

MOBILE SOCIAL MEDIA SHOPPING: AN
EXPLORATION FROM CONSUMERS' PERSPECTIVE

BY

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TABLE OF CONTENTS

Copyright Page..... ii

Declaration iii

Acknowledgement iv

Table of Contents v

List of Tables xii

List of Figures xiv

List of Appendices xv

List of Abbreviations xvi

Preface..... xvii

Abstract xviii

CHAPTER 1 INTRODUCTION 1

 1.0 Chapter Initiation 1

 1.1 Research Background 1

 1.2 Problem Statement 3

 1.3 Research Objective 5

1.3.1 General Objective	5
1.3.2 Specific Objectives	5
1.4 Research Questions	7
1.4.1 General Question	7
1.4.2 Specific Questions	7
1.5 Significance of Study	8
1.5.1 Theoretical Significance	8
1.5.2 Practical Significance	9
1.6 Conclusion	9
CHAPTER 2 THEORETICAL BACKGROUND	10
2.0 Chapter Initiation	10
2.1 Literature Review	10
2.1.1 Behavioral intention to adopt mobile social media shopping	10
2.1.2 Perceived Usefulness	11
2.1.3 Perceived Ease of Use	13
2.1.4 Perceived Playfulness	14
2.1.5 Visibility	15
2.1.6 Compatibility	16

2.1.7 Training and Support	18
2.2 Review of relevant theoretical models.....	20
2.2.1 Theory of Reasoned Action (TRA)	20
2.2.2 Theory of Planned Behavior (TPB)	21
2.2.3 Technology Acceptance Model (TAM)	22
2.2.4 Diffusion of Innovation (DOI)	23
2.2.5 Mobile Social Media Shopping	25
2.3 Proposed Conceptual Framework.....	27
2.4 Conclusion	28
CHAPTER 3 RESEARCH METHODOLOGY	29
3.0 Chapter Initiation	29
3.1 Research Design.....	29
3.1.1 Types of Research Design	29
3.1.2 Nature of Research Design.....	30
3.1.3 Time Horizon of Research Design	30
3.2 Data Collection Methods	31
3.2.1 Primary Data.....	31
3.2.2 Secondary Data.....	32
3.3 Sampling Design.....	32

3.3.1 Target Population	33
3.3.2 Sampling Element	34
3.3.3 Sampling Size.....	34
3.3.4 Sampling Location.....	36
3.3.5 Sampling Period	37
3.3.6 Sampling Frame.....	37
3.3.7 Sampling Technique.....	38
3.4 Research Instrument.....	39
3.4.1 Questionnaire.....	39
3.4.2 Questionnaire Design	39
3.4.3 Pretesting	41
3.5 Constructs Measurement.....	42
3.5.1 Origin of Questions	42
3.5.2 Operational Definition.....	45
3.5.3 Scale of Measurement	47
3.5.3.1 Nominal Scale	47
3.5.3.2 Ordinal Scale	48
3.5.3.3 Interval Scale	48
3.5.4 Summary of Scales used in Questionnaire	49

3.6 Data Processing.....	50
3.6.1 Data Checking	50
3.6.2 Data Editing.....	50
3.6.3 Data Coding.....	51
3.6.4 Data Transcribing	51
3.6.5 Data Cleaning	51
3.7 Data Analysis	52
3.7.1 Descriptive Analysis.....	52
3.7.1.1 Frequency Distribution	52
3.7.2 Statistical Analysis	53
3.7.2.1 Measurement Model Evaluation	54
3.7.2.2 Structural Model Evaluation	55
3.7.2.3 Assessing the Predictive Power	56
3.8 Conclusion	56
CHAPTER 4 DATA ANALYSIS	57
4.0 Chapter Initiation	57
4.1 Response Rate.....	57
4.2 Descriptive Analysis	58
4.2.1 Frequency Distribution of Respondents' Demographic Profile	58

4.2.1.1 Gender	58
4.2.1.2 Age	59
4.2.1.3 Ethnic Group	60
4.2.1.4 Occupation.....	60
4.2.1.5 Income	61
4.2.2 Frequency Distribution of Respondents' Additional Information	62
4.2.2.1 Mobile Devices Owned.....	62
4.2.2.2 Frequency of utilizing m-social media shopping in the past 12 months ..	63
4.3 Common Method Bias (CMB) Testing.....	64
4.4 Measurement Model Evaluation	65
4.5 Hypothesis Testing.....	71
4.6 Assessing the Predictive Power	76
4.7 Conclusion	78
CHAPTER 5 DISCUSSION AND POLICY IMPLICATIONS	79
5.0 Chapter Initiation	79
5.1 Summary of Statistical Analysis	79
5.1.1 Descriptive Analysis	79
5.1.1.1 Frequency Distribution	79
5.1.1.2 Measurement Model Evaluation	80

5.1.1.3 Hypothesis Testing.....	80
5.2 Discussion on Major Findings	81
5.2.1 PU and BI to adopt	81
5.2.2 PEOU and BI to adopt	82
5.2.3 PP and BI to adopt	82
5.2.4 VB and BI to adopt	83
5.2.5 CP and PU	83
5.2.6 CP and PEOU	84
5.2.7 TS and PU	84
5.2.8 TS and PEOU	85
5.2.9 CP and BI to adopt	85
5.2.10 TS and BI to adopt	86
5.3 Implications of Study.....	86
5.3.1 Theoretical Implications	86
5.3.2 Managerial Implications	87
5.4 Limitation and Future Directions.....	88
5.5 Conclusion	89
References	90
Appendices	103

LIST OF TABLES

Table 3.1: Suggested sample size in a typical marketing research	35
Table 3.2: Summary of Questionnaire Design.....	41
Table 3.3: Questions Origin.....	42
Table 3.4: Operational Definition.....	45
Table 3.5: Summary of Scales used in Questionnaire	49
Table 3.6: Rule of thumb for Cronbach's Alpha.....	54
Table 4.1: Gender.....	58
Table 4.2: Age.....	59
Table 4.3: Ethnic Group.....	60
Table 4.4: Occupation.....	60
Table 4.5: Income	61
Table 4.6: Mobile Devices Owned	62
Table 4.7: Frequency of utilizing m-social media shopping in the past 12 months ...	63
Table 4.8: Composite Reliability, Cronbach's α	65
Table 4.9: Average Variance Extracted.....	66
Table 4.10: Factor Loadings (Bold) and Cross Loadings.....	60
Table 4.11: Discriminant Validity (Fornell-Larcker Test)	69
Table 4.12: HTMT results.....	69
Table 4.13: Hypothesis Testing Results.....	71

Table 4.14: Predictive relevance, Q^2	75
Table 4.15: Effect sizes, f^2	76

LIST OF FIGURES

Figure 2.1: Theory of Reasoned Action 20

Figure 2.2: Theory of Planned Behavior..... 21

Figure 2.3: Technology Acceptance Model..... 22

Figure 2.4: Diffusion of Innovation Curve 24

Figure 2.5: Malaysian Mobile Users Phone Usage Behavior 26

Figure 2.6: Proposed Conceptual Framework 27

Figure 4.1: Result for Structural Model (Original Sample)..... 73

Figure 4.2: Result for Structural Model (T-statistics)..... 74

LIST OF APPENDICES

Appendix 3.1: Questionnaire 60

LIST OF ABBREVIATIONS

m-social media shopping	Mobile social media shopping
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
PP	Perceived Playfulness
VB	Visibility
CP	Compatibility
TS	Training and Support
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behavior
TAM	Technology Acceptance Model
DOI	Diffusion of Innovation
PLS-SEM	Partial Least Square Structural Equation Modeling
CR	Composite Reliability
AVE	Average Variance Extracted
CMB	Common Method Bias

PREFACE

This research project is submitted in partial fulfillment of the requirements for the degree of Master of Business Administration (Corporate Management). This research project is made up of the effort done from May 2017 until August 2017. This research project was supervised by Mr. Garry Tan Wei Han and written by Ms. Mooi Zhi Yin.

ABSTRACT

As mobile technologies continued to advance along with social media evolution, new platform has been made available for the consumers to purchase goods or services online, via their mobile device and through social media platforms, named as mobile social media shopping. In view that mobile social media shopping is an emerging information technology service, where its critical success factor is greatly dependent on the users, it is vital to decipher users' behavioral intention (BI). Thus, the main objective of this research study focus on examining the factors that influences the consumers' behavioral intention in adopting mobile social media shopping. In this research study, 200 valid data were assessed and analyzed using partial least square structural equation modeling (PLS-SEM). Findings of the study reported that perceived playfulness (PP), compatibility (CP) and TS (training and support) have significant impact on BI. Moreover, CP has also displayed significant influence on PU and PEOU. However, TS has shown to have significant impact on PU only, but not PEOU. The findings of this study are anticipated to contribute to both theoretical and practical world, in which the results are in hope to be able to serve as a guideline for future studies that are related to mobile social media shopping adoption.

CHAPTER 1: INTRODUCTION

1.0 Chapter Initiation

This section lay down an outline of the research project, in which it comprises the discussion on research background, problem statement, research objectives, research questions, significance of study as well as the overall conclusion recapitulate for this chapter.

1.1 Research Background

With the advent of internet, plenty of systems have been made available to the field of business, for instance virtual communities such as social media (Arnaboldi & Coget, 2016). Technologies and internet has revolutionized communication channel options for both marketers and consumers, and that has created a new world of possibilities and challenges for online businesses. With the rapid hike up of internet users in the society, it reveals that individuals are using new technologies, for example, Internet to satisfy their economic and social goals, which that makes virtual communities in a vogue today. Due to the fact mentioned, marketers have unveiled and foreseen the needs and efforts to be made for developing more useful mobile applications, programs as well as websites that are ergonomic to the users (Nilashi, Ibrahim, Reza Mirabi, Ebrahimi, & Zare, 2015).

In recent years, social media are very much enthralled and ubiquitous for social networking, content sharing and online accessing due to its potent ease of use, speed and reach to the target audience. Apart from that, the transformative power of social

media has extended beyond marketing and the aspects of consumer behavior (Aral, Dellarocas & Godes, 2013). Social media had provided the marketers with interactive, two ways communication environment that could possibly help to improve the consumers-marketers relationship (Chung, & Austria, 2012) and ultimately, helping them to better understand the consumer in an extensive manner. Today, mobile devices such as cell phones, tablets, notebooks have transformed into one of the basic necessities in everyone's lives, in which almost everyone owns at least one of those. Individuals tend not to be able to carry out their daily life properly without mobile devices due to the strong reliance on it in order to gain high level of convenience and connections. According to Ström, Vendel, & Bredican (2014), mobile devices and applications does not only provide new channels for marketers to reach their consumers, but it also permits the user to experience the integration of information search, phone functionality and social interaction among one another on their fingertips. For instance, a single tap on the device with internet connection permits the device owner to be connected to the outside world and to conduct any activities as prefer. With innovative improvements in mobile and wireless technologies today, numerous social media applications have evolved into the world of mobile (Kaplan, 2012). And with that, it sheds light on mobile social media shopping.

On the other hand, social media marketing is a newly emerged business practice that allows the marketers to market goods, services, ideas as well as information through online social media (Dahnil, Marzuki, Langgat, & Fabeil, 2014). In social media marketing, social media applications are adopted as an extension to complete the needs of traditional marketing as well as to attain various marketing objectives. And mobile social media shopping refers to the consumers' practice of purchasing online through social media platforms via the mobile devices.

1.2 Problem Statement

With the emergence of advanced technologies, social media platform have transformed into a powerful digital communication medium which permits the consumers to communicate, share information, and acquire knowledge regarding on the brands which they consider, review and acquire (Chappuis, Gaffey, & Parvizi, 2011). In year 2015, it was reported that there are approximately 44% of 7.5 billion of world populations are engaged with the internet, the number of internet users have hike up about 14% within 5 years ("Internet users (per 100 people) | World Bank", 2016). Malaysia displayed relatively high penetration of internet as it is a developing country with its commerce continuously expanding. Of all social network and messaging applications, Facebook and Whatsapp were shown to be the highest daily reach social media platform in Malaysia ("Malaysia daily reach of leading social platforms 2015 | Statistic", 2016). With the high percentage of mobile cellular subscriptions in Malaysia, which is about 144%, are found to be ahead of the United Kingdom and United States ("Mobile cellular subscriptions (per 100 people) | World Bank", 2016). Social media are increasingly accessed despite of time and location.

As stated in the e-commerce report published by Nielsen, the number of consumers shopping online has increased significantly in the past two years (Nielsen, 2014). It is stated that a minimal of 6 out of 10 Malaysians would opt for online purchases for instance purchasing of flight tickets, exhibition, performance and movie ticket, reserving for accommodation as well as tour reservation. Besides, most of the Malaysian populations are seen to incline towards social media platforms to express their ideas, thoughts and preferences, making the marketers to perceive that social media landscape in Malaysia to be vigorous. This concurs with the opinion of Hew, Tan, Lin and Ooi (2017), which proclaimed that mobile social media is one of the emerging issues in Asia region that is worth to be further explored.

Mobile devices ownership is growing persistently, almost half of the consumers owning all three smartphones, tablets and even notebook today. According to the statistics reported, the Asia Pacific's smartphone market possesses an upward trend and smartphone market in Malaysia is expected to grow about 1% annually in the future ("Smartphone users in Malaysia 2015-2021 | Statistic", 2016). In view with such significant increase in smartphone adoption rate in Malaysia and constant growth of social media platform, it permits more business and brand owners to explore and adopt mobile marketing and advertising. Apart from that, the adoption of social media platform also permits two ways interaction between the marketer and consumer, in which it helps to gain consumer insights in a more effective manner (Hudson, Huang, Roth, & Madden, 2016). And consequently, the service providers are able to fulfill and deliver goods or services that meet the consumers' requirement. Conversely, traditional shopping requires consumers to have more spare time in order for them to travel for distance to visit the bricks and mortar locations for purchasing and if need, queuing up for payment. Living in such a hectic context, very little to no people would have much time for shopping in the malls as people are always bounded with heavy workloads in their life. What's more, the Malaysia traffics are always under congestion, which that will make the consumers' journey to shop more challenging and ineffective.

As shown in the forecast from Deloitte 2015 holiday survey, 78% of the shoppers utilized their mobile devices for attaining a wide range of shopping information and activities, for instance searching for product information and reviews, comparing prices and more (Deloitte Development LLC, 2015). This context makes mobile shopping a better option for shoppers as compared to the traditional methods, for example having to visit the physical retail stores or via the wired-internet computers. Integrating of technologies into the mobile shopping context do provides the shopper with features of "portable" and "always on", this allows them to visit various mobile websites for shopping at anywhere, anytime (Wong, Tan, Ooi, & Lin, 2015a).

Numerous past literatures have shown studies on the role of mobile internet in predicting consumers' intention to adopt. However, there is very little from mobile shopping perspectives (Wong et al., 2015a). And according to Wong, Lee, Lim, Chua and Tan (2012), the determinants of consumers' mobile shopping adoption are more to investigate for emerging and developing markets, Malaysia. Recognizing that mobile social media shopping is another form of mobile shopping, the study on how consumers accept mobile social media shopping is essential.

1.3 Research Objective

1.3.1 General Objective

To examine factors that affect consumers' behavioral intention in adopting mobile social media shopping.

1.3.2 Specific Objectives

1. To study the relationship between Perceived Usefulness (PU) and consumers' behavioral intention in adopting mobile social media shopping.
2. To study the relationship between Perceived Ease of Use (PEOU) and consumers' behavioral intention in adopting mobile social media shopping.
3. To study the relationship between Perceived Playfulness (PP) and consumers' behavioral intention in adopting mobile social media shopping.

4. To study the relationship between Visibility (VS) and consumers' behavioral intention in adopting mobile social media shopping.
5. To study the relationship between Compatibility (CP) and Perceived Usefulness (PU) on consumers' behavioral intention in adopting mobile social media shopping.
6. To study the relationship between Compatibility (CP) and Perceived Ease of Use (PEOU) on consumers' behavioral intention in adopting mobile social media shopping.
7. To study the relationship between Training and Support (TS) and Perceived Usefulness (PU) on consumers' behavioral intention in adopting mobile social media shopping.
8. To study the relationship between Training and Support (TS) and Perceived Ease of Use (PEOU) on consumers' behavioral intention in adopting mobile social media shopping.
9. To study the relationship between Compatibility (CP) and consumers' behavioral intention in adopting mobile social media shopping.
10. To study the relationship between Training and Support (TS) and consumers' behavioral intention in adopting mobile social media shopping.

1.4 Research Questions

1.4.1 General Question

Which factor possesses greatest impact on consumers' behavioral intention in adopting mobile social media shopping?

1.4.2 Specific Questions

1. Does PU influence consumers' behavioral intention in adopting mobile social media shopping?
2. Does PEOU influence consumers' behavioral intention in adopting mobile social media shopping?
3. Does PP influence consumers' behavioral intention in adopting mobile social media shopping?
4. Does VS influence consumers' behavioral intention in adopting mobile social media shopping?
5. Does CP influence PU on consumers' behavioral intention in adopting mobile social media shopping?
6. Does CP influence PEOU on consumers' behavioral intention in adopting mobile social media shopping?

7. Does TS influence PU on consumers' behavioral intention in adopting mobile social media shopping?
8. Does TS influence PEOU on consumers' behavioral intention in adopting mobile social media shopping?
9. Does CP influence consumers' behavioral intention in adopting mobile social media shopping?
10. Does TS influence consumers' behavioral intention in adopting mobile social media shopping?

1.5 Significance of Study

1.5.1 Theoretical Significance

This paper serves to narrow or close the gap as numerous past literatures have shown studies on the role of mobile internet in predicting consumers' intention to adopt, however, there is very little from mobile shopping perspectives (Wong et al., 2015a). And according to Wong et al. (2012) the determinants of consumers' mobile shopping adoption are more to investigate for emerging and developing markets, such as Malaysia. Therefore, this research study intends to add values and provide more valuable insights on the existing literatures that revolve around mobile social media shopping. Concurrently, it also provides magnificent contribution towards the Technology Acceptance Model (TAM) and Diffusion of Innovation (DOI) model in the world of academic and literature. The significant factor/variables which could explain the consumers' behavioral intention in adopting mobile social media shopping are adopted from the model and included in our research framework for this

paper. On top of that, additional variables such as Perceived Playfulness (PP), Visibility (VS), and Training and Support (TS) are being integrated to the research framework as well in order to capture meaningful insights from different perspectives and attributes.

1.5.2 Practical Significance

The main purpose of this paper is to highlight the determinants which influence the consumers' behavioral intention in adopting mobile social media shopping. Findings from this study are believed to provide valuable insights to the marketing industry, and provide aids to the mobile and digital marketers, application developers in terms of setting their marketing/advertising strategy right and in a way that suits consumers' desires and fantasies. Also, it tends to permit the better delivery of information to target audience with better effectiveness and efficiency as well as the development of right tools/platform for shoppers to shop online. With better understanding on the psyche of online shopper and the consumer behavior, marketers and application developers could be more beneficially and effectively in developing the right tools/platform to secure, attracts and encourage shoppers to adopt mobile social media shopping and ultimately purchase online.

1.6 Conclusion

This chapter explored about the research background and the research problems. On top of that, the goals of research, research questions as well as the significance of study had also been included. In the following chapter, there will be a review of literature related to the relevant theoretical model, and hypotheses will be discussed in response to the respective research questions.

CHAPTER 2: THEORETICAL BACKGROUND

2.0 Chapter Initiation

This chapter encompasses the discussion on various factors which could affect the shoppers' behavioral intention. Relevant empirical research is reviewed and previous studies were more on the role of mobile internet in predicting consumers' intention to adopt. This section also guides the development of theoretical framework and hypothesis generating.

