A CONTEMPORARY PARADIGM OF TRAVEL INDUSTRY: DETERMINANTS OF SHARING ECONOMY ADOPTION

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research has been submitted in support of any application for any other degree or qualification of this or any other University, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

(4) The word count of this research report is 14,893 words.

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DEDICATION

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LIST OF ABBREVIATIONS

AU	Actual Usage
A-Level	Advanced Level
ACCA	Association of Chartered Certified Accountants
BI	Behavioral Intention
CONV	Convenience
CPA	Certified Practising Accountants
DV	Dependent Variable
DOSM	Department of Statistics Malaysia
EB	Epistemic Benefit
E-HAILING	Electronic Hailing
E-COMMERCE	Electronic Commerce
IU	Intention to Use
IVs	Independent Variables
IT	Information Technology
KLIA	Kuala Lumpur International Airport
KL	Kuala Lumpur
LIA	Langkawi International Airport
MTAM	Mobile Technology Acceptance Model
MEU	Mobile Ease of Use
MU	Mobile Usefulness
MP	Mobile Payment
MSA	Mobile Shopping Application
MLR	Multiple Linear Regression
M-COMMERCE	Mobile Commerce
NFC	Near Field Communication

O-Level	Ordinary Level
P2P	Peer-to-peer
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
PSY	Psychological Risk
PHY	Physical Risk
Pre-U	Pre-University
PhD	Doctor of Philosophy
SPAD	Land Public Transport Commission
SE	Sharing Economy
SIA	Senai International Airport
SPM	Sijil Pelajaran Malaysia
STPM	Sijil Tinggi Persekolahan Malaysia
SLR	Simple Linear Regression
SAS	Statistical Analysis System
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
TRU	Trust
UEC	Unified Examination Certificate
W.P.	Wilayah Persekutuan

PREFACE

The phenomenal of technology advancement, mobile development and emergence of various large brands such as Airbnb, GrabCar and Uber in today's digital era provide a great opportunity in launching sharing economy concept to people all around the world. Sharing economy (SE), also called collaborative consumption, is considered as a new shareconomy model through sharing those available assets or resources to others with a cost.

Behavioral intention (BI) plays a crucial role as attitude and subjective norm of a person in respect of the conduct are decided by the BI. Thus, BI considered as a dominant precursor of actual usage. Consumer perception as well as mobile technology acceptability considered as a significant enabling part in acceptance of SE adoption.

In this research, Mobile Technology Acceptance Model (MTAM) had been integrated with Extended Valence Framework to examine the determinants that significantly impact on user's BI toward SE adoption in Malaysia.

ABSTRACT

The phenomenal growth of technology has created a vibrant new domain for sharing economy (SE) in Malaysia travel industry. Despite of numerous limitations exist such as lack of rules and regulations established to safeguard consumers' right in SE, it is still highly acceptable by the Malaysian. Consumer perception is always an issue in the acceptance towards SE adoption. Besides, mobile technology acceptability is a significant enabling part in SE as most of the SE online platforms are being accessed through mobile devices. Therefore, a research was conducted to examine how they affect consumer behavioral intention (BI) and SE adoption.

The research objective is to study the determinants which influence SE participation in the travel industry. In this study, an enhanced framework was created by integrating Mobile Technology Acceptance Model (MTAM) with Extended Valence Framework for the purpose of establishing a comprehensive study pertaining to the determinants influencing SE adoption in the travel industry. It was proposed that perceived benefits (i.e. epistemic benefit & convenience), trust, mobile ease of use (MEU) and mobile usefulness (MU) have positive effects towards consumers BI in SE adoption, while perceived risk (i.e. psychological risk & physical risk) are negatively related to the BI in SE adoption.

This research was a cross-sectional study with 500 sets of questionnaire delivered to travelers from Federal Territory of Kuala Lumpur, Selangor, Perak, Pahang, Kedah, and Johor which were rated by Department of Statistics Malaysia (DOSM) as the states with higher percentage of visitors. Each target respondent was selected based on their experience in travel and whether they had the basic knowledge about SE. Transportation hubs and airports were chosen as the sampling location in this study. Moreover, purposive sampling technique was applied and SAS Enterprise Guide 7.1 was adopted to perform analysis of data.

CHAPTER 1: INTRODUCTION

1.1 Background of Study

Traditionally, most consumers accustomed to owning what they use. However, sharing economy emerges as a rising trend today as consumers nowadays prefer sharing or renting rather than owning (Gesing, 2017). In addition, the benefits and features brought by the Internet can be further leveraged with the IT advancement thus creating social activities (Askitas & Zimmermann, 2015). With this, it provides an opportunity for online platforms where 'collaborative consumption' to take place which have changed people's lifestyle and operating models in the business world (Botsman & Rogers, 2010; Wang & Zhang, 2012).

