal details. Please tick $(\sqrt{})$ your answer and your answers will be kept strictly confidential.

Q1) Do you use social media through mobile device (e.g: smartphones, tablets, etc.) ? □ Yes □ No

If Yes, please tick the social media that you are currently using (You can choose more than one):

- \Box Facebook \Box Youtube \Box Google + \Box LinkedIn
- \Box Instagram \Box Snapchat \Box Twitter \Box Wechat
- \Box WhatsApp \Box Line \Box Viber
- □ Other (Please specify):

Q2) Do you involved in ms-commerce (buy online by mobile devices through social media) before?

 \Box Yes, please specify the social media platform or platform(s) used:

(Please proceed to Q	23)	
No (Thank you for a second	or your participation.	The questionnaire ends here)
Q3) Gender:	□ Male	□ Female
Q4) Year of birth:		
□ Before 1965 or after	er 1999 (Thank you f o	or your participation. The questionnaire
ends here.)		
□ 1965 to 1979 (Pro	ceed to Q5)	
□ 1980 to 1999 (Pro	ceed to Q5)	
Q5) Marital status:		
□ Single	□ Married	
□ Divorced	□ Widowed	
Q6) Race:		
□ Malay	□ Chinese	🗆 Indian
\Box Other (Please spec	ify):	
Q7) Highest education	on achieved:	
\Box SPM	□ STPM/Pre-U	□ Diploma
□ Degree	□ Master	□ PhD
□ Other qualification	(Please specify):	
Q8) Monthly income	level:	
\Box RM1, 000 or below	w 🗆 RM	11, 001 to RM 3,000
□ RM3, 001 to RM 5	5,000 🗆 Ab	ove RM5, 000

Q9) How many times you used ms-commerce within one year?

- \Box 1-3 times \Box 4-6 times
- \Box 7-9 times $\Box \ge 10$ times

Section B: Determinants of consumers' trust on ms-commerce

This section seeks your opinion regarding the influence of cognitive and emotional trust in mobile payment and online consumer reviews aspects on trust in mscommerce. Respondents are asked to indicate the extent to which they agree or disagree with each statement using 5-point Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree] response framework. Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

No	Questions	Strongl Disagree	Disagree	Neutral	Agree	Strongly Agree	
	Cognitive Trust in Mobile Payment (CMP)						
CMP1	Mobile Payment always provides accurate	1	2	3	4	5	
	financial services.	1	2	5	т	5	
CMP2	Mobile Payment always provide reliable	1	2	3	4	5	
	financial services.	1	2	5	-	5	
CMP3	Mobile Payment always provide safe financial	1	2	3	4	5	
CIVII 5	services.	1	2	5	-	5	
	Emotional Trust in Mobile Payment (EMP)						
EMP1	I feel secure using Mobile Payment for my	1	2	3	4	5	
	payment.	1	2	5	-	5	
EMP2	I feel comfortable using Mobile Payment for	1	2	3	4	5	
	my payment.	1	2	5	т	5	
EMP3	I feel content using Mobile Payment for my	1	2	3	4	5	
	payment.	1	J	5	т	5	

	Profile Photo (PP)					
	Based on my past experience involved in ms-					
	commerce, taking into account only the photo					
	displayed in the profile,					
PP1	I believe that the people who wrote	1	2	3	4	5
LL1	reviews have a similar age to me.	1	2	3	4	5
PP2	I believe that the people who wrote	1	2	3	4	5
112	reviews look similar to me.	1	2	5	4	5
PP3	I believe that the people who wrote	1	2	3	4	5
113	reviews have a same social status as me.	1	2	3	4	5
	Linguistic Style (LS)					
	Based on my past experience involved in ms-					
	commerce,					
LS1	the reviews I read contain a similar	1	2	3	4	5
LOI	language to that which I use when I write.	1	2	5		5
LS2	the reviews I read employ a similar	1	2	3	4	5
202	vocabulary to that which I use when I write.	1	2	5		5
LS3	the reviews I read apply a similar writing	1	2	3	4	5
105	style to that which I use when I write.	1	2	5	-	5
	Reported Experience (RE)					
	Based on my past experience involved in ms-					
	commerce,					
RE1	the reviews I read describe incidents	1	2	3	4	5
KL1	similar to those I could tell.	1	2	5	+	5
RE2	the reviews I read narrate experiences	1	2	3	4	5
	similar to my own.	1		5	+	5
RE3	te reviews I read show consumer emotions	1	2	3	4	5
	that I have also felt.	1	<i>∠</i>	5	+	5

Section C: Trust on mobile social commerce

This section is seeking your opinion regarding the trust in ms-commerce. Respondents are asked to indicate the extent to which they agree or disagree with each statement using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) =neutral; (4) = agree and (5) = strongly agree] response framework. Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Trust in mobile social commerce					
TMS1	I believe that ms-commerce platforms will keep the promises and commitments they make.	1	2	3	4	5
TMS2	Ms-commerce platforms are trustworthy.	1	2	3	4	5
TMS3	I would rate ms-commerce platforms as honest.	1	2	3	4	5
TMS4	I think that the ms-commerce is responsible (e.g. good response time, delivery is on time).	1	2	3	4	5
TMS5	Generally speaking, I have confidence in the ms-commerce platforms.	1	2	3	4	5

Questionnaire ends.

Thank you for your participation.