2.1 Literature Review

2.1.1 Behavioral intention to adopt mobile social media shopping

According to Ding, Guo, Zhang, Qu, and Liu (2016), numerous researches have been conducted to study the factors that could influence the behavioral intention of consumers. Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM) are the best known research model for studying consumers' behavioral intention. Behavioral intention is delineated as a perceived notion between a person's own self and some action (Jaccard & King, 1977). In other words, it represents a person's intention to perform a given action (Islam, Kim Cheng Low & Hasan, 2013). Intention was found to possess direct impact on the consumers' adoption towards new innovation, technology or services (Ajzen, 1991). Hence, abundance of researches has included intention as the predictor for consumers' adoption towards new innovation technology or services (Irani, Dwivedi & Williams, 2008). Not only that, intentions could also capture the motivational factors that could influence one's behaviors. With that, intentions serve as the indicators of how hard people are willing to attempt and

how much effort they are planning to give in order for them to engage in a particular behavior (Ruiz Mafé, Sanz Blas & Fernando Tavera-Mesías, 2010).

On the other hand, the term adopts or adoption refers to one's acceptance and continuance to utilize a particular idea, service or goods (Rogers, 2003). Adoption could often be related to consumers' satisfaction, utilization and even implementation. This is further laid down by Liu and Guo (2008), both of these researchers claiming that there are various measures could be used for measuring consumers' adoption, and one of which that are commonly used are the consumers' satisfaction. Intention has widely appeared in most of the mobile based studies. For instance, Wong et al. (2015a) have used intention to determine the consumers' intention to adopt mobile shopping. Furthermore, a more recent example that were portrayed by Tan, Lee, Lin and Ooi (2017) was the study that examine the consumers' intention to adopt mobile applications as another channel to purchase tourism related product and services via the mobile devices.

2.1.2 Perceived Usefulness (PU), 1st independent variable

PU is one of the core construct in TAM, in which it is referring to the extent that an individual believes in adopting new specific technology will improve one's productivity and performance (Davis, Bagozzi & Warshaw, 1989). Being relevant to the current research context, adoption of mobile social media shopping with the advanced technology that the society possesses now, is by means referring to the shoppers' perception towards the utilization of mobile social media as a shopping platform which tend to provide higher efficiency and better online shopping experience to the shoppers. It is these perceptions that could influence the shopper's intention towards mobile social media shopping and their intention to adopt and purchase. According to Venkatesh and Davis (2000), PU of a technology was found to be one of the strong determinants that could drive shoppers' purchase intention. Consumer would be more likely to shop online if they could gain benefits such as

convenience, easy checkout process, easy access of product information and availability, time saving, customization of product and more. Competitive advantageous social networking site which provides online purchasing to its consumers is positively related to their intention to shop (Vijayasathy, 2004). This is proven in the previous study by Kan, Hung, Yang, Hsieh and Tang in 2010, 500 college students in Taiwan were being selected and studied on their mobile shopping adoption, perceived usefulness was found to have significant impact with the consumers' intention (Wong et al., 2012). Moreover, PU has also been confirmed to be the most important factor in mobile music acceptance (Sim, Tan, Wong, Ooi & Hew, 2014).

The “always on” and “portable” features of mobile devices permit users to be able to connect to the internet and shop online at any time anywhere. Especially with the emerged of social media applications that made available on the mobile devices, users can now enjoy more benefits for instance social media shopping that brings convenience and allows effective communications, are in fact causing user to have stronger adherence and positive intention to adopt mobile social media shopping. As for example in the context of Facebook, users (sellers and buyers) are allowed to post status updates, comments, pictures, videos, private messages or even involved in group discussion (Smock, Ellison, Lampe & Wohn, 2011), these makes users to enjoy high degree of convenience and in turns causing mobile social media shopping to be more practical, less hassle and effective.

Therefore, the following hypothesis is proposed:

H1: PU is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

2.1.3 Perceived Ease of Use (PEOU), 2nd independent variable

According to Davis's study (as cited in Marangunić and Granić 2014), PEOU of a technology or system, was defined as the extent to one's beliefs that utilization of a specific technology or system would be effortless, easy to navigate and use. Elements of system quality that includes ease of navigation through online store are the strong determinants in attracting consumers to shop online (Hsieh & Tsao, 2013). If a system or technology which is to be adopted is perceived to be complex and difficult to operate, the user would tend to be less likely to accept and use the particular system or technology (Tan, Ooi, Leong & Lin, 2014b), as they find it difficult to learn and manage. However according to Maamar (2003), mobile devices with small display screen could cause the input mechanism to be challenging for the user, and poor image resolution could further induce the feelings of frustration among consumers throughout their browsing and shopping experiences. Besides, mobile devices which have limited hardware support could also make mobile shopping more challenging, as the user might experience problems such as poor lifespan of battery power, easily heat up of the devices, inability to support certain software program and so forth. With all these potential challenges being faced by the user, they would need to contribute larger amount of effort when adopting mobile social media shopping. Therefore, it is crucial that the mobile devices must possess easy navigation structure, simple and clear interface as well as easy to process (Ranganathan & Grandon, 2002). Besides, Yang also stated that easy navigation of mobile social media enables consumers to perceive that mobile shopping to be user friendly (Yang, 2010). On the basis of above discussion, therefore it is hypothesize:

H2: PEOU is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

2.1.4 Perceived Playfulness (PP), 3rd independent variable

PP has been introduced into the original TAM by Moon and Kim (2001) as they perceived that the original TAM which focus on extrinsic factors or utilitarian value approach are insufficient to determine one's behavioral intention. In the study of Moon and Kim (2001), PP was included as one of the intrinsic motive to examine how PP could affect one's acceptance towards the system. In the study, the authors have also delineated PP as the strength of one's belief that interacting with the system will bring the users' intrinsic motives to fruition. Based on the past literature, PP could be defined under three dimensions, in which it reflects the extent that the individual deems that one's attention is focused on the interaction with World Wide Web, is intrigued during the interaction and perceives the interaction to be interesting or intrinsically enjoyed (Moon & Kim, 2001). Abide with the theory of flow, researchers had also suggested to include PP as one of the construct of interest into the TAM, as such it allows the users' pleasant feelings arose in the interaction to be captured (Moon & Kim, 2001). In other words, playfulness was also defined as the reason or belief developed by one's experiences with the environment (Jacky, 2006).

In the context of mobile social media shopping, it is important that the social media sites must be able to deliver enjoyment, excitement and pleasure to the users throughout their usage, in order to stimulate the users' level of acceptance and intention to shop. Rauniar, Rawski, Yang and Johnson (2014) have defined PP of social media to be the degree of which social media related activities are perceived to be interesting, fun and enjoyable. Social media applications on mobile encourages users to have social interactions and exchange of information among one another easily, for instance the share button allows user to share interesting articles, posts, pictures, videos and more to their social circle via their mobile devices with a single click. And all of which are believed to be able to bring substantial amount of pleasures to the users as well as to make them feel more engaged and entertaining. When a social media user enjoys using the system or service, he or she is more likely to perceive the system to be useful and accept it (Rauniar et al., 2014). Past studies

have validated that PP has a significant positive impact over the consumers' usage intention in innovative mobile app service (Hur, Lee & Choo, 2017). Furthermore, PP has also displayed to be the significant direct antecedents of the users' intention to adopt mobile services in several e-commerce studies (Ko, Kim & Lee, 2009; Revels, Tojib & Tsarenko, 2010). And the following hypothesis is posited:

H3: PP is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

2.1.5 Visibility (VB), 4th independent variable

As delineated in the past study, VB which refers to the degree to which an innovation is perceived to be readily discernible to others, has found to provide remarkable explanation on one's perception of adopting an information technology (IT) innovation (Moore & Benbasat, 1991). In accordance with that, Xia and Lee (2000) have also taken VB into consideration as one of their variables of interest, under their study of user's perception and acceptance of IT innovation. Some of the researchers have named VB as observability. In the diffusion of innovation theory, it states that one's rate of adoption towards an innovation is positively influenced by one's perception on the observability of an innovation (Rogers, 1995).

Therefore, consumers' behavioral intention to adopt an innovation is more likely to increase when he or she feels effortless and easier to observe the outcomes of an innovation. For instance, Facebook possess features that allows the sellers and buyers to have effective communications prior and throughout the purchasing process, allows the consumers to solve their queries easily, provide feedbacks and are able to make the transaction effectively. In addition to that, social media networking sites that fosters users to have social interaction permits the users to have the opportunity to raise questions, share insights and induce discussion about the innovations among the social circles, which that would influence the users to adopt an innovation when

they observed the benefits or realized that their peers are as well utilizing the system. As effortless and easier recognition or verbalization of the functions or benefits of particular innovation tend to stimulates more rapid diffusion of respective information across the users (Ho & Wu, 2011). Al-Jabri and Sohail (2012) in their study on mobile banking adoption had demonstrated that VB has relationship with the adoption of mobile banking. As discussed above, it is hypothesize that:

H4: VB is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

2.1.6 Compatibility (CP), 5th independent variable

CP is a foundational construct in innovation diffusion theory proposed by Rogers, in which it reflects to the degree to which the users' perception and evaluation on the innovation is compatible with their personal values, beliefs, habits, past experiences and needs (Rogers, 2003). Previous studies have indicated the level of significance of CP on influencing one's intention to adopt a new innovation or technology (Tornatzky & Klein, 1982), and it has shown its extensive presence not only in general IT and IS context, but also in the mobile context (Schierz, Schilke & Wirtz, 2010; Mallat & Tuunainen, 2008). As proposed, one is more likely to experience high level of certainty on accepting as well as adopting an innovation when the innovation product is compatible with one's needs and practices. In the context of mobile social media shopping, if mobile social media shopping fits the consumers' lifestyles, situation and needs, it would be compatible and hence it would be preferred over other alternative shopping modes. Therefore, social media sites or mobile applications which targets social media shopping have to be designed in such a way that it is consistent and well matched with the consumers' behaviors and lifestyles in order to stimulate the consumers' intention in adopting.

In addition to that, some researchers have also mentioned that constructs in TAM alone tend not to have sufficient predictive power for estimating the consumers' behavioral intention, but integrated model does (Wu & Wang, 2005). PU when coupled with innovation technology that is compatible with consumers' desires could positively impact the consumers' behavioral intention to adopt particular innovation. This is proven by the study of Ooi and Tan (2016), in which these researchers have looked into the adoption of smartphone credit cards and they have discovered that CP do have significant influence on PU. Again, this matter of fact has been further laid down by (Ozturk, Bilgihan, Nusair & Okumus, 2016), in which they stated that the innovative goods which are compatible with consumers' past consumption habits, and could offer greater value to consumers, tend to drive consumers' willingness to accept and adopt the innovative goods.

Besides, CP has also been found to have momentous impact on PEOU, in which an innovation or system which is perceived to be effortless, easy to navigate and provide relatively high degree of convenience to the users as well as compatible tend to drive the users' acceptance on mobile social media shopping (Ewe, Yap & Lee, 2015). According to Ooi and Tan (2016), they have showed the direct effect of CP on users' PEOU in the context of smartphone credit card adoption by mobile users. And on top of that, Tornatzky and Klein (1982) have also mentioned that the persistent consumers' expectation on the possibility of easier task completion has led CP to be a considerable factor that affects PEOU. Therefore, social media sites, layouts, applications that offer higher degree of familiarity to the users across devices tend to influence the users' perception, and make them to perceive it as easy to use, and in turns stimulate their behavioral intention in adopting. Based on above discussion, hypotheses are suggested as follow:

H5: CP is positively related to PU.

H6: CP is positively related to PEOU.

H9: CP is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

2.1.7 Training and Support (TS), 6th independent variable

TS is another crucial element that could influence the users' acceptance and intention in adopting new innovation, technology, or system. This is explained and stated in the prior research, whereby theory and evidence assert that one's perceptions in new information technology or system acceptance may increase over a period of time with adequate support (Igarria, Zinatelli, Cragg & Cavaye, 1997). From the perspective of user TS, it is crucial that the users are surrounded with necessary resources and technology to facilitate and assist users in utilizing and accepting the new system (Smith & Salvendy, 2001). In order to stimulate and raise consumers' intention to adopt a new system, for instance mobile social media shopping, it is essential that the consumers must have better understanding on mobile social media shopping, how to utilize the innovation as well as to have sufficient guidance and support being provided. In addition to that, Tsai and LaRose (2015) have also emphasized that sufficient knowledge and skills must be available to the users in order for them to successfully utilize the new innovation, while in an organization, users must be given sufficient technical TS.

TS is believed to have considerable effects towards PU and PEOU respectively in which a number of past studies have proposed that when sufficient TS is available to the users, it will efficiently enhance the users' capabilities as well as their perception towards an innovation or system usefulness and ease of use (Igarria et al., 1997). An empirical investigation has been conducted on the factors influencing mobile e-learning adoption intention, in which the researchers have further laid down the facts that training students on the system would subsequently enhance the students' awareness on the system's usefulness as well as its ease of use (Khanh & Gim, 2014). When one is equipped with satisfactory level of TS, it tends to improve the user's self-efficacy, which in turns will ameliorate PU and PEOU (Torkzadeh & Van Dyke, 2002). Similarly, when consumers are flourished with sufficient training program and technical support as needed, consumers is more likely to perceive that mobile social media shopping is useful and less tedious to operate as well as could help them to

attain higher level of achievement. Therefore, the hypotheses are formulated as follow:

H7: TS is positively related to PU.

H8: TS is positively related to PEOU.

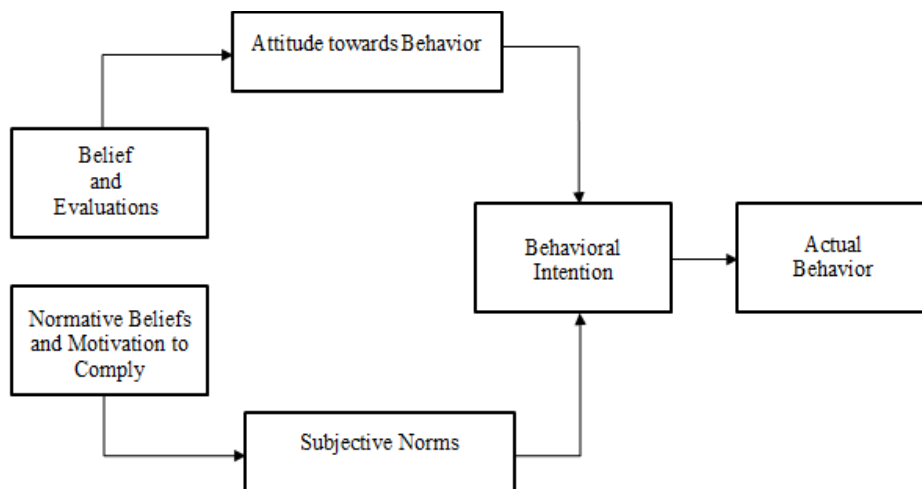
H10: TS is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

2.2 Review of relevant theoretical models

2.2.1 Theory of Reasoned Action (TRA)

The Theory of Reasoned Action was developed in 1980 by Ajzen and Fishbein to study how consumers' behavioral change attempts can impact the behavioral intention (Sheppard, Hartwick, & Warshaw, 1988). According to TRA, one's attitude towards a behavior is influenced by one's beliefs on the consequences of the behavior, coupled with one's evaluation of the consequences (Davis et al., 1989). While one's normative beliefs and motivation to comply with the norms could also contribute to the impact on behavioral intention (Davis et al., 1989). However, there are some limitations with this model. It possesses a significant risk of contradicts between attitudes and norms because attitude could be referred as norms and norms could be claimed as attitudes too. Besides, it also assumes that there would be free of restrictions when one has the intention to act. However, in fact there are numerous limitations for instance, time, ability, environment and so forth. Thus, the Theory of Planned Behavior (TPB) was developed in attempt to overcome this limitation.

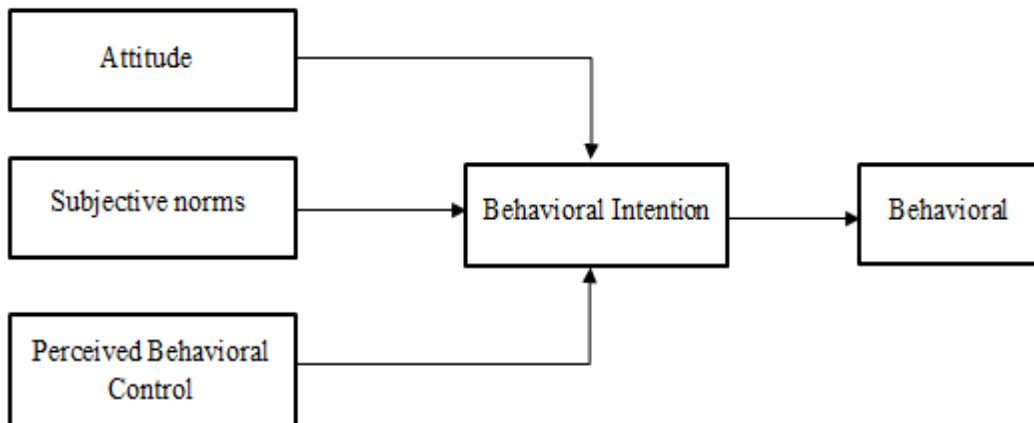
Figure 2.1 Theory of Reasoned Action



2.2.2 Theory of Planned Behavior (TPB)

According to Ajzen (1985), besides the ideas of attitudes and subjective norms in TRA, TPB has integrated the concept of perceived behavioral control, which the idea is taken from the self-efficacy theory (SET). TPB postulates that the incorporation of one's attitude towards behavior, subjective norms, and perceived behavioral control which could contribute to the molding of one's behavioral intentions and behaviors (Ajzen, 1985). In other words, it suggests that one's action is guided by the factors of behavioral, normative and control beliefs without specific information system usage. As mentioned by Al-Debei, Al-Lozi, and Papazafeiropoulou, (2013), with the presence of certain shortcomings in TPB, such as its failure in explaining large proportion of variance in behavior and intention, it had contributed to the emergence of TAM. Apart from that, TPB is also found to experience difficulties in applying and possesses the risk of poor reliability (Casey & Wilson-Evered, 2012).

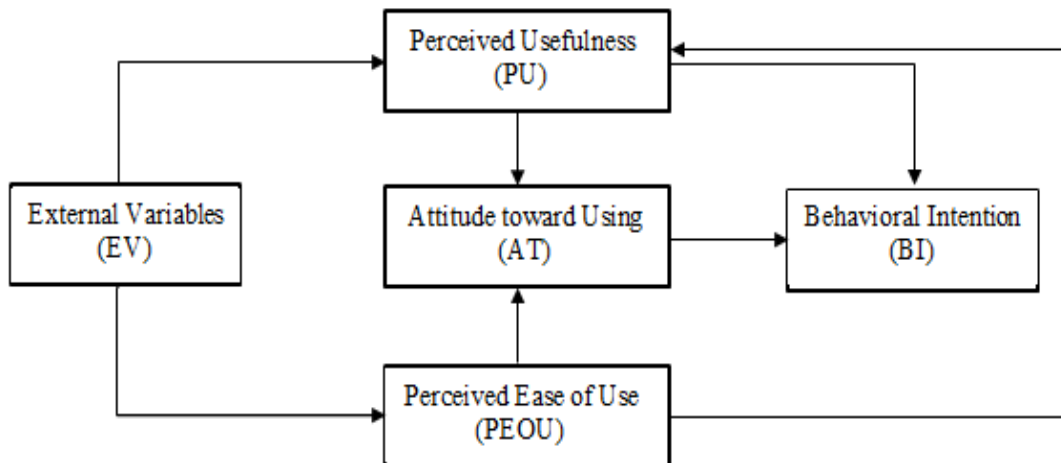
Figure 2.2: Theory of Planned Behavior



2.2.3 Technology Acceptance Model (TAM)

TAM, which is one of the most popular research models, was developed in 1989, and proposed by Fred Davis. It enables researcher to estimate the use and acceptance of information systems and technology by a user. TAM proposed that users' acceptance towards a specific technology can be explained by Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) of the respective technology (Marangunić & Granić, 2014). PU refers to the extent of one's belief on the utilization and adoption of technology which could aid in enhancing one's job performance while PEOU implies one's belief on ease of navigation of particular technology (Gengeswari & Sharmeela-Banu, 2016). TAM has been a robust model that was extensively used to study the adoption of various consumer technology for instance in the field of mobile commerce, mobile learning and online banking (Chaiprasit, 2015). However, since the original model considered only two antecedents and is not able to reflect thoroughly the overall influences on consumers' acceptance (Davis et al., 1989), hence many academicians have suggested to extend the original TAM by integrating additional constructs to increase its predictive power on consumers' behavioral intention to adopt, for instance perceived playfulness (Moon & Kim, 2001), visibility (Rogers, 2003; Moore & Benbasat, 1991), compatibility (Rogers, 2003; Wu & Wang, 2005), training and support (Wu & Wang, 2005).