Sharing economy (SE), namely, collaborative consumption, is a peer-to-peer-based interaction activity of an organization or individual who owned idle resources and has the willingness to deliver the right usage of such resources to others with a cost (Hamari, Sjöklint & Ukkonen, 2015). It has unlocked a new frontier by matching those with under-utilized assets with others who demand and willing to pay for them (The rise of the sharing economy, 2013). This has spawned scores of digital marketplaces especially in the travel industry that enable individuals to exchange value at an unprecedented scale credit to the deep penetration in mobile technology.

Travel is broadly defined as making a journey or trip from one place to another place (Vogel, 2016). Meanwhile, the travel industry is mainly comprised of three elements, namely transportation, accommodation as well as entertainment. In this industry, entertainment is referred to as physical relaxing occasions such as casino, theme park or shopping mall. (Economy watch, 2010). However, under the SE context, entertainment is referred to as software-based applications in consumption habits such as Spotify (Consumer intelligence series: The sharing economy, 2015). Thus, due to the incomparability of the concept of entertainment under both the travel industry and SE, this study will only focus on the other two main components, which are transportation and accommodation. As the highlight of this study was about the sharing economy in the travel industry; hence, travelers who are travelling from one place to another place will be the target respondent of this study.

Across the globe, tourism is increasing in both quantitative and qualitative way, with the appearance of the new forms travel (Sharpley, 2003). Tentatively, SE is changing industry dynamics as well as revolutionized the way travelers acquire for their accommodation (Cheng, 2016; Karlsson & Dolnicar, 2016; Ert, Fleischer & Magen, 2016). For instance, peer-to-peer (P2P) accommodation platforms are altering the consumption patterns extending to destination selection and range of activities involved in tourism destinations (Tussyadiah & Pesonen, 2015). Not only just focusing on destinations, tourists nowadays are more likely to long for unique life experience to an unfamiliar culture and new lifestyles. For instance, guests of Airbnb may blend in and experience social and community-focused atmosphere as well as their cultures and lifestyle at their host's house as they are walking into the real-life routine of the locals instead of staying in the hotels being just like typical tourists, and even more connected with the locals with the host's help (Kim, Yoon & Zo, 2015).

Meanwhile, the ride-hailing services arising from SE have swapped most of the consumers away from the traditional way of booking taxis to getting rides offered by drivers using their private passenger cars. Without owning a single vehicle, Uber with its market valuation worth of $66 billion is again redefining the industry dynamics and

has demonstrated that online platforms can be used to orchestrate access to assets at the global scale (Gesing, 2017).

1.2 Problem Statement

Although many studies discussed the benefits of SE, there may be some underlying problems that were yet to be discovered. For instance, Uber was not responsible for any accidents caused by the drivers when they were picking up a smartphone hail; it left excess liability tangled with the driver and passenger. Furthermore, there was a case where accommodation sharing service (e.g. Airbnb) raised racial discrimination in California (Lee, 2017). The host refused to rent her accommodation to Asian guests by making a racist comment. Besides, it was found that there was a lack of rules and regulations established to safeguard consumers' right in SE usage in Malaysia.

Despite numerous limitations exist, SE was still highly acceptable by the Malaysian as the fast-paced growth of the usage of sharing economy can be seen over the years. With Uber and Grabcar, an online assessment conducted by the Land Public Transport Commission (SPAD) showed that more than 80% of the respondent prefers Uber and Grabcar over the normal taxis (80pc prefer Uber, 2016). With Airbnb, the Malaysian Airbnb host welcomed about 1.5 million guests in 2017, constituting a 137% growth in guess arrival and it also represented the highest year-over-year growth in the Southeast Asia market (Lum, 2018).

Consumer perception will affect consumer behavior and the acceptance towards participation in SE as well. Based on research done by Martins, Oliveira and Popovic (2014), perceived risk had a significant negative effect on behavioral intention. However, the phenomenon arises in Malaysia was somehow varied from the research's results (Kim, Ferrin & Rao, 2008). The study completed by Kim et al. (2008) further

proved that the phenomena occurred in Malaysia was contradicting because the consumer's perceived risk did not eliminate their intention to use the SE platforms.