Figure 2.3: Technology Acceptance Model



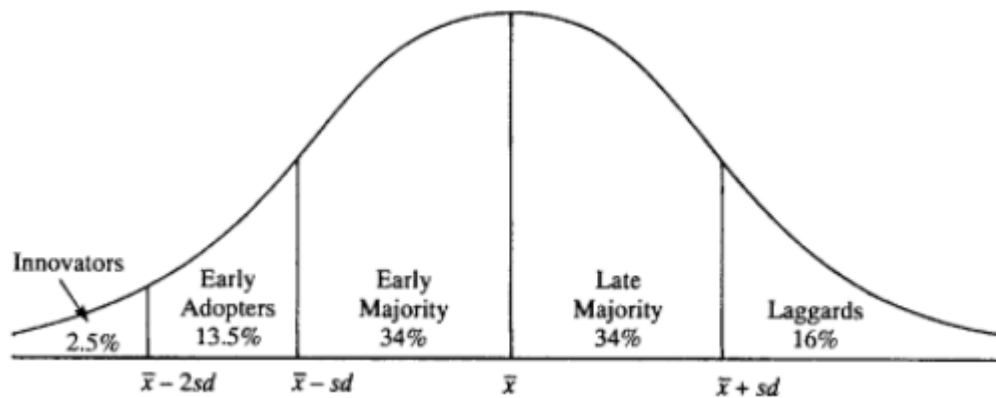
2.2.4 Diffusion of Innovation (DOI)

DOI theory was initially discussed in 1903 by Gabriel Tarde, which it leads to the rise of S-shaped diffusion curve while Ryan and Gross have then introduced the adopter categories in 1943. DOI was eventually popularized by Everett Rogers, which is deemed to be a valuable change model for guiding technological innovation in which the innovation is being modified and presented in ways as to satisfy the needs across all level of adopters (Kaminski, 2011). According to Rogers, there are five different segments of adopters being distinguished, and over time, the innovation idea or product spread and diffuse across the populations until the saturated point is reached (Rogers, 2003). The five categories are represented by a bell curve, in which it encompasses 2.5 percent of innovators, 13.5 percent of early adopters, 34 percent of early majority, 34 percent of late majority and lastly the laggards composed of 16 percent (Rogers, 2003). The innovators are perceived to be venturesome, while early adopters are the group of respect, followed on by early majority, which this group of population will deliberate for some time before they could take up the new ideas completely. Late majority are also known as the skeptical, whereby the new innovations are approached in a manner of skeptical and cautious air. Lastly, laggards are the traditional pieces in which they are the last to adopt an innovation in the social system; they often tend to be suspicious about new ideas and of change events.

In addition to that, attributes of innovation in DOI aids to reduce the uncertainty towards an innovation, there are five innovation characteristics, relative advantage, compatibility, complexity, trialability and observability. As stipulated by Rogers (2003), relative advantage refers to the degree to which an innovation is being perceived as superior than the idea it supersedes. It carries the same intention as convenience and PU (Wong et al., 2012). Compatibility, on the other hand is defined as the degree to which an innovation is perceived as consistent with the potential adopters' needs, existing values as well as past experiences. While complexity revolves and is substitutable with PEOU, in which it represents the degree to which an innovation is perceived to be relatively difficult to understand and operate.

Trialability is defined as the degree to which an innovation may be assessed on a limited basis before an innovation being adopt. Lastly, observability which some researchers named it visibility implies the extent to which the results of an innovation are visible to the potential adopters. It is indicated in literatures that the above measures are correlated with the rate of adoption of innovation. However, one of the drawbacks seen from this model is that DOI focus only at the adoption stage of innovation but not the post adoption stage which is also valuable towards an acceptance research (Zhu & He, 2002).

Figure 2.4: Diffusion of Innovation Curve



2.2.5 Mobile Social Media Shopping

Fuelled by the increasing technology advancement in mobile devices and development of various telecommunication networks had granted the opportunities for mobile commerce to grow rapidly. The recent boom in mobile commerce does not only change the conventional business approaches, but it has also rendered high degree of convenience to the consumers, for instance allow the consumers to purchase items online, make payments and more. Of all mobile commerce services, mobile shopping is one of each which receives a great deal of attention in recent years.

According to Wong et al. (2012), mobile shopping is defined as any monetary transactions which are related to the purchases of goods and services via the internet enabled mobile devices, while mobile social media shopping is by means the above mentioned activities are conducted through the social media platform. On the other hand, mobile commerce is elucidated as any transaction with monetary value which is being performed over the wireless telecommunication network, in a direct or indirect manner (Barnes, 2002). In response to the booming mobile commerce trend and increasingly used of social media platforms among the communities, various business owners have involved in mobile advertisement as to target these groups of users.

According to Chung and Austria (2012), social media can be known as a business strategy as well as an outlet for business owners to conduct broadcasting, whereas social networking is a tool or utility which people used to build connections with one another. To date, social media has been growing phenomenally and it is expected to continue its growth extensively in the near future. And this had unleashed the gap for mobile social media shopping to occur. As stated in the PwC Total Retail 2016 report, practically there are approximately three quarters of Malaysian respondents claimed that they access various promotional offerings while shopping mainly through social media (Mahalingam, 2016). And as a matter of fact, the consumers in South-East Asia had portrayed relatively strong desire to use social media in forming associations with their preferred brands. In addition to that, PwC also revealed that around 70-75

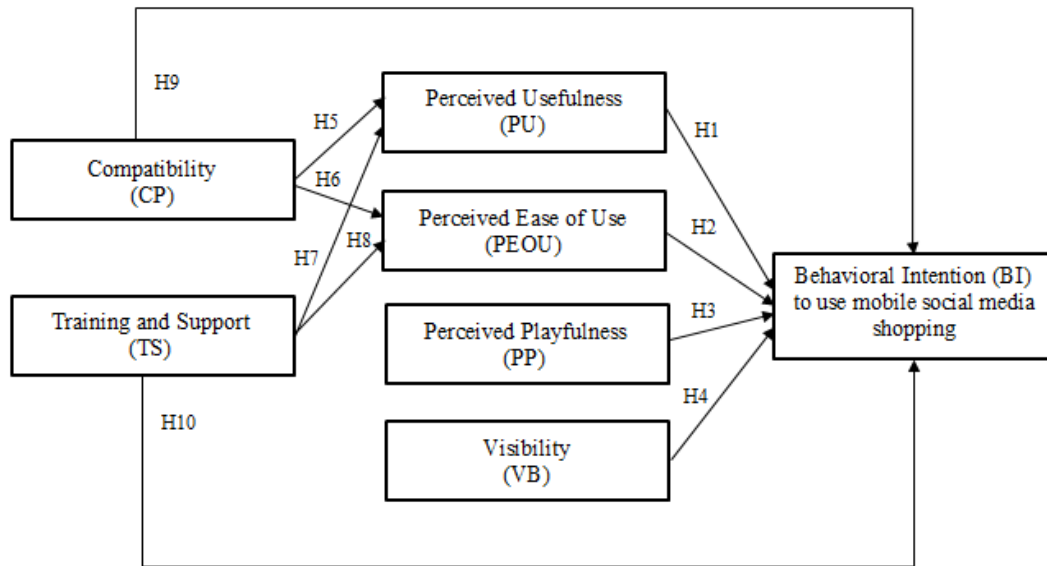
percent of consumers surveyed in Malaysia, Singapore, and Thailand do reported that they often make purchases online through their mobile phones (Mahalingam, 2016). And the rates of mobile phone purchasing usage in all three South-East Asia countries mentioned above have gone beyond the global average rate of 54 percent. Furthermore, mobile social media shopping service is convinced further as Nielsen Smartphone Insights 2014 reported that Malaysian mobile users usually spend 20 percent using their smartphones on social media and 9 percent on shopping.

Figure 2.5: Malaysian Mobile Users Phone Usage Behavior



2.3 Proposed Conceptual Framework

Figure 2.6: Proposed Conceptual Framework



Adapted from: (Venkatesh & Davis, 2000; Rogers, 2003; Igarria, Zinatelli, Cragg & Cavaye, 1997; Moon & Kim, 2001)

The proposed research model for this study was developed through the integration of TAM model, coupled with DOI theory as well as some of the valuable constructs that are proven to have meaningful prediction towards behavioral intention in technology acceptance among users. And of all, mobile social media shopping is considered as one of the technology based innovation.

TAM model by Venkatesh and Davis (2000) was seen to have frequent adoption for studies which involve the investigation of technology or innovation acceptance due to its robustness. TAM consists of two variables of interest, PU and PEOU, and both have been exploited in our current study. Although TAM is a distinguished model, yet it is insufficient or incomplete to predict the users' intention. Thus, apart from TAM, DOI theory by Rogers that span across variables such as relative advantage, compatibility, complexity, trialability and observability have also shown to be extensively used by various researchers, which intended to measure the users' perceptions of adopting an IT innovation (Moore & Benbasat, 1991). However, only CP and VB was included in our research framework because both of these constructs are found to have better consistency on explaining the consumers' intention in adopting mobile services or technology. In addition to that, TS have also been suggested as an influential element that could facilitate new technology acceptance by users. Therefore, TS is being adopted in order to have a rigorous exploration on the current study. Furthermore, Moon and Kim (2001) have also proposed to include PP as one of the intrinsic motive to examine its ability to affect one's acceptance towards the system.

2.4 Conclusion

Past studies were reviewed under this chapter, and with that the research model was formulated based on the literatures reviewed. Relevant hypotheses have also been developed and all variables of interest have been discussed appropriately. The upcoming chapter will be discussing on the research methodology as needed.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Chapter Initiation

Under this section, there will be discussion on design of research, methods for collecting data, design of sampling, tools of research, the variables and measurement as well as data analysis technique that will be applied in this research.

3.1 Research Design

Design of research is described as a structured and organized plan that steer the research study towards to attain its stated research goals (Burns & Bush, 2014). As mentioned by Malhotra, Birks and Wills (2012), quality research design shall encompass and outline details and specific procedures for obtaining the necessary information to explain particular research problems.

3.1.1 Types of Research Design

There are different types of research approach, which it can be either qualitative, quantitative, or mixed methods (Creswell, 2014). Meanwhile in this research study, quantitative research design has been applied. Quantitative research design allows researcher to gather meaningful numerical data as well as to perform necessary analysis via the aids of statistical tools and in turns allow the researchers to explicate the event being explored. Quantitative research design is applied in current study because it permits us to determine the significance of the proposed hypotheses (Sekaran & Bougie, 2013). In addition to that, Sekaran and Bougie (2013) have also stated the ability of quantitative research design which it allows the study to ascertain

the association among the dependent and independent variables. One of the data collection methods for quantitative research design is survey and questionnaire; therefore in this research study, questionnaire is used to collect useful and relevant information from the target respondents as to attain the purpose of this research.

3.1.2 Nature of Research Design

In general, research design can be classified into two important categories, either exploratory or conclusive research. Conclusive research could be further subdivided into casual or descriptive research, which it is applied to expound specific phenomenon, hypotheses and relationships between variables. As stipulated by Malhotra et al. (2012), conclusive research tends to collect data via quantitative analysis and it usually requires large samples to be obtained for a better accuracy analysis. Further down, a research study is claimed to be descriptive if it aims to investigate or define a problem, occurrence, or society's behavioral intention towards an issue (Sekaran & Bougie, 2013). With the aid of questionnaires, descriptive study also allows the researchers to better capture the insights about the target respondents' behaviors towards an issue. Having the research objective of examining the factors influencing consumers' behavioral intention in adopting mobile social media shopping, descriptive research is adopted for this study.

3.1.3 Time Horizon of Research Design

Time horizon undertake for a research design can be of a longitudinal study or a cross-sectional study. In this research study, cross-sectional study is adopted due to the factor of time constraints in conducting the study, in which the time horizon available for conducting this study was limited. At the same time, the study was also intended to look at a phenomenon or issue at a particular time horizon only, therefore cross-sectional study is best fitted. As proposed by Saunders, Lewis and Thornhill,

(2009), cross-sectional study is favored in a research when the research destined to examine the phenomenon instantaneously and when a research study accepts data collection from sample of population elements for only once (Malhotra et al., 2012). In view of the cross-sectional study characteristics, the information collected for the aspects of consumers' intention towards the adoption of mobile social media shopping reflects only the consumers' adoption intentions which exist at the point when they submit their responses via the questionnaires.

3.2 Data Collection Methods

Methods for data collection refer to techniques which researcher used to gather and measure information on variables of interest, which the sources of data could be primary or secondary (Sekaran & Bougie, 2013).

3.2.1 Primary Data

Primary data are information that is being gathered first-hand with the intention to attain specific objectives or to dissert a specific problem (Malhotra et al., 2012). Primary data can be obtained through numerous approaches, for instance observations, interviews, survey and questionnaire and so forth. Primary data sources are for example, individuals, focus groups, panels of respondent that are specifically set up by the researcher, in which opinions of interest would be sought from them to accomplish the purpose of study (Sekaran & Bougie, 2013). As compared to secondary data collection, primary data collection tends to incur higher cost and require longer time (Malhotra et al., 2012). In this research study, set of survey questionnaire was established and serve as a tool to collect the relevant information from target respondents. Sekaran and Bougie (2013) have defined questionnaire to be a tool that consists of a set of specifically formulated questions that comes along with various scales, in which it intends to collect and measure the responses from the

target respondents. Survey method was being used in this research as it is found to be advantageous in terms of cost saving as well as reducing the time consumed.

3.2.2 Secondary Data

As mentioned by Malhotra et al. (2012), secondary data are the information that was previously being gathered by some other person, which intended to address other issues of interest by the researchers rather than the current issues. Search retrieval is one of the techniques that most researchers would use to collect the secondary data. Secondary data could be collected from various sources, for instance the published books, journals, articles, and other online resources. With that, secondary data collection tends to incur a relatively lower cost as some secondary data are even freely available (Malhotra et al., 2012). Mainly, the secondary data obtained for this research study was from the UTAR digital library, other online journal databases, online resources as well as the published books that are available in UTAR Perak Campus Library.

3.3 Sampling Design

As described by Sekaran and Bougie (2013), sampling represents the operation of drawing an adequate amount of elements from entire total population, to form the sample of the study and provide understanding of its characteristics or properties to the researchers, which in turns would make it possible for the researchers to generalize such characteristics or properties to the total population elements. Instead of collecting data from the entire population, sample is used because it is practically impossible to collect information from every elements in the entire population, even if it does, it tend to involve massive resources, time as well as cost. Sample is the subset and the representatives of the total population (Sekaran & Bougie, 2013). Sampling designs could be of two prominent types, which are the nonprobability

sampling and probability sampling. An effective sampling process allows the researcher to delineate the population of study, sampling location, sampling elements, techniques used for sampling as well as the size of sample to be drawn (Malhotra & Peterson, 2009).

3.3.1 Target Population

In research, target population refers to the entire set of units for which the survey data are to be used to make inferences related to the research study (Lavrakas, 2011). Malhotra (2009) has defined target population to be the collection of total elements in a group. The target population for this research is the consumers. Consumers refer to any individual that purchases goods or services for one's personal use and not for manufacturing or resale ("Who Is A Consumer?", n.d.). Everyone could be a consumer, consumers would purchase and consume the goods and services which they needed, ranges from basic necessities to lifestyle desire. With the main research purpose revolve around the consumers' adoption intention towards mobile social media shopping, the befitting target population are the online consumers or shoppers who purchase online through the social media platform as they are the audience who involved in the online shopping process. Social media platforms for business transaction are for instance Facebook, Instagram, Pinterest, Snapchat and more (Wertz, 2017). The results for this research study are expected to be generalized in the Malaysian context, thus the target population being focused for this study are consumers who are the citizens of Malaysia.

3.3.2 Sampling Element

Sampling element refers to the individuals that are within the group of sample being drawn from the target population. According to Malhotra and Peterson (2009), the target respondents of a study are the sampling elements for the research. In this research context, the sampling element would be the consumers who are the citizens of Malaysia that owns at least a mobile device that have connectivity to the wireless telecommunication network or is internet-enabled. Added criteria are for instance owning a credit card or ATM card that could serve as a debit card to allow purchase of goods and services online as well as possessing the knowledge and past experience with mobile social media shopping. In order to make the generalization of results into the Malaysia context possible, the selection of target respondents for this research was preferable and given priority to the consumers who are the citizens of Malaysia. Besides that, this study has also placed greater emphasis on consumers who owns internet-enabled mobile device and has experience with social media as they are the individuals who are more likely to involve in mobile social media shopping.

3.3.3 Sampling Size

As claimed by Sekaran and Bougie (2013), size of sampling could be delineated as the quantity of samples in a research study. The number of samples to be drawn for a study is contingent on numerous factors, for instance the number of variables in the study, the importance of decision to be made, the nature of research, nature of analysis as well as the limitation on resources (Malhotra et al., 2012). Partial least squares structural equation modeling (PLS-SEM) approach is adopted in this research study. As suggested by Hair, Hult, Ringle and Sarstedt (2013a), the determination of sample size in PLS-SEM can be driven by numerous factors, for instance the significance level, statistical power, minimum coefficient of determination (R^2 values) used in the model, maximum quantity of arrows pointing at a latent variable. Practically, typical marketing research studies tend to have a 5% of level of

significance, 80% of statistical power, and a minimal of 0.25 R^2 values (Wong, 2013). With these criteria, Marcoulides and Saunders (2006) have proposed that the minimum sample size could be reliant on the maximum quantity of arrows pointing at a latent variable in the model, as shown in table below. Apart from that, Hoyle's research has also recommended that a sample size of 100-200 will be sufficient and feasible to carry out path modeling (Hoyle, 1995). And in our research model, there are a total of 10 arrows pointing at the latent variable; hence the sample size for this study would be aimed at 200.

Table 3.1 Suggested sample size in a typical marketing research

Minimum sample size required	Maximum number of arrows pointing at a latent variable in the model
52	2
59	3
65	4
70	5
75	6
80	7
84	8
88	9
91	10

Source: Marcoulides and Saunders (2006)

3.3.4 Sampling Location

Sampling location represents the place or spots where the survey questionnaire is administered to the target respondents as to collect the necessary information for the research study. This research study was conducted at Perak state, as its percentage of smartphone user rate was ranked as the fourth highest in Peninsular Malaysia ("Hand Phone Users Survey 2014", 2015). As in year 2014, among the top four, Selangor state holds the first place (20.9%), while state of Johor has taken up the second place (12.7%), meanwhile WP Kuala Lumpur ranked third with 8.9% and tailed closely by Perak with 8.5%.

On the other hand, Perak was selected as the sampling location due to its cellular telephone penetration rate holds about 149.2%, which is relatively high and adequately representable. In addition to that, the penetration rate for Perak state has shown to be steadily increase over the years since 2009 to 2014, which this implies that the residents and consumers in Perak are more willing to accept and adopt new innovation technology or services when they are being introduced.

Particularly, Ipoh city which is the state capital of Perak was selected to be the place for collecting responses as it serves as the center of administration, finance, politics, education, commerce and much more. These make Ipoh to have higher opportunities and stronger attractive power to attract people from different places to gather along in the city. With that, Ipoh tend to have abundant of residents stem from different demographic background, that in turns make the results to have a fair representation of different race, religion, and culture over Malaysia.

Developed survey questionnaires were distributed across shopping malls in Ipoh city as shopping malls are the location where most consumers from various backgrounds could be identified. It is an utmost important to have responses from different demographic background as to make the results generalizable across Malaysia.

3.3.5 Sampling Period

Sampling period is correspondent to the period in which the survey questionnaires were administered to the target respondents in order to gather the informative data as to accomplish stated research goals. The sampling period for this research study started from 18th June 2017 to 2nd July 2017. The reason that this period was being chosen was due to the occurrence of festive season around this period, as Lucrative Ramadan and Hari Raya Aidil Fitri falls in between these dates. As stated in one of the articles in New Straits Times, online entrepreneurs tend to leverage on digital and social media channels during the lucrative Ramadan and Hari Raya months, as to bring a boost to their sales (Lim, 2017). This implies that consumers are more likely to perform online transaction at this period of time. In addition to that, due to the immense shopping spree at this period, abundance of consumers would pay a visit to the shopping malls, and that could enable the questionnaires to be exposed and delivered to consumers with diversified background.

3.3.6 Sampling Frame

According to Malhotra et al. (2012), sampling frame refers to the sources or complete list of information that could represent the elements of target population of interest. This information could be stemmed from the electronic registrar, customer database, telephone directories, mailing list, street maps and more. However, there is no sampling frame for this research study as there is no complete list for consumers who attend the shopping malls in Ipoh.

3.3.7 Sampling Technique

Sampling technique represents the approaches, ways or methods that are being adopted in a research study with the intention to collect the sample of the study. Sekaran and Bougie (2013) have laid down two prominent types of sampling design, they refer to the probability sampling and nonprobability sampling. Under the circumstances of no sampling frame in this research study, nonprobability sampling design was acquired to gather the samples (Sekaran & Bougie, 2013). In nonprobability sampling designs, elements in the population do not have equal chances to be drawn as the sample of study. Further laid down by Sekaran and Bougie (2013), there are convenience sampling, judgmental sampling, quota sampling and snowball sampling under the nonprobability sampling designs.

Of all, judgmental sampling and convenience sampling techniques were utilized in this research study. Judgmental sampling was applied to judge and select the samples of shopping malls in Ipoh. Once the sample of shopping malls were identified and selected, convenience sampling was then applied to administer the questionnaires to the eligible consumers who attend the shopping malls. As mentioned by Sekaran and Bougie (2013), judgmental sampling techniques suggest the researchers to select the samples of study based on their personal judgment. Three shopping malls that are dispersed in different areas have been selected as the sampling location for this research study, which they are AEON Mall Klebang, Aeon Kinta City and Ipoh Parade.

Three of these shopping malls have been shortlisted because these malls have relatively high number of visitors as compared to other shopping malls that are of same tier in Ipoh. Convenience sampling techniques allows researchers to randomly select the samples of study based on one's convenience (Sekaran & Bougie, 2013). Referring to the guidelines provided, questionnaires were randomly issued to the eligible consumers that attend the shortlisted shopping malls. Consumers who were seen to be free and unoccupied were approached for contributing their responses.

3.4 Research Instrument

3.4.1 Questionnaire

The main research instrument for this research study is questionnaire, which it is a set of reformulated questions that are being utilized to obtain the information on consumers' behavioral intention to adopt mobile social media shopping from the target respondents. Basically, there are two types of questionnaires, which they are structured questionnaire and unstructured questionnaire. Among both, structured questionnaire was used in this research study. In structured questionnaire, questions set in the questionnaire are of close ended and were being asked in a structured manner. Target respondents were required to contribute their opinions by selecting from the response options given and that is closest to their real intention. Some of the examples for options of responses that were included in the questionnaire are for instance, multiple choice and scale. Structured questionnaire was adopted for several reasons. One of which was, with structured and close ended questions, respondents require less time to provide their answer. Apart from that, it could also enhance the rate of response as it requires less effort from the respondents (Malhotra et al., 2012).

3.4.2 Questionnaire Design

As argued by Burns and Bush (2014), the design of questionnaire is in fact an ordered and systematic process in which it requires the researcher to scrutinize a variety of question formats and contemplate a number of factors categorizing the survey in hand, that eventually design and phrase the questions cautiously as well as to make proper arrangement on the questionnaires layout in order to successfully gather the meaningful responses from the target respondents. It is a definite process that requires researchers to examine and go through a chain of considerations. It is essential that

the tool of measurement adopted by the researcher should be reliable and valid (Burns & Bush, 2014). Hence, the design of questionnaire plays a critical role in a research, whereby it has to be designed in a way that it is easily comprehensible for the target respondents. Questionnaire design which is relatively poor and ineffective tends to contribute to research failure.

Questionnaire that was utilized in this research study was designed and worded using the universal language, English. Although English is not the primary language in Malaysia, but it is a language which can be comprehend by almost everyone in the country. In addition to that, questions in the questionnaires used were reformulated based on the questions from remarkable past studies by previous researchers. All questions were adapted from the past studies with an intention to ensure that this research study is able to conform to validity and reliability (Leong, Hew, Tan & Ooi, 2013). Apart from that, all questions were also designed in a straightforward manner in which there would be strictly no double barreled question as it will bring confusion to the target respondents. Furthermore, clear instructions were also given and listed at the beginning of each section in the questionnaire, as to provide explicit guidelines to the target respondents. Table 3.2 outlines the summary of questionnaire design for this research study.

Table 3.2: Summary of Questionnaire Design

Section	Questions quantity	Questions	Types of scale used
A	5	Questions under this section tell of the demographic background of the target respondents.	Nominal and Ordinal scale
B	2	Questions under this section tell of the additional information of the target respondents.	Nominal and Ordinal scale
C	26	Questions under this section tell of the independent variables of this research study.	Interval scale
D	4	Questions under this section tell of the dependent variable of this research study.	Interval scale

Source: Developed for the research

3.4.3 Pretesting

Pretesting is by means involving small scale of respondents, intended to help the researcher to assess the appropriateness of the questions and to look at the respondents' comprehension towards the questions. The tool of measurement, questionnaire to be used must be pretested prior distributed in large scale in order to ensure that all questions in the questionnaire are comprehensible and understood by the target respondents, in which there would be absence of ambiguity in the questions as well as absence of issues with measurement or wording (Sekaran & Bougie, 2013). Pretesting is crucial as it allows the researcher to rectify the flaws of the questionnaires prior administering in large scale for data collection. For this research study, 30 respondents were randomly drawn from the pool of target population as to contribute their feedbacks for the pretesting of questionnaire. A set of questionnaire

was distributed to each sampled respondent, and the respondent was then required to provide his/ her feedback in terms of the clarity of instructions given, overall grammar and the level of comprehensible of the questions, whether it requires a lot of effort to approach the question and provide responses. Upon completion of pretesting, overall positive feedbacks were received. Hence, the questionnaire was used for large scale data collection.

3.5 Constructs Measurement

3.5.1 Origin of Questions

Table 3.3: Questions Origin

Perceived Usefulness (PU)		
PU1	Using mobile social media shopping improves my productivity in purchasing.	Adapted from Tan, Ooi, Chong and Hew (2014a)
PU2	Mobile social media shopping services allow me to complete my shopping task with better efficiency.	Adapted from Tan et al. (2014a)
PU3	I find mobile social media shopping to be advantageous.	Adapted from Tan et al. (2014a);
PU4	Using mobile social media shopping can help me to reduce time spent in shopping.	Adapted from Groß (2014)
PU5	Mobile social media shopping enables me to make better purchasing decision.	Adapted from Groß (2014)
Perceived Ease of Use (PEOU)		
PEOU1	Mobile social media shopping services are clear and comprehensible.	Adapted from Groß (2014)
PEOU2	Mobile social media shopping is easy to use	Adapted from Groß (2014)

	and hassle-free.	
PEOU3	I find it easy to perform what I intend to perform with mobile social media shopping services.	Adapted from Groß (2014)
PEOU4	Handling mobile social media shopping is easy and without great effort.	Adapted from Tan et al. (2014a);
PEOU5	It would be easy for me to become skilful at using mobile social media shopping services.	Adapted from Tan et al. (2014a)

Perceived Playfulness (PP)

PP1	While interacting with mobile social media shopping services, I did not realize time had elapsed.	Adapted from Çelik (2011); Chou (2006)
PP2	I enjoy using mobile social media shopping services.	Adapted from Çelik (2011); Chou (2006)
PP3	Interacting with mobile social media shopping makes me want to explore more.	Adapted from Çelik (2011); Chou (2006)
PP4	Mobile social media shopping is fun and interesting.	Adapted from Chou (2006)

Visibility (VB)

VB1	I can see the effect of a transaction immediately.	Adapted from Al-Jabri and Sohail (2012);
VB2	I will be influenced by others to use mobile social media shopping.	Adapted from Elogie, Ikenwe and Idubor (2015)
VB3	I will be influenced to adopt mobile social media shopping by observing its benefits.	Adapted from Elogie et al. (2015)
VB4	I am satisfied with the results of using mobile social media shopping services.	Adapted from Elogie et al. (2015)

Compatibility (CP)

CP1	Utilizing mobile social media shopping is compatible with most aspects of my life.	Adapted from Lu and Su (2009)
CP2	Engaging in mobile social media shopping	Adapted from Wu and Wang (2005)

matches my lifestyle.

CP3	Using mobile social media shopping fits well with the way I prefer to engage in online transactions.	Adapted from Wu and Wang (2005)
CP4	Mobile social media shopping services are consistent with the way I like to live and shop.	Adapted from Lu and Su (2009)

Training and Support (TS)

TS1	A specific person or group is available for assistance with mobile social media shopping difficulties.	Adapted from Wu, Wang and Lin (2007)
TS2	Specialized instruction and education concerning about mobile social media shopping service is available to me.	Adapted from Wu et al. (2007)
TS3	Specialized programs or consultant about training are available to me.	Adapted from Wu et al. (2007)

Behavioral Intention (BI)

BI1	I intend to increase the use of mobile social media shopping services in the future.	Adapted from Wu et al. (2007); Tan et al. (2014b)
BI2	Whenever possible, I intend to use mobile social media shopping services in future.	Adapted from Wu et al. (2007); Tan et al. (2014a)
BI3	I estimate that the chances of me using mobile social media shopping in my practice are frequent.	Adapted from Wu et al. (2007)
BI4	I believe my interest towards mobile social media shopping will be intensified in future.	Adapted from Tan et al. (2014b)

Source: Developed for the research

3.5.2 Operational Definition

Table 3.4: Operational Definition

Variable	Item
Perceived Usefulness	<ol style="list-style-type: none"> 1. Using mobile social media shopping improves my productivity in purchasing. 2. Mobile social media shopping services allow me to complete my shopping task with better efficiency. 3. I find mobile social media shopping to be advantageous. 4. Using mobile social media shopping can helps me to reduce time spent in shopping. 5. Mobile social media shopping enables me to make better purchasing decision.
Perceived Ease of Use	<ol style="list-style-type: none"> 1. Mobile social media shopping services are clear and comprehensible. 2. Mobile social media shopping is easy to use and hassle-free. 3. I find it easy to perform what I intend to perform with mobile social media shopping services. 4. Handling mobile social media shopping is easy and without great effort. 5. It would be easy for me to become skillful at using mobile social media shopping services.
Perceived Playfulness	<ol style="list-style-type: none"> 1. While interacting with mobile social media shopping services, I did not realize time had elapsed. 2. I enjoy using mobile social media shopping services. 3. Interacting with mobile social media shopping makes me want to explore more. 4. Mobile social media shopping is fun and interesting.
Visibility	<ol style="list-style-type: none"> 1. I can see the effect of a transaction immediately.

	<ol style="list-style-type: none">2. I will be influenced by others to use mobile social media shopping.3. I will be influenced to adopt mobile social media shopping by observing its benefits.4. I am satisfied with the results of using mobile social media shopping services.
Compatibility	<ol style="list-style-type: none">1. Utilizing mobile social media shopping is compatible with most aspects of my life.2. Engaging in mobile social media shopping matches my lifestyle.3. Using mobile social media shopping fits well with the way I prefer to engage in online transactions.4. Mobile social media shopping services are consistent with the way I like to live and shop.
Training and Support	<ol style="list-style-type: none">1. A specific person or group is available for assistance with mobile social media shopping difficulties.2. Specialized instruction and education concerning about mobile social media shopping service is available to me.3. Specialized programs or consultant about training are available to me.
Behavioral Intention	<ol style="list-style-type: none">1. I intend to increase the use of mobile social media shopping services in the future.2. Whenever possible, I intend to use mobile social media shopping services in future.3. I estimate that the chances of me using mobile social media shopping in my practice are frequent.4. I believe my interest towards mobile social media shopping will be intensified in future.

3.5.3 Scale of Measurement

As stated by Sekaran and Bougie (2013), they refer scale as a mechanism or tool used by the researcher in order to distinguish the individuals and identify how it varies among each other on the attentive variables to the research study. Basically, there are 4 types of measurement of scale, which they refer to the nominal, ordinal, interval and ratio. As claimed by Hair, Money, Samouel and Page (2007), the idea of measurement revolves around the practices of assigning numbers to the variables of interest in the research study, based on specific rules. By measuring the scale, sophisticated data analysis can be performed, and meaningful answer can be obtained to the research questions (Sekaran & Bougie, 2013).

3.5.3.1 Nominal Scale

Sekaran and Bougie (2013) defined nominal scale to be a scale that allows researcher to assign subjects to certain groups or categories. In research study, nominal scale was only used for the purpose of identification and categorization (Sekaran & Bougie, 2013), but it is impossible to rank it or portray any quantitative information (Hair et al., 2007). In this study, nominal scale was used in Section A and B, in which it was applied to assemble the details of demographic background along with the additional information of target respondents. Two types of rating scale were involved in both of these sections, which they are category scale and dichotomous scale. Category scale contains multiple items or options that are intended to draw only a single response from the respondent, whereas dichotomous scale is often used to acquire an answer from two categories, for instance gender that is divided into female or male, or 'yes' or 'no' response (Sekaran & Bougie, 2013).

3.5.3.2 Ordinal Scale

Ordinal scale is a scale that permits the classification of variables to denote the differences among various classes as well as to allow the researcher to rank order (Sekaran & Bougie, 2013). In addition to that, ordinal scale also enables researcher to determine whether one subject has higher level of significance than the other one. In this study, ordinal scale is employed in both Section A and B as to gather the details of respondents' demographic profile as well as their frequency of utilizing mobile social media shopping in the past 12 months. In order to measure the variables of interest, category scale was used to provide multiple options for the respondent to ultimately draw only a single response.

3.5.3.3 Interval Scale

According to Sekaran and Bougie (2013), interval scale permits researchers to conduct some of the arithmetical operations towards the data collected from target respondents. With the aid of interval scale, researchers are able to ascertain the spread between two points on scale, which then allows the computation of means and standard deviations of the responses on the attentive variables in a research study (Sekaran & Bougie, 2013). In this research study, interval scale was involved under Section C and D. As for the measurement, 7 point-Likert scale was used as the rating scale as to collect the responses. 7 point-Likert scale permits researchers to determine the level of agreement to disagreement within the respondents in respond towards the statements listed in the questionnaire. Within the 7 point-Likert scale, it encompasses the option of Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree (Burns & Bush, 2014).

3.5.4 Summary of Scales used in Questionnaire

Table 3.5: Summary of Scales used in Questionnaire

Item	Type of scale used	Type of rating scale used
Gender	Nominal scale	Dichotomous scale
Age	Ordinal scale	Category scale
Ethnic group	Nominal scale	Category scale
Occupation	Nominal scale	Category scale
Income	Ordinal scale	Category scale
Mobile devices owned	Nominal scale	Category scale
Frequency of utilizing m-social media shopping	Ordinal scale	Category scale
Perceived usefulness	Interval scale	Likert scale
Perceived ease of use	Interval scale	Likert scale
Perceived playfulness	Interval scale	Likert scale
Visibility	Interval scale	Likert scale
Compatibility	Interval scale	Likert scale
Training and support	Interval scale	Likert scale
Behavioral intention	Interval scale	Likert scale

Source: Developed for the research

3.6 Data Processing

According to Saunders et al. (2009), data that have not been processed and analyzed are referred as raw data, which it conveys very little to no meaning. Thus, in order to turn raw data into useful and meaningful information that are to be used for further statistical analysis, these data have to be checked, edited, coded, transcribed and cleaned. All these processes are necessary to make sure that the data collected are complete, accurate and appropriate for further analysis and interpretation.

3.6.1 Data Checking

Data processing process includes a whole string of activities, and data checking is the first stage. At this point, questionnaires that were collected have to be checked and reviewed to determine the quality of responses (Malhotra et al., 2012). Questionnaires that are incomplete or received after the cut-off date have to be neglected. Data checking is an essential step whereby it helps researcher to identify errors or issues that exist in the early stage (Malhotra & Peterson, 2009), which it then allows the researcher to take necessary corrective measures prior proceeding to the following stage.

3.6.2 Data Editing

The second stage in data processing process is data editing, it serves to enhance the accuracy and precision of the outcome (Malhotra, 2009). At this point, questionnaires that are with outliers will be discarded and does not contribute to the following stage.

3.6.3 Data Coding

Data coding comes after data editing, which it is the third stage in data processing process. Numbers or numerical codes will be assigned to the each responses collected through questionnaires (Saunders et al., 2009). This step allows researchers to improve their time spent in entering data into the system and with fewer errors.

3.6.4 Data Transcribing

Data transcribing is the upcoming stage, which it accommodates the fourth stage in data processing process. Data transcribing is referring to the act of transferring coded facts from the collected questionnaires into computers by way of key punching (Malhotra & Peterson, 2009). In this research study, responses collected were recorded in a spreadsheet and were directly entered into the SmartPLS software application.

3.6.5 Data Cleaning

Data cleansing is a crucial part for data analysis; it is the final stage in data processing process. It helps researchers to detect and remove errors and inconsistencies from the data collected with the intention to improve the quality of data (Devi & Kalia, 2015). Malhotra (2009) argued that this stage works almost identical with the stage of data editing, however data cleaning covers more details and extensively.

3.7 Data Analysis

Analysis of data represents a systematic process which applies statistical techniques to transform data obtained into meaningful, useful information, and thereby being utilized to make implications as well as suggesting conclusions and to provide better insights about the research study. Data analysis allows researcher to determine whether the hypotheses developed for the research study are being supported or not (Sekaran & Bougie, 2013). In this research study, SmartPLS software was used to process and analyze the collected data.

3.7.1 Descriptive Analysis

According to Burns and Bush (2014), descriptive analysis is commonly employed to illustrate the sample dataset in a way to divulge the general pattern of responses and to depict the typical respondents. In research study, descriptive measures are basically used to summarize the basic findings for the sample.

3.7.1.1 Frequency Distribution

According to Sekaran and Bougie (2013), frequency distribution was bring into play to display variables that can be classified as well as all personal data or demographic profiles of target respondent. Frequency distribution is a statistical representation that could be either in a tabular or graphical format, to portray the number of observations within a given interval.

3.7.2 Statistical Analysis

Partial Least Squares Structural Equation Modeling (PLS-SEM) from SmartPLS, which is a prominent software application developed by Ringle, Wende and Will (2005) was used in this research study. As mentioned by (Wong, 2013), structural equation modeling is acknowledged as the second generation of multivariate data analysis method that is extensively employed in numerous marketing research. There are several reasons why structural equation modeling is substantively used in research study, one of which is that it makes comprehensive means available to researcher as to evaluate and modify the theoretical models and with that, it offers great potential for further theory development (Anderson & Gerbing, 1988). In this research study, PLS-SEM was adopted as the main research purpose for this study is about theory development. Not only that, PLS-SEM also provides researcher with the clues of explained variance in dependent variables based on the characteristics of the measurement model. PLS-SEM is a good alternative to covariance-based SEM (CB-SEM), as PLS can tolerate small sample size and provides greater predictive accuracy, also it is adopted when the applications have little theory available and model specification is ambiguous (Hwang, Malhotra, Kim, Tomiuk & Hong, 2010; Wong, 2010). As recommended by Anderson and Gerbing (1988), the two step approach was strictly followed for the measurement and structural model evaluation.

In PLS-SEM, bootstrapping is used as it provides no assumption that data are normally distributed hence, it employs nonparametric bootstrapping that involves repetitive random sampling with substitution from original sample as to generate a bootstrap sample, and thereby to acquire the standard errors for hypothesis testing (Hair, Ringle & Sarstedt, 2011). According to Henseler, Ringle, and Sinkovics (2009), bootstrap sample allows the researcher to validate on the estimated coefficients projected in PLS-SEM as to determine whether they are significant. It is essential that each bootstrap sample must possess similar number of cases with the original sample. As mentioned by Hair et al. (2011), SEM results from each bootstrap sample is estimated using the PLS algorithm.