Past studies (Chen & Salmanian, 2017; Kam, Zhu, & Hudson, 2016; Lee, Chan, Balaji & Chong, 2018) also studied the acceptance of sharing economy; however, these studies adapted different research methodologies and were based on different cultures, countries, and it was not in the context of Malaysia. Not to mention that there was a lack of researches (Lee, Chan, Balaji & Chong, 2018) of sharing economy adoption using extended valence framework in the context of Malaysia. Moreover, it was also found that most of the existing studies (Liu & Yang, 2018; Han, Nguyen & Nguyen, 2016; Faqih & Jaradat, 2015) only emphasize on using Technology Acceptance Model (TAM) to identify the acceptability of certain technology. Although TAM had been extensively researched to predict the acceptability of mobile technology, however, the problem was TAM could not portray the acceptability of technology in mobile context as people might behave differently when they were using a mobile device instead of desktop computer due to the physical and functional differences (Tan, Ooi, Leong & Lin, 2014). Furthermore, Mobile Technology Acceptance Model (MTAM) was rarely used in previous studies to investigate the SE adoption.

As the sharing economy was growing rapidly (Lum, 2018), the science behind the significant growth must be addressed properly as for business practitioner and research's useful purpose. According to Hawlitschek, Teubner and Gimpel (2016), instead of assessing a behavior or an acceptance in e-commerce using solely on TAM, usage of theories and model from social psychology should be considered. To determine the determinants that drive the consumer to participate in sharing economy, MTAM was being incorporated in this research along with extended valence framework to address the behavioral intention (BI) and the SE adoption in the travel industry.

1.3   Research Questions and Objectives

General research objectives	General research questions
1) To identify the determinants that affect user's behavioral intention toward adoption of sharing economy in Malaysia.	1) What are the determinants that would influence on user's behavioral intention toward adoption of sharing economy in Malaysia?
2) To investigate the general behavioral intention and perception of Malaysian toward actual usage of sharing economy.	2) What are the Malaysian's perception and behavioral intention toward actual usage of sharing economy?

Specific research objectives	Specific research questions
1) To analyze the relationship between epistemic benefit and behavioral intention in sharing economy.	1) What is the relationship between epistemic benefit and behavioral intention in sharing economy?
2) To examine the association between convenience and behavioral intention in sharing economy.	2) What is the association between convenience and behavioral intention in sharing economy?
3) To investigate the relationship between psychological risk and behavioral intention in sharing economy.	3) What is the relationship between psychological risk and behavioral intention in sharing economy?

4) To investigate the correlation between physical risk and behavioral intention in sharing economy.	4) What is the correlation between physical risk and behavioral intention in sharing economy?
5) To examine the relationship between trust and behavioral intention in sharing economy.	5) What is the relationship between trust and behavioral intention in sharing economy?
6) To analyze the relationship between mobile ease of use and behavioral intention in sharing economy.	6) What is the relationship between mobile ease of use and behavioral intention in sharing economy?
7) To analyze the relationship between mobile usefulness and behavioral intention in sharing economy.	7) What is the relationship between mobile usefulness and behavioral intention in sharing economy?
8) To investigate the relationship between behavioral intention and actual usage in sharing economy.	8) What is the relationship between behavioral intention and actual usage in sharing economy?

1.4   Significance of the Study

1.4.1 Theoretical Significance

This study contributes to the future researchers who concerned about the development of SE in the travel industry. Although the extended valence framework has been investigated in other specialties, it is believed that this

study would be the first of the few empirical studies which further specifying how the components of extended valence framework like perceived benefit (epistemic benefit and convenience), perceived risk (physical and psychological) and trust affect the SE adoption in both mobility and hospitality services. Besides, this research extends the applicability of MTAM to SE adoption as the participation in SE are mostly by mobile users as most of the SE online platforms are being accessed through mobile devices.

1.4.2 Managerial / Practical Significance

Besides the contribution in the academic line, this study may as well provide better insights for the SE service provider in Malaysia. This study might further bestow a better understanding of the current service providers regarding the factors that shape the consumer's perception towards SE in the travel industry. It is imperative to first comprehend how SE has recently attracted mainstream consumers away from traditional enterprises such as hotels and taxis. By understanding the perceived benefits and perceived risk factors valued by consumers, the current SE providers may focus on enhancing the benefits that are prioritized by travelers and eliminate the risk factors that would have caused negative impacts on the consumer's perception towards SE. With that, the SE user may be benefited with the improvement done by the service provider and gain a better enjoyment in using SE platforms. This study might as well provides some useful insight about SE to government and regulators in dealing with a rigid law and regulation to safeguard the consumers' safety and rights in using SE platforms especially in the tourism sector.