3.7.2.1 Measurement Model Evaluation

Validity and reliability should be thoroughly examined for a reflective measurement model (Hair, Ringle & Sarstedt, 2013b). In this research study, the reliability of each construct was ascertained by the composite reliability (CR) and Cronbach's coefficient alpha, as a measurement for internal consistency reliability. As recommended by Bagozzi and Yi (1988), the desired value for composite reliability should be a minimal of 0.60. Cronbach's alpha coefficient span from 0 to 1, and an acceptable threshold value for α would be ideal if it exceeds 0.70 (Nunnally & Bernstein, 1994). The measuring instrument is better if its alpha coefficient is higher. Table 3.6 illustrates rule of thumb for Cronbach's alpha.

Table 3.6: Rule of thumb for Cronbach's Alpha

Level of Reliability	Alpha Range
Poor reliability	0.60 and less
Fair reliability	0.61 to 0.70
Good reliability	0.71 to 0.80
Very good reliability	0.81 to 0.95

Source: Sekaran and Bougie (2013)

As for the measurement for validity of the reflective measurement model, it is contingent on the convergent validity and discriminant validity. As stipulated by Carlson and Herdman (2010), convergent validity reveals the extent to which two measures capture a common construct. In order to assess the convergent validity, average variance extracted (AVE) of each latent variable is measured, in which its acceptable threshold value would be a minimum of 0.50 (Kline, 2015). While on the other hand, in order to determine the discriminant validity of the model, factor loading, Fornell-Larcker test and heterotrait-monotrait ratio of correlations (HTMT) would be assessed. According to Henseler, Ringle and Sarstedt (2014), HTMT is an estimate of the correlation among the constructs, HTMT value that is smaller than one indicates the existence of true correlation between the two constructs are differ and

discriminant validity is achieved. As stated in Fornell and Larcker criterion, the AVE of each construct should be greater than its squared correlation with any other construct (Fornell & Larcker, 1981) in order to establish discriminant validity. As for the HTMT method, According to Hair, Black, Babin and Anderson (2010), discriminant validity ensures that a construct measure is distinctive and unique as well as able to represent the phenomena of interest that are not captured by other construct measures in a particular structural equation model.

3.7.2.2 Structural Model Evaluation

PLS-SEM is generally more favorable when the structural model is more complex and there is smaller sample size (Hair et al., 2011). The coefficient of determination, R^2 , the level and significance of path coefficient were being measured in structural model as the main objective of prediction-oriented PLS-SEM is to provide explanation on the variance of target endogenous variable. The judgment of R^2 acceptable level depends on the research context. However in the context of marketing research study, the rule of thumb for R^2 value depicts 0.75 to be substantial, 0.50 to be moderate and 0.25 to be weak (Hair et al., 2011). The individual path coefficients for each indicator were measured and interpreted as the standardized beta coefficient. With the measures of path coefficients, t-statistics and p-value, it allows the determination of whether the developed hypotheses are significant. The significance level of the study was set at $\alpha = 0.05$.

3.7.2.3 Assessing the Predictive Power

As proposed by Hair, Sarstedt, Hopkins and Kuppelwieser (2014), Q^2 value tells of whether the structural model is relevant in explaining its endogenous variables. Q^2 values can be classified into three levels, which represent small (0.02), medium (0.15), and large (0.35) (Cohen, 2013).

Moreover, effect size has also been included as to assess the intensity of relationship among the latent variables. As mentioned by Hair et al. (2014), when a path has high value of f^2 (effect size), it implies that the endogenous variable is strongly explained by the particular exogenous variable. Similarly, 0.02 represents small, 0.15 indicates medium and 0.35 signifies large effect size (Hair et al., 2014).

3.8 Conclusion

This section has discussed the methodology of the research study, in which it covers the research design, methods for gathering data, sampling design, and tools for research. Also, it includes the constructs measurement, data processing as well as analysis of data. The following chapter will be discussing on the analysis and interpretation of data.

CHAPTER 4: DATA ANALYSIS

4.0 Chapter Initiation

SmartPLS version 2.0 software was used to compute the results. This chapter presents the patterns and analyses of the results obtained from various analysis techniques, which are pertinent to the research questions and proposed hypotheses.

4.1 Response Rate

A sum total of 230 questionnaires were randomly distributed to the visitors who attend the selected shopping malls in Ipoh city for data collection. Of all 230 questionnaires, only 209 questionnaires were returned and usable. With that, the response rate for this research study was computed as 90.86%. As mentioned by Sekaran and Bougie (2013), a research study is only feasible if it has a minimum of 30% response rate, which it is vital for it to be acceptable. A survey must have good response rate in order for it to contribute accurate and meaningful results; as such it is able to reflect the results of the entire target population and draw conclusive implications. However, only 200 questionnaires were sent for further analysis using SmartPLS software. The remaining 9 questionnaires were discarded due to incomplete responses and some conflicting responses.

4.2 Descriptive Analysis

4.2.1 Frequency Distribution of Respondents' Demographic Profile

In the survey questionnaire, section A encompasses questions that tell of the demographic background of the target respondents.

4.2.1.1 Gender

Table 4.1: Gender

Gender	Frequency	Percentage
Male	72	36%
Female	128	64%
Total	200	100%

Source: SPSS Output

Table 4.1 presents the gender information of the target respondents. Majority of the target respondents are female, in which they constitute of 64% of the total target respondents while male accounted for the remaining 36%.

4.2.1.2 Age

Table 4.2: Age

Age	Frequency	Percentage
20 years old and below	37	18.5%
21 to 30 years old	118	59%
31 to 40 years old	29	14.5%
41 to 50 years old	10	5%
51 to 60 years old	4	2%
60 years old and above	2	1%

Source: SPSS Output

Table 4.2 depicts the age information of the target respondents. Majority of the target respondents comes from the age group of 21 to 30 years old, in which it made up of 59%. The second highest age category is contributed by the respondents who age 20 years old and below, which it constitutes of 18.5% and it is then followed by the age category of 31 to 40 years old, with 14.5%. 5% of the respondents age in between 41 to 50 years old, while 2% lies between the age group of 51 to 60 years old. And lastly, 1% of the respondents are 60 years old and elder.

4.2.1.3 Ethnic Group

Table 4.3: Ethnic Group

Ethnic Group	Frequency	Percentage
Malay	55	27.5%
Chinese	106	53%
Indian	39	19.5%

Source: SPSS Output

Table 4.3 illustrates the ethnic group details of the target respondents. Bulk of the target respondents are Chinese, whereby they make up of 53%. There are 27.5% of Malay and 19.5% of Indian.

4.2.1.4 Occupation

Table 4.4: Occupation

Occupation	Frequency	Percentage
Unemployed	11	5.5%
Working professional	136	68%
Self-employed	27	13.5%
Student	26	13%

Source: SPSS Output

Table 4.4 demonstrates the occupation details of the target respondents. Majority of the target respondents are working professional, which it constitutes of 68% of the total target respondents. Meanwhile, 13.5% of the target respondents declared that they are self-employed and 13% of them are students. Minority of the target respondents are of unemployed, whereby this group of respondents have taken up 5.5%.

4.2.1.5 Income

Table 4.5: Income

Income	Frequency	Percentage
Below or equal to RM1000	31	15.5%
RM1001 – RM2000	17	8.5%
RM2001 – RM3000	61	30.5%
RM3001 – RM4000	50	25%
RM4001 – RM5000	22	11%
RM5001 and above	17	9.5%

Source: SPSS Output

Table 4.5 visualizes the individual personal monthly income or allowance details of the target respondents. 30.5% of the respondents earn about RM2001 to RM3000 per month, while 25% of the respondents gain a monthly income of RM3001 to RM4000. Meanwhile, the income group which ranked third highest in this research study is contributed by those who earn RM1000 or less per month, it is then followed by the income category of RM4001 to RM5000 (11%), RM5001 and above (9.5%) and lastly RM1001 to RM2000 (8.5%).

4.2.2 Frequency Distribution of Respondents' Additional Information

In the survey questionnaire, section B encompasses questions that tell of the additional information of the target respondents.

4.2.2.1 Mobile devices owned

Table 4.6: Mobile devices owned

Details	Frequency	Percentage
Smartphone	44	22%
Smartphone, Personal Digital Assistance Device	8	4%
Smartphone, Tablets	12	6%
Smartphone, Tablets, Laptop/ Notebook	54	27%
Smartphone, Laptop/ Notebook	82	41%

Source: SPSS Output

Table 4.6 displays the details of mobile devices owned by the target respondents. Majority of the target respondents (41%) owned more than one mobile device, which are smartphone and laptop or notebook. 27% of the respondents have revealed that they owned not only smartphone and laptop or notebook, but even tablets. Meanwhile, 22% of the target respondents possess only smartphone alone. On the other hand, 6% of the target respondents have the ownership of both smartphone and tablets, whereas 4% of them are the possessors of both smartphone and personal digital assistance device.

4.2.2.2 Frequency of utilizing m-social media shopping in the past 12 months

Table 4.7: Frequency of utilizing m-social media shopping in the past 12 months

Details	Frequency	Percentage
Less than 1 time	29	14.5%
1 – 5 times	55	27.5%
6 – 10 times	41	20.5%
11 – 15times	34	17%
16 – 20 times	23	11.5%
21 – 25 times	5	2.5%
More than 25 times	13	6.5%

Source: SPSS Output

Table 4.7 shows the respondents' frequency of utilizing mobile social media shopping in the past 12 months. 27.5% of the target respondents claimed that they have used mobile social media shopping for 1 to 5 times in the past 12 months. While 20.5% of the respondents have reported their usage are of 6 to 10 times, followed by those who are of 11 to 15 times (17%), less than 1 time (14.5%), and 16 to 20 times (11.5%). Lastly, 6.5% of the target respondents mentioned that they have utilized their mobile device to shop via the social media platform for about more than 25 times in the past 1 year, while 2.5% of the respondents have indicated a usage of 21 to 25 times.

4.3 Common Method Bias (CMB) Testing

Common method bias (CMB) testing was examined, as all self-reported data poses the potential for common method bias. There are numerous methods to test common method bias, for example Harman's single factor, correlation matrix, common latent factor and marker variable (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). In this research study, correlation matrix approach was used. As stated by Kim, Kim and Wachter (2013), correlations are higher than 0.90 when CMB exist. The highest correlation is 0.900, which indicates that CMB is unlikely to be a major concern for this study. In view that the concern on CMB, this research study has included the procedural remedies proposed by Podsakoff et al. (2003), for instance communicating with the respondents and notifying them that there is no absolute right or wrong answers, providing the respondents with clear instructions and as well promise to secure the respondents' anonymity as to ensure that the possibility and impact on CMB could be kept as low as possible.

4.4 Measurement Model Evaluation

As mentioned earlier, partial least square-structural equation modeling (PLS-SEM) technique was employed in this research study as to review the proposed hypotheses and research model.

Table 4.8: Composite Reliability, Cronbach's α

Constructs	No. of items	Composite Reliability (CR)	Cronbach's α
PU	5	0.973	0.965
PEOU	5	0.971	0.963
PP	4	0.961	0.939
VB	4	0.923	0.888
CP	4	0.974	0.964
TS	3	0.938	0.901
BI	4	0.975	0.966

Source: SmartPLS

Note:

- a) BI = behavioral intention; CP = compatibility; PEOU = perceived ease of use; PP = perceived playfulness; PU = perceived usefulness; TS = training and support; VB = visibility

The reliability of this research study has been verified and illustrated in Table 4.8, as both Cronbach's α and composite reliability for all constructs exceeds the required thresholds, which are of a minimum of 0.60 and 0.70 respectively. Thus, all constructs are said to have achieved the internal constructs reliabilities.

As to ascertain the validity of the research model, convergent validity and discriminant validity tests were exploited. Convergent validity was indicated by the

AVE, and on the other hand, discriminant validity was indicated by the factor loadings, Fornell-Lacker Test as well as the HTMT criterion.

Table 4.9: Average Variance Extracted

Constructs	Average Variance Extracted (AVE)
PU	0.877
PEOU	0.871
PP	0.892
VB	0.751
CP	0.902
TS	0.834
BI	0.908

Source: SmartPLS

Note:

- a) BI = behavioral intention; CP = compatibility; PEOU = perceived ease of use; PP = perceived playfulness; PU = perceived usefulness; TS = training and support; VB = visibility

Table 4.9 demonstrates the values of Average Variance Extracted (AVE) generated for all constructs. As proposed by Hair et al. (2013b), AVE value should achieve a minimum of 0.50. Since all constructs have their AVE exceeds 0.50, thus the convergent validity of the model is said to be achieved.

Table 4.10: Factor Loadings (Bold) and Cross Loadings

	BI	CP	PEOU	PP	PU	TS	VB
BI1	0.956	0.823	0.715	0.800	0.822	0.595	0.810
BI2	0.961	0.858	0.805	0.823	0.840	0.553	0.835
BI3	0.951	0.871	0.745	0.785	0.833	0.557	0.808
BI4	0.943	0.821	0.733	0.820	0.849	0.542	0.822
CP1	0.844	0.946	0.829	0.804	0.875	0.636	0.849
CP2	0.860	0.965	0.790	0.811	0.873	0.549	0.871
CP3	0.828	0.935	0.815	0.798	0.840	0.482	0.842
CP4	0.830	0.952	0.774	0.795	0.882	0.543	0.858
PEOU1	0.780	0.841	0.933	0.814	0.868	0.499	0.845
PEOU2	0.760	0.799	0.922	0.756	0.760	0.412	0.760
PEOU3	0.732	0.792	0.965	0.802	0.803	0.441	0.810
PEOU4	0.662	0.742	0.931	0.755	0.750	0.410	0.779
PEOU5	0.730	0.762	0.914	0.776	0.773	0.439	0.788
PP2	0.822	0.853	0.844	0.941	0.873	0.551	0.859
PP3	0.795	0.762	0.733	0.940	0.791	0.459	0.847
PP4	0.780	0.775	0.793	0.952	0.829	0.467	0.842
PU1	0.864	0.897	0.834	0.832	0.954	0.566	0.870
PU2	0.837	0.864	0.831	0.839	0.947	0.621	0.848
PU3	0.797	0.830	0.782	0.841	0.938	0.527	0.843
PU4	0.781	0.837	0.760	0.798	0.925	0.519	0.795
PU5	0.827	0.850	0.765	0.815	0.919	0.521	0.820
TS1	0.586	0.589	0.492	0.551	0.608	0.911	0.596

TS2	0.543	0.507	0.417	0.457	0.527	0.939	0.509
TS3	0.474	0.486	0.373	0.405	0.461	0.888	0.487
VS1	0.650	0.673	0.730	0.683	0.690	0.503	0.811
VS2	0.641	0.715	0.642	0.695	0.665	0.349	0.807
VS3	0.834	0.823	0.731	0.826	0.808	0.608	0.917
VS4	0.826	0.888	0.849	0.890	0.904	0.544	0.924

Source: SmartPLS

Note:

- a) BI = behavioral intention; CP = compatibility; PEOU = perceived ease of use; PP = perceived playfulness; PU = perceived usefulness; TS = training and support; VB = visibility
- b) PP1 was dropped due to its poor loading on perceived playfulness (i.e. less than 0.70)

The factor loadings and cross loadings of all items under each construct were extracted to examine the discriminant validity. In line with the recommendation by Fornell and Larcker (1981), each item should possess a factor loading of a minimum of 0.70. All items except PP1 were seen to achieve the required criteria, whereby they have their factor loadings exceeds 0.70. Since PP1 failed to meet the minimum criteria, hence it was dropped. Table 4.10 depicts the factor loadings and cross-loadings of each item, all items were seen to load highly with their corresponding latent constructs, and do not portray stronger connections with other constructs. Thus, discriminant validity is attained.

Table 4.11: Discriminant Validity (Fornell-Larcker Test)

	BI	CP	PEOU	PP	PU	TS	VB
BI	0.953						
CP	0.885	0.95					
PEOU	0.787	0.845	0.933				
PP	0.847	0.845	0.837	0.944			
PU	0.877	0.914	0.849	0.881	0.937		
TS	0.59	0.582	0.473	0.522	0.589	0.913	
VB	0.86	0.9	0.854	0.899	0.892	0.586	0.867

Source: SmartPLS

Note:

- a) BI = behavioral intention; CP = compatibility; PEOU = perceived ease of use; PP = perceived playfulness; PU = perceived usefulness; TS = training and support; VB = visibility
- b) Off diagonal elements are the inter-construct correlations
- c) Diagonal elements in bold are the square root of the AVE

Table 4.11 illustrates the results of the Fornell-Larcker test. All constructs have seen to attain discriminant validity and are distinctive, as the AVE of each construct is greater than its squared correlation with any other construct.

Table 4.12: HTMT Results

	Original Sample (O)	Sample Mean (M)	Bias	2.50%	97.50%
CP → BI	0.917	0.918	0.001	0.867	0.951
PEOU → BI	0.814	0.815	0.001	0.733	0.87
PEOU → CP	0.875	0.875	0	0.812	0.914

PP → BI	0.889	0.89	0.001	0.82	0.932
PP → CP	0.887	0.888	0.002	0.84	0.916
PP → PEOU	0.879	0.879	0.001	0.811	0.917
PU → BI	0.908	0.909	0.001	0.856	0.948
PU → CP	0.947	0.948	0.001	0.921	0.966
PU → PEOU	0.878	0.879	0	0.804	0.918
PU → PP	0.924	0.924	0	0.884	0.952
TS → BI	0.627	0.626	-0.001	0.517	0.731
TS → CP	0.619	0.619	0	0.494	0.714
TS → PEOU	0.501	0.5	-0.001	0.344	0.619
TS → PP	0.559	0.559	-0.001	0.41	0.671
TS → PU	0.624	0.622	-0.002	0.514	0.718
VB → BI	0.92	0.921	0.001	0.849	0.971
VB → CP	0.968	0.968	0	0.941	0.994
VB → PEOU	0.921	0.921	0	0.865	0.956
VB → PP	0.978	0.979	0.001	0.945	0.997
VB → PU	0.956	0.956	0	0.926	0.981
VB → TS	0.642	0.64	-0.002	0.505	0.744

Source: SmartPLS

Note:

- a) BI = behavioral intention; CP = compatibility; PEOU = perceived ease of use; PP = perceived playfulness; PU = perceived usefulness; TS = training and support; VB = visibility

Table 4.12 visualizes the HTMT results as to assess discriminant validity. As shown, the confidence interval for the HTMT inference test displays that none of the confidence intervals include a value of 1, and as such, discriminant validity is demonstrated by the HTMT method.

In general, both reliability and validity of the measurement model were established.

4.5 Hypothesis Testing

Table 4.13: Hypothesis Testing Results

Hypothesis	Relationship	Original Sample (O)	Sample (M)	Mean	Standard Deviation (STDEV)	T (O/STDEV)	P Values	Result
H1	PU → BI	0.224	0.228		0.128	1.754	0.08	Not supported
H2	PEOU → BI	-0.044	-0.039		0.064	0.684	0.494	Not supported
H3	PP → BI	0.238	0.238		0.098	2.413*	0.016	Supported
H4	VB → BI	0.072	0.076		0.132	0.548	0.584	Not supported
H5	CP → PU	0.864	0.867		0.024	35.469***	0	Supported
H6	CP → PEOU	0.862	0.862		0.047	18.291***	0	Supported
H7	TS → PU	0.086	0.082		0.033	2.618**	0.009	Supported
H8	TS → PEOU	-0.029	-0.03		0.058	0.497	0.619	Not supported
H9	CP → BI	0.408	0.4		0.145	2.822**	0.005	Supported
H10	TS → BI	0.074	0.07		0.035	2.152*	0.032	Supported

Source: SmartPLS

Note:

a) BI = behavioral intention; CP = compatibility; PEOU = perceived ease of use; PP = perceived playfulness; PU = perceived usefulness; TS = training and support; VB = visibility

b) Significant at:

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.0$

Figure 4.1: Result for Structural Model (Original Sample)

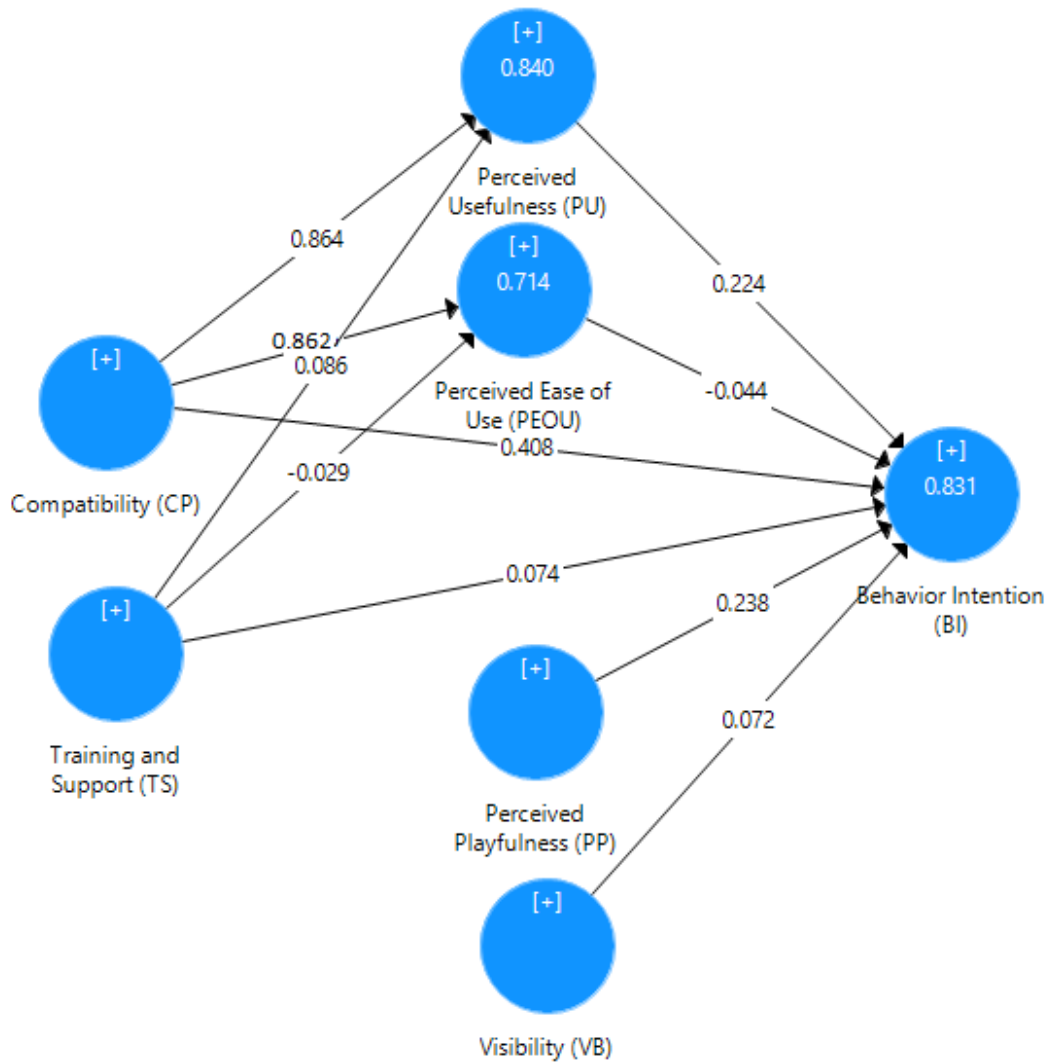
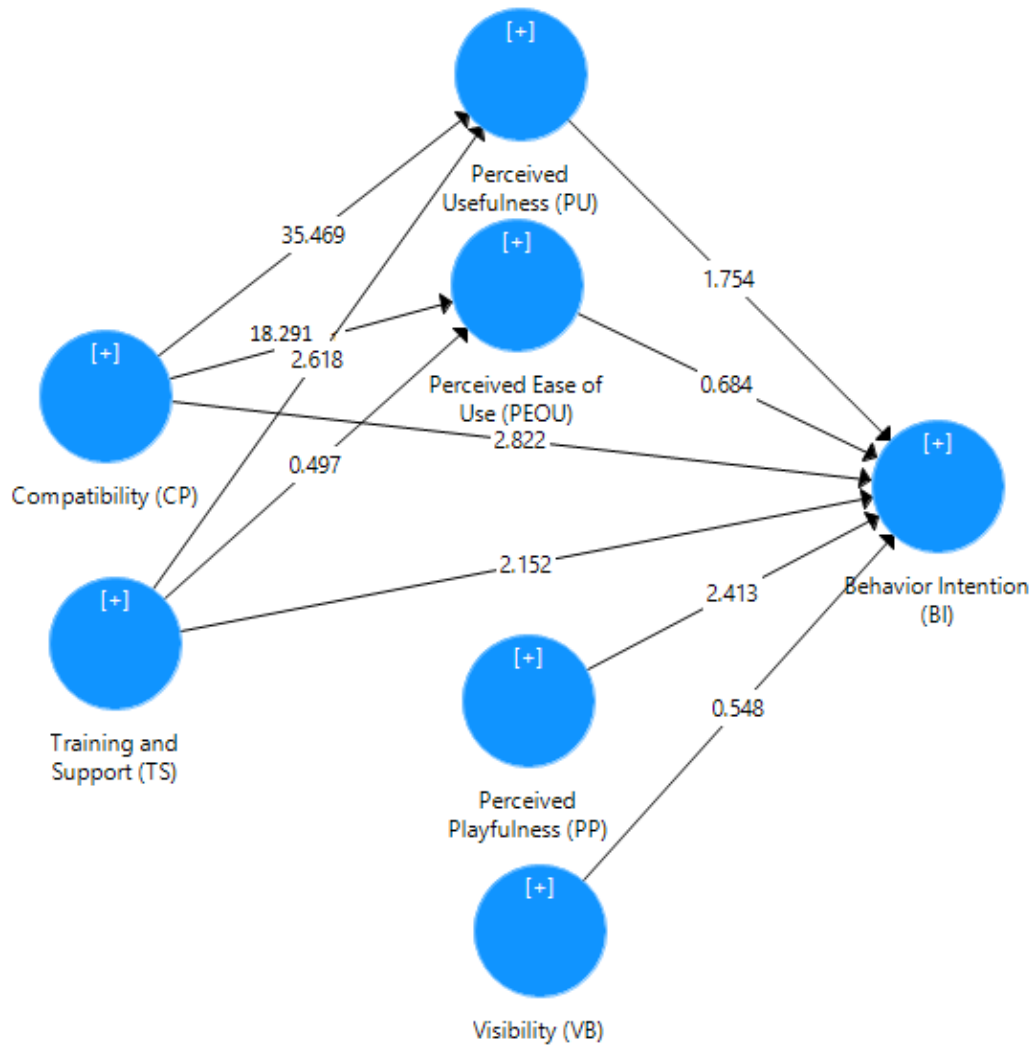


Figure 4.2: Result for Structural Model (T-statistics)



In this research study, PLS-SEM method was employed to assess the proposed research hypotheses. As shown, the structural model accounts for 83.1% of variance in users BI to use mobile social media shopping. Findings displayed under Table 4.13 and Figure 4.1 indicates that, of all ten hypotheses, six were supported and are able to predict the users BI towards mobile social media shopping acceptance. PP ($\beta = 0.238$, $p < 0.0$), CP ($\beta = 0.408$, $p < 0.01$), and TS ($\beta = 0.074$, $p < 0.0$) have significant linkage with consumers' BI to adopt mobile social media shopping. Conversely, results revealed that PU ($\beta = 0.224$, $p > 0.05$), PEOU ($\beta = -0.044$, $p > 0.05$) and VB ($\beta = 0.072$, $p > 0.05$) failed to predict the consumers' BI to adopt mobile social media

shopping, hence H1, H2 and H4 are not supported. Furthermore, the path coefficients of CP ($\beta = 0.864$, $p < 0.001$) and TS ($\beta = 0.086$, $p < 0.01$) also show positive and significant impact on PU with the explained variance, R^2 accounts for 84%. Also, the results have indicated that CP ($\beta = 0.862$, $p < 0.001$) was a significant determinant of PEOU, with explained variance, R^2 of 71.4%. However, TS ($\beta = -0.029$, $p > 0.05$) has no effect on predicting PEOU, resulting H8 to be not supported. Hence, H3, H5, H6, H7, H9 and H10 were supported.

Table 4.14: Fit Summary

	Saturated Model	Estimated Model
SPMR	0.047	0.062

Source: SmartPLS

As shown in Table 4.14, the Standardized Root Mean Square Residual (SRMR) for saturated model and estimated model is 0.047 and 0.062 respectively. As stated by Hair, Hult, Ringle and Sarstedt (2017), a value less than 0.08 is considered a good fit.

4.6 Assessing the Predictive Power

Table 4.15: Predictive relevance, Q^2

	SSO	SSE	$Q^2 (=1-SSE/SSO)$
BI	800	235.787	0.705
CP	800	800	
PEOU	1,000.00	420.983	0.579
PP	600	600	
PU	1,000.00	312.394	0.688
TS	600	600	
VB	800	800	

Source: SmartPLS

Note:

- a) BI = behavioral intention; CP = compatibility; PEOU = perceived ease of use; PP = perceived playfulness; PU = perceived usefulness; TS = training and support; VB = visibility

Table 4.15 indicates the Stone-Geisser's, Q^2 value as to assess the predictive relevance of the structural model. As mentioned by Hair et al. (2014), Q^2 value tells of whether the structural model is relevant in explaining its endogenous variables. Q^2 values can be classified into three levels, which represent small (0.02), medium (0.15), and large (0.35) (Cohen, 2013). As shown in the table, Q^2 for BI, PEOU and PU are more than 0.35, which that signifies that the integrated model is highly relevant in predicting these constructs.

Table 4.16: Effect sizes, f^2

Endogenous variables	BI	CP	PEOU	PP	PU	TS	VB
Exogenous variables							
BI							
CP	0.122		1.718		3.079		
PEOU	0.002						
PP	0.051						
PU	0.034						
TS	0.02		0.002		0.03		
VB	0.003						

Source: SmartPLS

Note:

- a) BI = behavioral intention; CP = compatibility; PEOU = perceived ease of use; PP = perceived playfulness; PU = perceived usefulness; TS = training and support; VB = visibility

Table 4.16 visualizes the results for effect sizes, f^2 for each path coefficient. As mentioned by Hair et al. (2014), when a path has high value of f^2 , it implies that the endogenous variable is strongly explained by the particular exogenous variable. The measurement for effect sizes are similar to the levels of predictive relevance, which 0.02 represents small, while 0.15 indicates medium and 0.35 signifies large effect size (Hair et al., 2014). The results indicate that, CP, PP, PU and TS have small effect on BI, while the effect of CP on PEOU and PU are large. In addition to that, TS has also seen to have small effect on PU.

4.7 Conclusion

This chapter has provided the summary of data analyses resulted from the SmartPLS software. The following chapter will be discussing about the key findings, inferences of study, and weaknesses of study together with some suggestions for upcoming studies.

CHAPTER 5: DISCUSSION AND POLICY

IMPLICATIONS

5.0 Chapter Initiation

This section comprises four sections, in which it provides insights on the key findings of research study, implications of study, and research study limitations along with the recommendations for upcoming studies in future.

5.1 Summary of Statistical Analysis

A total of 200 complete sets of questionnaires were being processed and analyzed using SmartPLS software.

5.1.1 Descriptive Analysis

5.1.1.1 Frequency Distribution

In this research study, female respondents accounted for a larger portion, whereby they constitute of 64%, while male accounted for the remaining 36%. Majority of the respondents are Chinese (53%), age between 21 to 30 years old (59%), and are working professionals. A number of them declared that their personal monthly income or allowances is between RM2001 to RM3000. In addition to that, most of the respondents (41%) reported that they own at least one mobile device and have used 1 to 5 times of mobile social media shopping in the past 12 months.

5.1.1.2 Measurement Model Evaluation

Reliability of the measurement model has been attained as both Cronbach's coefficient alpha and composite reliability for each constructs exceeds the thresholds value, which are of a minimum of 0.60 and 0.70 respectively. With that, all constructs of this study has been proven to be reliable. Not only that, convergent validity has also been proven as all constructs have their AVE exceeds the acceptable cut off point, 0.50. In view for discriminant validity, factor loadings of all items were shown to exceed 0.70, except PP1, as such this item was being dropped. Apart from that, discriminant validity has also been confirmed as results from Fornell-Larcker test indicate that the AVE of each construct is greater than its squared correlation with any other construct. Last but not least, HTMT method has again proven discriminant validity of the research model, as none of the confidence intervals include a value of 1, implying that all constructs are empirically distinct.

5.1.1.3 Hypothesis Testing

This research model has shown to be able to predict 83.1% of variance of the dependent variable. With all 10 proposed hypotheses being tested, 4 hypotheses were not being supported. However, 6 of the hypotheses developed were supported, which are H3, H5, H6, H7, H9 and H10.

5.2 Discussion on Major Findings

5.2.1 PU and BI to adopt

H1: PU is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

The proposed hypothesis for PU was not supported in this study as its p-value exceeds 0.05. Hence, it signifies that there is no significant relationship between PU and BI, which this results is contradictory with the past studies that are related with technology adoption, for instance (Wong, Tan, Tan & Ooi, 2015c; Tan, Siah, Ooi, Hew & Chong, 2015; Wong, Tan, Loke & Ooi, 2015b). However, the present findings corroborates with past empirical studies by (Sim, Kong, Lee, Tan & Teo, 2012) on mobile technologies adoption and (Aldás-Manzano, Ruiz-Mafé & Sanz-Blas, 2009), where 470 samples in Spain were used and evidences indicated that consumers would purchase regardless whether the mobile services provides benefits or vice versa. In addition to that, part of the reason might be due to the local cultures in Malaysia, whereby consumers require time to slowly digest, accept mobile social media shopping and they still prefer to visit the brick and mortar store for shopping as they might perceive the traditional way to be way more productive, and as well they are able to use their shopping time to develop social relationship and enjoy the shopping experience.

5.2.2 PEOU and BI to adopt

H2: PEOU is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

H2 was not supported as PEOU has found to have no significant influence on BI. Above findings conform with the study by (Ooi & Tan, 2016; Juniwati, 2014). However, the findings contradict with most of the past studies conducted on technology adoption, such as (Pan, Chew, Cheah, Wong & Tan, 2015; Teo, Tan, Ooi & Lin, 2015a; Wong, Tan, Loke & Ooi, 2014). One of the possible explanations is that majority of the target respondents for this research study age from 21 to 30 years old, which they are the group of millennial, who are all young adults that are more attentive towards the newest technology and innovation (Teo, Tan, Ooi, Hew & Yew, 2015b). These groups of consumers basically have lesser to no barriers to use or manage an IT innovation due to their inquisitive and explorative personality; hence PEOU is insignificant to predict BI.

5.2.3 PP and BI to adopt

H3: PP is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

The findings revealed that PP is a significant determinant to forecast the consumers' behavioral intention to adopt mobile social media shopping, which it is consistent with previous findings by (Cheong & Park, 2005; Tan et al., 2017). This is no surprise as the existence of entertainment elements in social media applications are able deliver enjoyment, excitement and pleasure experience to the users throughout their usage, which that will encourage the users to adopt mobile social media shopping.

5.2.4 VB and BI to adopt

H4: VB is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

Regarding VB, the results finding highlight that this construct is not a significant predictor for BI. Hence, H4 was not supported in this study. Although the findings contradicts with a study by (Al-Jabri & Sohail, 2012) where VB was significant with the intention to adopt mobile banking, however, the finding is in line with past studies by (Kapoor, Dwivedi & Williams, 2014; Arts, Frambach & Bijmolt, 2011). The possible reason lies on the fact that consumers nowadays are more independent and are able to make better and reasonable justifications on their own; as such they might not be easily influenced by others to adopt a particular innovation. In addition to that, the visibility of this innovation might not be apparent enough for the moment.

5.2.5 CP and PU

H5: CP is positively related to PU.

Based on the results, H5 was supported and directing that CP has positive significant impact towards PU. Past literatures have shown evidence that support the prediction of PU with CP. The results findings is aligned with past empirical works by (Ooi & Tan, 2016) on mobile users adoption on smartphone credit card as well as a study by Schierz et al., 2010) on mobile payment system. The findings explains that when mobile social media shopping fits well with the consumers' lifestyle and habits, they will find that mobile social media shopping to be useful and beneficial. With the predominance of mobile devices as to provide connections for people, various social media applications have designed in such a way that it is more compatible and applicable on all types of mobile devices and in turns lead to the perception that mobile social media shopping is more efficient.

5.2.6 CP and PEOU

H6: CP is positively related to PEOU.

H6 was supported and indicated that CP is positively associated with PEOU. The results findings is consistent with prior findings by (Ozturk et al., 2016; Ooi & Tan, 2016), whereby CP was found to have significant influence on PEOU. This implies that when the consumers believe that using mobile social media shopping is reconcilable with their current habits and past experiences, they will find the innovation to be easy to use and handle.

5.2.7 TS and PU

H7: TS is positively related to PU.

Abide with the prediction, H7 was supported as TS was found to be significant to PU. The result is contrary with the findings by (Wong, Tan, Hew & Ooi, 2016; Wu et al., 2007) but it has been proven in past studies by scholars such as (Yap & Tan, 2017). The finding leads us to believe that when there is sufficient training and support provided for the consumers, it will enhance their perceived usefulness and task performance on managing mobile social media shopping.

5.2.8 TS and PEOU

H8: TS is positively related to PEOU.

On the contrary, TS was found insignificant towards PEOU, hence H8 was not supported. The outcome of this study is inconsistent with past literatures (Michaelidou, Siamagka & Christodoulides, 2011; Wong et al., 2016), which emphasizes that existence of TS with adequate training and support programs are important in facilitating PEOU. One of the possible causes is that, some of the seller on social media application today have not provide sufficient guidelines to guide the consumers on how to manage mobile social media shopping. As for instance, Facebook is open for anyone to sell anything, with that means there are numerous sellers come with different types of procurement procedures that are not being standardized, which this will results in confusion among the consumers throughout the purchasing experience. Hence, TS is not able to determine PEOU accurately.

5.2.9 CP and BI to adopt

H9: CP is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

The impact of CP on BI to adopt has been confirmed and thus, H9 was supported. The same results collaborates finding by (Wong et al. 2015a; Ooi & Tan, 2016) in mobile shopping context and mobile payment method respectively. The finding explains that mobile social media application designers should give attention in improving the degree of compatibility of the innovation as to meet and consistent with the consumer needs, past experiences, habits and lifestyle. As consumers would incline to accept and use an innovation when it is reconcilable with their lifestyle and desires.

5.2.10 TS and BI to adopt

H10: TS is positively related to the consumers' behavioral intention to adopt mobile social media shopping.

In line with the proposed hypothesis, TS has been proven to influence BI significantly, which the result is congruent with studies by (Wong et al., 2016; Michaelidou et al., 2011). This supports the perception of Igarria et al. (1997) and Tsai and LaRose (2015), whereby when relevant and sufficient support and training is made available for the consumers, it will increase the consumers' level of acceptance on using mobile social media shopping.

5.3 Implications of study

5.3.1 Theoretical Implications

From the theoretical perspective, this research study had contributed to the existing literatures by providing valuable insights on the consumers' behavioral intention on adopting mobile social media shopping in Malaysia context. In line with many past studies that are related with mobile innovation technology adoption, PU and PEOU were adopted into this study as to investigate BI. In addition to that, this study has successfully extended the existing TAM model by incorporating additional constructs from DOI model (CP and VB) as well as PP and TS. The extended TAM model is believed to be able to provide better insights on the adoption of mobile social media shopping than TAM alone. On top of that, this research model could also be replicated or served as a backbone for further extension as to cater the needs of different environments or context, in order to better predict the consumers BI towards mobile social media shopping adoption.

5.3.2 Managerial Implications

In order to encourage more consumers to accept and use mobile social media shopping, it is vital that the social media applications designs are able to provide advantages that the consumers concern and value. Present findings has identified few determinants which the consumers place greater attention on, namely PP, CP and TS. In addition to that, CP was also found to have significant effects on PU and PEOU. On the other hand, TS has confirmed its influence on PU significantly. The findings of this study are able to provide valuable insights to mobile application software developers, mobile marketers, merchants and retailers online, mobile commerce sellers and other related parties.

From the managerial perspective, since PU does not have significant impact on Malaysian consumers' BI to use mobile social media shopping, thus the related parties could avoid placing much concern onto this attributes when providing the services to the users. Apart from that, data analysis results have also reported that PEOU has no significant impact in predicting consumers' BI. Therefore, it is not essential that the parties involved to provide social media application in such a way that it is extremely easy to use as majority of the consumers are young innovative users, whereby their information-seeking behaviors are able to help them to reduce the barriers in managing new innovation. On the other hand, PP was reported to be significantly associated with BI, hence the practitioners should deem to include fun, entertaining and interesting elements such as music, video, graphic interchange format (GIF), pictures into the shopping contents provided on social media platforms when designing the mobile social media applications.

In light with the findings on VB, attention of related parties for the visibility of mobile social media shopping could be diverted away as consumers does not emphasize on this attributes. Hence, mobile social media shopping service need not to be designed in such a way that it is very much discernible and appealing, as young consumers that are explorative are able to extract the desirable information on their

own. Moreover, CP has also been proven to be a significant factor in predicting as well as exerted its influence on PU and PEOU. This signifies that when mobile social media shopping is compatible with their daily life, it will leads to a perception that the innovation is very easy to navigate, brings abundance of benefits and that will in turns influence consumers' BI to adopt. As such, related parties should develop, market and advertise social media shopping in a way that it matches the consumers' past experiences, habits and lifestyles. At the same time, there shall be concerns on the features and advantages of convenience and usefulness. Lastly, with the significant relationship between TS and BI, parties involved is advised to provide sufficient and precise information as well as detailed guidelines to the potential adopters, for instance on how the purchasing on social media operates, the procedures to secure and complete the transaction and so forth. On top of that, technical infrastructure must also be made available to the potential adopters as to stimulate the level of acceptance and BI to adopt. Considering TS has a significant association with PU, it is essential that sufficient training and support are provided to the consumers as to enhance their perception on self-efficacy.

5.4 Limitations and Future Directions

Although this research study has employed rigorous statistical procedures and attained the research objectives, but there are several limitations and weaknesses that future studies should take into consideration. Firstly, the sample of the study is majority younger generations, which they are mainly 21 to 30 years old (59%). Although prior literatures have revealed that younger innovative adults are more prone to adopt new innovation (Tan, Chong, Ooi & Chong, 2010). However, we cannot assume that these are the only representatives as potential adopters, we cannot generalize to the elders, or other areas as different age group tends to have different behaviors towards new innovation (Tan, Ooi, Sim & Phusavat, 2012). Future research may take a look at different age groups to observe if there are any deviations on behaviors exerted towards BI. In addition to that, sample size of the study contributes

are one of the shortcoming as well. The location for data collection was under geographical and time constraint, with that the findings are unable to capture the whole picture and generalization into other environments or areas remains ambiguous to a certain extent. Therefore, future studies could be improved by using a larger sample size, and sampling from different states in the Peninsula Malaysia. Furthermore, the present research study is of cross-sectional study based. In view that mobile social media shopping is still new to the Malaysian, and when technology grows into a more mature stage, findings may vary over time. Thus, future research could employ longitudinal study as to better capture the responses and behavior. Lastly, there are limitation concerns on the research model as the research model used has restrained to the adoption factors derived from TAM, with VB and CP extracted from DOI model as well as integrated TS and PP. Future studies should consider including additional variables, for instance perceived risk, perceived trust, perceived cost, perceived value and so forth in order to obtain a more accurate picture on consumers' BI to adopt mobile social media shopping.

5.5 Conclusion

Generally, this research paper focuses on the consumers' behavioral intention to adopt mobile social media shopping in Malaysia. Besides the extension of TAM with additional variables (CP, VB) extracted from DOI model, TS and PP have also been adapted to answer the research objectives. Present findings have revealed the existence of significant association between PP, CP and TS towards BI respectively. In addition to that, CP has also possessed significant influence on PU and PEOU. However, TS has been proven to have significant impact on PU only, but not PEOU. The findings of this study are anticipated to contribute to both theoretical and practical world, in which the results are in hope to be able to serve as a guideline for future studies that are related to mobile social media shopping adoption.

REFERENCES

- Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. *Action Control*, 11-39. http://dx.doi.org/10.1007/978-3-642-69746-3_2
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior And Human Decision Processes*, 50(2), 179-211. [http://dx.doi.org/10.1016/0749-5978\(91\)90020-t](http://dx.doi.org/10.1016/0749-5978(91)90020-t)
- Aldás-Manzano, J., Ruiz-Mafé, C., & Sanz-Blas, S. (2009). Exploring individual personality factors as drivers of M-shopping acceptance. *Industrial Management & Data Systems*, 109(6), 739-757. <http://dx.doi.org/10.1108/02635570910968018>
- Al-Debei, M., Al-Lozi, E., & Papazafeiropoulou, A. (2013). Why people keep coming back to Facebook: Explaining and predicting continuance participation from an extended theory of planned behaviour perspective. *Decision Support Systems*, 55(1), 43-54. <http://dx.doi.org/10.1016/j.dss.2012.12.032>
- Al-Jabri, I., & Sohail, M. (2012). Mobile Banking Adoption: Application of Diffusion of Innovation Theory. *Journal Of Electronic Commerce Research*, 13(4).
- Anderson, J., & Gerbing, D. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423. <http://dx.doi.org/10.1037//0033-2909.103.3.411>
- Aral, S., Dellarocas, C., & Godes, D. (2013). Introduction to the Special Issue—Social Media and Business Transformation: A Framework for Research. *Information Systems Research*, 24(1), 3-13. <http://dx.doi.org/10.1287/isre.1120.0470>
- Arnaboldi, M., & Coget, J. (2016). Social media and business. *Organizational Dynamics*, 45(1), 47-54. <http://dx.doi.org/10.1016/j.orgdyn.2015.12.006>
- Arts, J., Frambach, R., & Bijmolt, T. (2011). Generalizations on consumer innovation adoption: A meta-analysis on drivers of intention and behavior. *International Journal Of Research In Marketing*, 28(2), 134-144. <http://dx.doi.org/10.1016/j.ijresmar.2010.11.002>
- Bagozzi, R., & Yi, Y. (1988). On the Evaluation of Structural Equation Models. *Journal Of The Academy Of Marketing Science*, 16(1), 74-94. <http://dx.doi.org/10.1177/009207038801600107>

- Barnes, S. (2002). The mobile commerce value chain: analysis and future developments. *International Journal Of Information Management*, 22(2), 91-108. [http://dx.doi.org/10.1016/s0268-4012\(01\)00047-0](http://dx.doi.org/10.1016/s0268-4012(01)00047-0)
- Broeckelmann, P. (2010). Exploring consumers' reactions towards innovative mobile services. *Qualitative Market Research: An International Journal*, 13(4), 414-429. <http://dx.doi.org/10.1108/13522751011078827>
- Burns, A., & Bush, R. (2014). *Marketing research* (7th ed.). Upper Saddle River: Pearson Education.
- Carlson, K., & Herdman, A. (2010). Understanding the Impact of Convergent Validity on Research Results. *Organizational Research Methods*, 15(1), 17-32. <http://dx.doi.org/10.1177/1094428110392383>
- Casey, T. & Wilson-Evered, E. (2012). Predicting uptake of technology innovations in online family dispute resolution services: An application and extension of the UTAUT. *Computers In Human Behavior*, 28(6), 2034-2045. <http://dx.doi.org/10.1016/j.chb.2012.05.022>
- Çelik, H. (2011). Influence of social norms, perceived playfulness and online shopping anxiety on customers' adoption of online retail shopping. *International Journal Of Retail & Distribution Management*, 39(6), 390-413. <http://dx.doi.org/10.1108/09590551111137967>
- Chaiprasit, C. (2015). *Shopping On Social Networking Web Sites: Female Consumers' Intentions To Shop On Facebook In Bangkok Area*. University of the Thai Chamber of Commerce.
- Chappuis, B., Gaffey, B., & Parvizi, P. (2011). *Are your customers becoming digital junkies?*. McKinsey & Company. Retrieved 14 November 2016, from <http://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/are-your-customers-becoming-digital-junkies>
- Cheong, J., & Park, M. (2005). Mobile internet acceptance in Korea. *Internet Research*, 15(2), 125-140. <http://dx.doi.org/10.1108/10662240510590324>
- Chou, P. (2006). *Understanding User's Perceived Playfulness toward Mobile Information and Entertainment Services in New Zealand* (Master). Auckland University of Technology.
- Chung, C., & Austria, K. (2012). Attitudes Toward Product Messages on Social Media. *International Journal Of E-Services And Mobile Applications*, 4(4), 1-14. <http://dx.doi.org/10.4018/jesma.2012100101>

- Cohen, J. (2013). *Statistical Power Analysis for the Behavioral Sciences*. Burlington: Elsevier Science.
- Creswell, J. (2014). *Research Design: Qualitative, Quantitative and Mixed Method Approaches*(4th ed.). SAGE.
- Davis, F., Bagozzi, R., & Warshaw, P. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982-1003. <http://dx.doi.org/10.1287/mnsc.35.8.982>
- Deloitte Development LLC,. (2015). *Deloitte's 2015 Annual Holiday Survey* (p. 27). Deloitte Development LLC. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/consumer-business/us-2015-holiday-survey-results.pdf>
- Devi, S., & Kalia, A. (2015). Study of Data Cleaning & Comparison of Data Cleaning Tools. *International Journal Of Computer Science And Mobile Computing*, 4(3), 360 – 370.
- Ding, Y., Guo, F., Zhang, X., Qu, Q., & Liu, W. (2016). Using event related potentials to identify a user's behavioural intention aroused by product form design. *Applied Ergonomics*, 55, 117-123. <http://dx.doi.org/10.1016/j.apergo.2016.01.018>
- Elogie, A., Ikenwe, I., & Idubor, I. (2015). Factors Influencing the Adoption of Smartphones by Undergraduate Students at Ambrose Alli University, Ekpoma, Nigeria. *African Journals Online*, 12(1).
- Ewe, S., Yap, S., & Lee, C. (2015). Network externalities and the perception of innovation characteristics: mobile banking. *Marketing Intelligence & Planning*, 33(4), 592-611. <http://dx.doi.org/10.1108/mip-01-2014-0006>
- Fornell, C., & Larcker, D. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal Of Marketing Research*, 18(1), 39. <http://dx.doi.org/10.2307/3151312>
- Gengeswari, K. & Sharmeela-Banu, S. (2016). Revealing the Underlying Insights on the Use of Social Media by Foreign Students—A Qualitative Approach. *Journal Of Business Theory And Practice*, 4(1), 139-150. <http://dx.doi.org/10.22158/jbtp.v4n1p139>
- Groß, M. (2014). Exploring the acceptance of technology for mobile shopping: an empirical investigation among Smartphone users. *The International Review Of Retail, Distribution And Consumer Research*, 25(3), 215-235. <http://dx.doi.org/10.1080/09593969.2014.988280>

- Hair, J., Money, A., Samouel, P., & Page, M. (2007). *Research methods for business*. Chichester. West Sussex: John Wiley & Sons, Inc.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Harlow: Pearson Education Limited.
- Hair, J., Ringle, C., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *The Journal Of Marketing Theory And Practice*, 19(2), 139-152. <http://dx.doi.org/10.2753/mtp1069-6679190202>
- Hair, J., Hult, G., Ringle, C., & Sarstedt, M. (2013a). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks: Sage.
- Hair, J., Ringle, C., & Sarstedt, M. (2013b). Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance. *Long Range Planning*, 46(1-2), 1-12. <http://dx.doi.org/10.1016/j.lrp.2013.01.001>
- Hair, J., Hult, G., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling* (2nd ed.). Thousand Oaks: Sage.
- Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106-121. <http://dx.doi.org/10.1108/eb-10-2013-0128>
- Hand Phone Users Survey 2014*. (2015). *Multimedia Communications and Multimedia Commission*. Retrieved 25 July 2017, from <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/MCMC-Hand-Phone-User19112015.pdf>
- Henseler, J., Ringle, C., & Sinkovics, R. (2009). The use of partial least squares path modeling in international marketing. *Advances In International Marketing*, 20, 277-319.
- Henseler, J., Ringle, C., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal Of The Academy Of Marketing Science*, 43(1), 115-135. <http://dx.doi.org/10.1007/s11747-014-0403-8>
- Hew, J., Tan, G., Lin, B., & Ooi, K. (2017). Generating travel-related contents through mobile social tourism: Does privacy paradox persist?. *Telematics And Informatics*. <http://dx.doi.org/10.1016/j.tele.2017.04.001>
- Ho, C., & Wu, W. (2011). Role of Innovativeness of Consumer in Relationship between Perceived Attitudes of New Products and Intention to adopt. *International Journal Of Electronic Business Management*, 9(3), 258-

266. Retrieved from https://www.researchgate.net/profile/Cheng_Hsun_Ho/publication/263351407_Role_of_Innovativeness_of_Consumer_in_Relationship_between_Perceived_Attributes_of_New_Products_and_Intention_to_Adopt/links/0deec53aa457251f89000000.pdf
- Hoyle, R. (1995). *Structural Equation Modeling: Concepts, Issues, and Applications* (1st ed.). Thousand Oaks, CA: Sage Publications.
- Hsieh, M., & Tsao, W. (2013). Reducing perceived online shopping risk to enhance loyalty: a website quality perspective. *Journal Of Risk Research*, 17(2), 241-261. <http://dx.doi.org/10.1080/13669877.2013.794152>
- Hudson, S., Huang, L., Roth, M., & Madden, T. (2016). The influence of social media interactions on consumer–brand relationships: A three-country study of brand perceptions and marketing behaviors. *International Journal Of Research In Marketing*, 33(1), 27-41. <http://dx.doi.org/10.1016/j.ijresmar.2015.06.004>
- Hur, H., Lee, H., & Choo, H. (2017). Understanding usage intention in innovative mobile app service: Comparison between millennial and mature consumers. *Computers In Human Behavior*, 73, 353-361. <http://dx.doi.org/10.1016/j.chb.2017.03.051>
- Hwang, H., Malhotra, N., Kim, Y., Tomiuk, M., & Hong, S. (2010). A Comparative Study on Parameter Recovery of Three Approaches to Structural Equation Modeling. *Journal Of Marketing Research*, 47(4), 699-712. <http://dx.doi.org/10.1509/jmkr.47.4.699>
- Igbaria, M., Zinatelli, N., Cragg, P., & Cavaye, A. (1997). Personal Computing Acceptance Factors in Small Firms: A Structural Equation Model. *MIS Quarterly*, 21(3), 279. <http://dx.doi.org/10.2307/249498>
- Irani, Z., Dwivedi, Y., & Williams, M. (2008). Understanding consumer adoption of broadband: an extension of the technology acceptance model. *Journal Of The Operational Research Society*, 60(10), 1322-1334. <http://dx.doi.org/10.1057/jors.2008.100>
- Islam, Z., Kim Cheng Low, P., & Hasan, I. (2013). Intention to use advanced mobile phone services (AMPS). *Management Decision*, 51(4), 824-838. <http://dx.doi.org/10.1108/00251741311326590>
- Internet users (per 100 people) | World Bank.* (2016). *Data.worldbank.org*. Retrieved 14 November 2016, from <http://data.worldbank.org/indicator/IT.NET.USER.P2?end=2015&start=2010>

- Jaccard, J., & King, G. (1977). The relation between behavioural intentions and beliefs: A probabilistic model. *Human Communication Research*, 3(4), 326-334. <http://dx.doi.org/10.1111/j.1468-2958.1977.tb00535.x>
- Jacky, P. (2006). *Understanding User's Perceived Playfulness toward Mobile Information and Entertainment Services in New Zealand* (Master). Auckland University of Technology.
- Juniwati. (2014). Influence of Perceived Usefulness, Ease of Use, Risk on Attitude and Intention to Shop Online. *European Journal Of Business And Management*, 6(27), 218-228.
- Kaminski, J. (2011). Diffusion of Innovation Theory. *Canadian Journal Of Nursing Informatics*, 6(2). Retrieved from <http://cjni.net/journal/?p=1444>
- Kaplan, A. (2012). If you love something, let it go mobile: Mobile marketing and mobile social media 4x4. *Business Horizons*, 55(2), 129-139. <http://dx.doi.org/10.1016/j.bushor.2011.10.009>
- Kapoor, K., Dwivedi, Y., & Williams, M. (2014). Examining the role of three sets of innovation attributes for determining adoption of the interbank mobile payment service. *Information Systems Frontiers*, 17(5), 1039-1056. <http://dx.doi.org/10.1007/s10796-014-9484-7>
- Khanh, N., & Gim, G. (2014). Factors Influencing Mobile E-Learning Adoption Intention: An Empirical Investigation in High Education. *Journal Of Social Sciences*, 10(2), 51-62. <http://dx.doi.org/10.3844/jssp.2014.51.62>
- Kim, Y., Kim, D., & Wachter, K. (2013). A study of mobile user engagement (MoEN): Engagement motivations, perceived value, satisfaction, and continued engagement intention. *Decision Support Systems*, 56, 361-370. <http://dx.doi.org/10.1016/j.dss.2013.07.002>
- Kline, R. (2015). *Principles and practice of structural equation modeling* (4th ed.). New York: The Guilford Press.
- Ko, E., Kim, E., & Lee, E. (2009). Modeling consumer adoption of mobile shopping for fashion products in Korea. *Psychology And Marketing*, 26(7), 669-687. <http://dx.doi.org/10.1002/mar.20294>
- Lavrakas, P. (2011). Target Population. *Encyclopedia Of Survey Research Methods*. <http://dx.doi.org/10.4135/9781412963947.n571>
- Leong, L., Hew, T., Tan, G., & Ooi, K. (2013). Predicting the determinants of the NFC-enabled mobile credit card acceptance: A neural networks

- approach. *Expert Systems With Applications*, 40(14), 5604-5620. <http://dx.doi.org/10.1016/j.eswa.2013.04.018>
- Lim, B. (2017). Digital boost to sales. *New Straits Times*. Retrieved from <https://www.nst.com.my/lifestyle/bots/2017/05/243690/digital-boost-sales>
- Liu, C., & Guo, Y. (2008). Validating the End-User Computing Satisfaction Instrument for Online Shopping Systems. *Journal Of Organizational And End User Computing*, 20(4), 74-96. <http://dx.doi.org/10.4018/joeuc.2008100104>
- Lu, H., & Su, P. (2009). Factors affecting purchase intention on mobile shopping web sites. *Internet Research*, 19(4), 442-458. <http://dx.doi.org/10.1108/10662240910981399>
- Maamar, Z. (2003). Commerce, e-commerce, and m-commerce. *Communications Of The ACM*, 46(12), 251. <http://dx.doi.org/10.1145/953460.953508>
- Mahalingam, E. (2016). Online shopping uptrend in Malaysia. *The Star Online*. Retrieved from <http://www.thestar.com.my/business/business-news/2016/06/27/online-shopping-uptrend/>
- Malaysia daily reach of leading social platforms 2015 | Statista. (2016). Statista. Retrieved 14 November 2016, from <https://www.statista.com/statistics/496953/daily-active-users-of-leading-social-networks-malaysia/>
- Malaysia Internet Usage and Telecommunications Reports. (2016). *Internetworldstats.com*. Retrieved 14 November 2016, from <http://www.internetworldstats.com/asia/my.htm>
- Malhotra, N. (2009). *Marketing Research: An Applied Orientation* (6th ed.). Pearson Education.
- Malhotra, N., Birks, D., & Wills, P. (2012). *Marketing Research: An Applied Approach* (4th ed.). Harlow: Pearson Education.
- Malhotra, N., & Peterson, M. (2009). *Basic marketing research* (3rd ed.). Upper Saddle River, N.J.: Pearson Education.
- Mallat, N., & Tuunainen, V. (2008). Exploring Merchant Adoption of Mobile Payment Systems: An Empirical Study. *E-Service Journal*, 6(2), 24-57. <http://dx.doi.org/10.2979/esj.2008.6.2.24>
- Marangunić, N. & Granić, A. (2014). Technology acceptance model: a literature review from 1986 to 2013. *Universal Access In The Information Society*, 14(1), 81-95. <http://dx.doi.org/10.1007/s10209-014-0348-1>

- Michaelidou, N., Siamagka, N., & Christodoulides, G. (2011). Usage, barriers and measurement of social media marketing: An exploratory investigation of small and medium B2B brands. *Industrial Marketing Management*, 40(7), 1153-1159. <http://dx.doi.org/10.1016/j.indmarman.2011.09.009>
- Mobile cellular subscriptions (per 100 people) | World Bank. (2016). *Data.worldbank.org*. Retrieved 14 November 2016, from <http://data.worldbank.org/indicator/IT.CEL.SETS.P2>
- Moon, J., & Kim, Y. (2001). Extending the TAM for a World-Wide-Web context. *Information & Management*, 38(4), 217-230. [http://dx.doi.org/10.1016/s0378-7206\(00\)00061-6](http://dx.doi.org/10.1016/s0378-7206(00)00061-6)
- Moore, G., & Benbasat, I. (1991). Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. *Information Systems Research*, 2(3), 192-222. <http://dx.doi.org/10.1287/isre.2.3.192>
- Nielsen. (2014). *Malaysians Rank Among The World's Most Avid Online Shoppers*. Retrieved from <http://www.nielsen.com/my/en/press-room/2014/e-commerce.html>
- Nilashi, M., Ibrahim, O., Reza Mirabi, V., Ebrahimi, L., & Zare, M. (2015). The role of Security, Design and Content factors on customer trust in mobile commerce. *Journal Of Retailing And Consumer Services*, 26, 57-69. <http://dx.doi.org/10.1016/j.jretconser.2015.05.002>
- Nunnally, J., & Bernstein, I. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Ooi, K., & Tan, G. (2016). Mobile technology acceptance model: An investigation using mobile users to explore smartphone credit card. *Expert Systems With Applications*, 59, 33-46. <http://dx.doi.org/10.1016/j.eswa.2016.04.015>
- Ozturk, A., Bilgihan, A., Nusair, K., & Okumus, F. (2016). What keeps the mobile hotel booking users loyal? Investigating the roles of self-efficacy, compatibility, perceived ease of use, and perceived convenience. *International Journal Of Information Management*, 36(6), 1350-1359. <http://dx.doi.org/10.1016/j.ijinfomgt.2016.04.005>
- Pan, V., Chew, P., Cheah, A., Wong, C., & Tan, G. (2015). Mobile marketing in the 21st century: a partial least squares structural equation modelling approach. *International Journal Of Modelling In Operations Management*, 5(2), 83. <http://dx.doi.org/10.1504/ijmom.2015.072669>
- Podsakoff, P., MacKenzie, S., Lee, J., & Podsakoff, N. (2003). Common method biases in behavioral research: A critical review of the literature and

- recommended remedies. *Journal Of Applied Psychology*, 88(5), 879-903.
<http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Qu, Y. (2014). Study on influence factors of repeated purchase behavior of e-commerce consumers. *International Conference On Economic Management And Social Science*, 68-72. Retrieved from
<http://file:///C:/Users/user/Downloads/QET616.pdf>
- Ranganathan, C. & Grandon, E. (2002). An Exploratory Examination of Factors Affecting Online Sales. *Journal Of Computer Information Systems*, 42(3), 87-93. <http://dx.doi.org/10.1080/08874417.2002.11647507>
- Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: an empirical study on Facebook. *Journal Of Enterprise Information Management*, 27(1), 6-30.
<http://dx.doi.org/10.1108/jeim-04-2012-0011>
- Revels, J., Tojib, D., & Tsarenko, Y. (2010). Understanding consumer intention to use mobile services. *Australasian Marketing Journal (AMJ)*, 18(2), 74-80.
<http://dx.doi.org/10.1016/j.ausmj.2010.02.002>
- Rogers, E. (1995). *Diffusion of Innovation* (4th ed., pp. 244-250). New York: The Free Press. Retrieved from <https://www.d.umn.edu/~lrochfor/ireland/dif-of-in-ch06.pdf>
- Rogers, E. (2003). *Diffusion of Innovations* (5th ed., p. 281). New York: Free Press. Retrieved from <https://books.google.com.my/books?id=9U1K5LjUOwEC&printsec=frontcover&dq=diffusion+of+innovations+5th+edition&hl=en&sa=X&ved=0ahUKEwiKvsvlgMTUAhWkrY8KHaNdA8IQ6AEIKzAB#v=onepage&q=diffusion%20of%20innovations%205th%20edition&f=false>
- Ruiz Mafé, C., Sanz Blas, S., & Fernando Tavera-Mesías, J. (2010). A comparative study of mobile messaging services acceptance to participate in television programmes. *Journal Of Service Management*, 21(1), 69-102.
<http://dx.doi.org/10.1108/09564231011025128>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Harlow: Financial Times Prentice Hall.
- Schierz, P., Schilke, O., & Wirtz, B. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research And Applications*, 9(3), 209-216.
<http://dx.doi.org/10.1016/j.elerap.2009.07.005>

- Sheppard, B., Hartwick, J., & Warshaw, P. (1988). The Theory of Reasoned Action: A Meta-Analysis of Past Research with Recommendations for Modifications and Future Research. *J CONSUM RES*, 15(3), 325. <http://dx.doi.org/10.1086/209170>
- Sekaran, U., & Bougie, R. (2013). *Research Methods For Business: A Skill Building Approach Sixth Edition* (6th ed.). John Wiley & Sons.
- Sim, J., Tan, G., Wong, J., Ooi, K., & Hew, T. (2014). Understanding and predicting the motivators of mobile music acceptance – A multi-stage MRA-artificial neural network approach. *Telematics And Informatics*, 31(4), 569-584. <http://dx.doi.org/10.1016/j.tele.2013.11.005>
- Sim, J., Kong, F., Lee, V., Tan, G., & Teo, A. (2012). Determining factors affecting broadband services adoption: an empirical analysis of Malaysian consumers. *International Journal Of Services, Economics And Management*, 4(3), 236. <http://dx.doi.org/10.1504/ijsem.2012.048621>
- Smartphone users in Malaysia 2015-2021 | Statistic*. (2016). Statista. Retrieved 15 November 2016, from <https://www.statista.com/statistics/494587/smartphone-users-in-malaysia/>
- Smith, M., & Salvendy, G. (2001). *Systems, Social, and Internationalization Design Aspects of Human-computer Interaction* (p. 265). London: Lawrence Erlbaum Associates. Retrieved from https://books.google.com.my/books?id=dVUJqSo9IBgC&pg=PA265&lpg=PA265&dq=facilitating+condition+training+and+support&source=bl&ots=jpAfcUMjXI&sig=dpUqq3A4PRRlsqr8H4TYt2yvf2k&hl=en&sa=X&redir_esc=y#v=onepage&q=facilitating%20condition%20training%20and%20support&f=false
- Smock, A., Ellison, N., Lampe, C., & Wohn, D. (2011). Facebook as a toolkit: A uses and gratification approach to unbundling feature use. *Computers In Human Behavior*, 27(6), 2322-2329. <http://dx.doi.org/10.1016/j.chb.2011.07.011>
- Ström, R., Vendel, M., & Bredican, J. (2014). Mobile marketing: A literature review on its value for consumers and retailers. *Journal Of Retailing And Consumer Services*, 21(6), 1001-1012. <http://dx.doi.org/10.1016/j.jretconser.2013.12.003>
- Tan, G., Chong, C., Ooi, K., & Chong, A. (2010). The Adoption of Online Banking in Malaysia: An Empirical Analysis. *International Journal Of Business And Management Science*, 3(2), 169-193.
- Tan, G., Ooi, K., Chong, S., & Hew, T. (2014a). NFC mobile credit card: The next frontier of mobile payment?. *Telematics And Informatics*, 31(2), 292-307. <http://dx.doi.org/10.1016/j.tele.2013.06.002>

- Tan, G., Ooi, K., Leong, L., & Lin, B. (2014b). Predicting the drivers of behavioral intention to use mobile learning: A hybrid SEM-Neural Networks approach. *Computers In Human Behavior*, 36, 198-213. <http://dx.doi.org/10.1016/j.chb.2014.03.052>
- Tan, G., Lee, V., Lin, B., & Ooi, K. (2017). Mobile Applications in Tourism: The Future of the Tourism Industry?. *Industrial Management & Data Systems*, 117(3).
- Tan, G., Ooi, K., Sim, J., & Phusavat, K. (2012). Determinants of Mobile Learning Adoption: An Empirical Analysis. *Journal Of Computer Information Systems*, 52(3).
- Tan, G., Siah, M., Ooi, K., Hew, T., & Chong, A. (2015). The adoption of PDA for future healthcare system: an emerging market perspective. *International Journal Of Mobile Communications*, 13(1), 1. <http://dx.doi.org/10.1504/ijmc.2015.065887>
- Teo, A., Tan, G., Ooi, K., & Lin, B. (2015a). Why consumers adopt mobile payment? A partial least squares structural equation modelling (PLS-SEM) approach. *International Journal Of Mobile Communications*, 13(5), 478. <http://dx.doi.org/10.1504/ijmc.2015.070961>
- Teo, A., Tan, G., Ooi, K., Hew, T., & Yew, K. (2015b). The effects of convenience and speed in m-payment. *Industrial Management & Data Systems*, 115(2), 311-331. <http://dx.doi.org/10.1108/imds-08-2014-0231>
- Tornatzky, L., & Klein, K. (1982). Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings. *IEEE Transactions On Engineering Management*, EM-29(1), 28-45. <http://dx.doi.org/10.1109/tem.1982.6447463>
- Torkzadeh, G., & Van Dyke, T. (2002). Effects of training on Internet self-efficacy and computer user attitudes. *Computers In Human Behavior*, 18(5), 479-494. [http://dx.doi.org/10.1016/s0747-5632\(02\)00010-9](http://dx.doi.org/10.1016/s0747-5632(02)00010-9)
- Tsai, H., & LaRose, R. (2015). Broadband Internet adoption and utilization in the inner city: A comparison of competing theories. *Computers In Human Behavior*, 51, 344-355. <http://dx.doi.org/10.1016/j.chb.2015.04.022>
- Venkatesh, V. & Davis, F. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), 186-204. <http://dx.doi.org/10.1287/mnsc.46.2.186.11926>

- Vijayasathya, L. (2004). Predicting consumer intentions to use on-line shopping: the case for an augmented technology acceptance model. *Information & Management*, 41(6), 747-762. <http://dx.doi.org/10.1016/j.im.2003.08.011>
- Wertz, J. (2017). *Which Social Media Platforms Are Right For Your Business?*. *Forbes.com*. Retrieved 24 July 2017, from <https://www.forbes.com/sites/jjawertz/2017/02/18/which-social-media-platforms-are-right-for-your-business/#6c2ca2b912a2>
- Who Is A Consumer?*. *Consumerrights.org.in*. Retrieved 24 July 2017, from <http://www.consumerrights.org.in/meaning-of-consumer.htm>
- Wong, C., Tan, G., Ooi, K., & Lin, B. (2015a). Mobile shopping: the next frontier of the shopping industry? An emerging market perspective. *International Journal Of Mobile Communications*, 13(1), 92. <http://dx.doi.org/10.1504/ijmc.2015.065892>
- Wong, C., Lee, H., Lim, Y., Chua, B., & Tan, G. (2012). Predicting the Consumers' Intention to Adopt Mobile Shopping: An Emerging Market Perspective. *International Journal Of Network And Mobile Technologies*, 3(3), 24-39.
- Wong, C., Tan, G., Hew, T., & Ooi, K. (2016). Can mobile TV be a new revolution in the television industry?. *Computers In Human Behavior*, 55, 764-776. <http://dx.doi.org/10.1016/j.chb.2015.10.021>
- Wong, C., Tan, G., Loke, S., & Ooi, K. (2015b). Adoption of mobile social networking sites for learning?. *Online Information Review*, 39(6), 762-778. <http://dx.doi.org/10.1108/oir-05-2015-0152>
- Wong, C., Tan, G., Tan, B., & Ooi, K. (2015c). Mobile advertising: The changing landscape of the advertising industry. *Telematics And Informatics*, 32(4), 720-734. <http://dx.doi.org/10.1016/j.tele.2015.03.003>
- Wong, C., Tan, G., Loke, S., & Ooi, K. (2014). Mobile TV: a new form of entertainment?. *Industrial Management & Data Systems*, 114(7), 1050-1067. <http://dx.doi.org/10.1108/imds-05-2014-0146>
- Wong, K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, 24.
- Wong, K. (2010). Handling small survey sample size and skewed dataset with partial least square path modelling. *Vue: The Magazine Of Marketing Research And Intelligence Association*, 20-23.

- Wu, J., & Wang, S. (2005). What drives mobile commerce?. *Information & Management*, 42(5), 719-729. <http://dx.doi.org/10.1016/j.im.2004.07.001>
- Wu, J., Wang, S., & Lin, L. (2007). Mobile computing acceptance factors in the healthcare industry: A structural equation model. *International Journal Of Medical Informatics*, 76(1), 66-77. <http://dx.doi.org/10.1016/j.ijmedinf.2006.06.006>
- Xia, W., & Lee, G. (2000). The Influence of Persuasion, Training, and Experience on User Perceptions and Acceptance of IT Innovation. *ICIS 2000 Proceedings*. Retrieved from <https://pdfs.semanticscholar.org/d2b0/ba909cb28c4dbc30cbdb0100b8763e99347d.pdf>
- Yang, K. (2010). Determinants of US consumer mobile shopping services adoption: implications for designing mobile shopping services. *Journal Of Consumer Marketing*, 27(3), 262-270. <http://dx.doi.org/10.1108/07363761011038338>
- Yap, W., & Tan, G. (2017). Mobile social media marketing: a partial least squares structural equation modelling approach. *International Journal Of Modelling In Operations Management*, 6(3), 172. <http://dx.doi.org/10.1504/ijmom.2017.10005799>
- Zhu, J., & He, Z. (2002). Perceived Characteristics, Perceived Needs, and Perceived Popularity: Adoption and Use of the Internet in China. *Communication Research*, 29(4), 466-495. <http://dx.doi.org/10.1177/0093650202029004005>

APPENDICES

Appendix 3.1 Questionnaire

TITLE OF TOPIC:
Mobile Social Media Shopping: An exploration from consumers'
perspectives
Survey Questionnaire

Dear respondents,

I am a postgraduate student of Master of Business Administration (Corporate Management) from University Tunku Abdul Rahman. The purpose of this survey is to explore the factors that influence users to adopt mobile social media shopping in Malaysia. Your contribution is highly appreciated, thank you.

For the purpose of this study, the term:

- a. ***Mobile social media sites*** refer to Facebook, Twitter, Instagram, and etc. that access under mobile environment.
- b. ***Mobile social media shopping*** refers to the consumers' practice of purchasing goods or services online through social media platforms via the mobile devices

This questionnaire encompasses 4 segments. Please answer all questions in all segments to the best of your knowledge. There are **no definite right or wrong** to any of these statements. All information will be kept **private** and **confidential**. For any further questions or queries, please do not hesitate to contact me.

Thank you for your participation.

Yours sincerely,

Mooi Zhi Yin

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Section A: Demographic Profile

The following questions refer to the general information of the respondent.

Please tick “√” the appropriate box to indicate your answer.

1. Gender:

- Male Female

2. Age:

- 20 years old and below 21 to 30 years old
 31 to 40 years old 41 to 50 years old
 51 to 60 years old 60 years old and above

3. Ethnic group:

- Malay Chinese Indian Others: _____

4. Occupation:

- Unemployed Working professional
 Self-employed Student
 Others: _____

5. Individual personal monthly income:

- Below or equal to RM1000 RM1001 – RM2000
 RM2001 – RM3000 RM3001 – RM4000
 RM4001 – RM5000 RM5001 and above

Section B: Additional Information of Respondent

The following questions refer to the additional information of respondent.

Please tick “√” the appropriate box to indicate your answer.

1. Which mobile devices of the following do you own? (You are allowed to choose more than one option)

- | | |
|---|--|
| <input type="checkbox"/> Smartphone | <input type="checkbox"/> Personal Digital Assistant Device |
| <input type="checkbox"/> Tablets | <input type="checkbox"/> Others: _____ |
| <input type="checkbox"/> Laptop/ Notebook | |

2. Please indicate the frequency of utilizing mobile social media shopping in the past 12 months.

- | | |
|---|--|
| <input type="checkbox"/> Less than 1 time | <input type="checkbox"/> 1 – 5 times |
| <input type="checkbox"/> 6 – 10 times | <input type="checkbox"/> 11 – 15 times |
| <input type="checkbox"/> 16 – 20 times | <input type="checkbox"/> 21 – 25 times |
| <input type="checkbox"/> More than 25 times | |

Section C: Factors affecting the adoption intention of mobile social media shopping

Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

[(1) = strongly disagree; (2) = disagree; (3) = slightly disagree; (4) = neutral; (5) = slightly agree; (6) = agree; (7) = strongly agree]

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
PU Perceived Usefulness								
PU1	Using mobile social media shopping improves my	1	2	3	4	5	6	7
PU2	Mobile social media shopping services allow me to complete my shopping	1	2	3	4	5	6	7
PU3	I find mobile social media shopping to be	1	2	3	4	5	6	7
PU4	Using mobile social media shopping can helps me to	1	2	3	4	5	6	7
PU5	Mobile social media shopping enables me to	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
PEOU Perceived Ease of Use								
PEOU1	Mobile social media shopping services are	1	2	3	4	5	6	7
PEOU2	Mobile social media shopping is easy to use	1	2	3	4	5	6	7
PEOU3	I find it easy to perform what I intend to perform with mobile social media	1	2	3	4	5	6	7
PEOU4	Handling mobile social media shopping is easy	1	2	3	4	5	6	7
PEOU5	It would be easy for me to become skilful at	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
PP Perceived Playfulness								
PP1	While interacting with mobile social media shopping services, I did not	1	2	3	4	5	6	7
PP2	I enjoy using mobile social media shopping services.	1	2	3	4	5	6	7
PP3	Interacting with mobile social media shopping makes	1	2	3	4	5	6	7
PP4	Mobile social media shopping is fun and	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
VB Visibility								
VB1	I can see the effect of a	1	2	3	4	5	6	7
VB2	I will be influenced by others to use mobile social	1	2	3	4	5	6	7
VB3	I will be influenced to adopt mobile social media	1	2	3	4	5	6	7
VB4	I am satisfied with the results of using mobile	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
CP Compatibility								
CP1	Utilizing mobile social media shopping is	1	2	3	4	5	6	7
CP2	Engaging in mobile social media shopping matches my	1	2	3	4	5	6	7
CP3	Using mobile social media shopping fits well with the	1	2	3	4	5	6	7
CP4	Mobile social media shopping services are consistent with the way I	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
TS Training and Support								
TS1	A specific person or group is available for assistance with mobile social media	1	2	3	4	5	6	7
TS2	Specialized instruction and education concerning about mobile social media	1	2	3	4	5	6	7
TS3	Specialized programs or consultant about training are	1	2	3	4	5	6	7

Section D: Behavioral intention to adopt mobile social media shopping

Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

[(1) = strongly disagree; (2) = disagree; (3) = slightly disagree; (4) = neutral; (5) = slightly agree; (6) = agree; (7) = strongly agree]

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
B1 Behavioral Intention								
BI1	I intend to increase the use of mobile social media shopping services in the	1	2	3	4	5	6	7
BI2	Whenever possible, I intend to use mobile social media shopping services in future.	1	2	3	4	5	6	7
BI3	I estimate that the chances of me using mobile social media shopping in my	1	2	3	4	5	6	7
BI4	I believe my interest towards mobile social media shopping will be intensified	1	2	3	4	5	6	7

Thank you for your time, opinion and comments.

~ The End ~