From the strategic viewpoint for future or potential service providers, understanding such phenomenon is a crucial step before the traditional

providers of the transportation and hospitality services start to examine in what ways they could engage in the innovation and further against the competition with the emerging SE. Through this study, they may get the inspiration of altering their traditional way of business operation to adapt to the revolution of the travel industry to better serve the market and consumers' wants.

Furthermore, the results of this study may provide some useful insights for both the current and potential SE application developers. Taking into the consideration of the mobile application's usefulness and ease of use, the SE applications developer may simplify the functions and add in some user-friendly features in developing the SE application that may ease the usage of its users. Moreover, they may improve the design and accessibility of the application to increase user engagement and further enhance their experience in using the application.

1.5   Outline of study

In chapter 1, the background, problem statement, objectives, and significance of the study were discussed in constructing an appropriate foundation for this research. Chapter 2 focused on constructing and proposing a conceptual framework and forming hypotheses on the ground of previous studies. Up next, the research methodology consisted of research design, targeted population, sampling procedure, data collection method, variables, and measurement were presented. Meanwhile, results of the pilot test, final survey, descriptive analysis, central tendencies measurement, scale measurement, and inferential analysis were presented and analyzed accordingly in Chapter 4. Other than the summary of the analysis conducted, Chapter 5 covered the discussion of major findings, implications of the study, limitations, recommendations, and conclusion.

CHAPTER 2: LITERATURE REVIEW

2.1 Theoretical Foundation

2.1.1 Mobile Technology Acceptance Model (MTAM)

Technology Acceptance Model (TAM) is rooted in the Theory of Reasoned Action (TRA), which depicts the connection between beliefs, attitudes, intentions and subjective norms. In other words, the attitude and subjective norm of a person in respect of the conduct are decided by the behavioral intention (Fishbein & Ajzen, 1975).

TAM is indeed a crucial research model to examine the behavioral intention of consumers towards information technology sectors (Chen & Chen, 2011). According to Chang and Tung (2007), TAM is valid for the prediction of individual acceptance of several systems. TAM introduces two relevant belief variables compared to TRA which are Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). PU is the extent that using a particular system can improve the efficiency of the user's conduct whereas PEOU represents the belief of a person that it will be effortless to use that system (Davis, 1989).

Several types of research have proven that the TAM applies especially to the acceptance of IT products by consumers, however, it does not reflect the real mobile environment (Cheung & Vogel, 2013; Qiu & Li, 2008). In contrast, the sharing economy (SE) as an internet-based system is mostly adopted for personal use by mobile users (Botsman & Rodgers, 2010). This makes it difficult to draw a meaningful conclusion. Moreover, MTAM has barely been investigated, particularly in sharing economy context. Therefore, to reflect the actual mobile environment, MTAM is applied in this study to determine the acceptance of the sharing economy. MTAM includes mobile ease of use (MEU) and mobile usefulness (MU). MEU is deemed to be the perception of difficulty to learn and use for potential adopters during mobile devices adoption, while MU is about the perception of enhancing functionality for the users of mobile devices (Ooi & Tan, 2016).

2.1.2 Extended Valence Framework

Originally, the valence framework is extracted from economical and psychological literature to determine behaviors that incorporate the perceived risks and benefits simultaneously (Goodwin, 1996). However, recognizing the significant role of trust, Kim, Ferrin and Rao (2008) introduced trust into valence framework as perceived risks, perceived benefits and trust share the similar characteristic which directly affects the intention of consumers to buy. Moreover, according to Lee, Chan, Balaji and Chong (2018), trust displays the readiness of consumers to take risks to meet their needs. Therefore, trust is crucial in identifying the users' intention to adopt the sharing economy as taking part in the sharing economy often involves various potential risks (Lee, 2018). Next, perceived risk is the users' belief which an online transaction

contains uncertain impacts, whereas perceived benefit refers to the perception about online transaction would make him or her better off (Kim et al., 2008). Next, trust portrays as how consumer presumes the chosen online environment are dependable (Posey, Lowry, Roberts & Ellis, 2010).

In line with Folger (2016), consumers usually aware of performance, physical, psychological and time risk in sharing economy. According to Lee (2009), performance risk arises if a product does not meet its performance requirements. Based on Chang and Hsiao (2008), physical risk considers as the potential for physical injury or threat in the use of the purchased product or services. Next, psychological risk occurs when the purchased goods or services negatively affects the self-perception of a consumer (Park & Tussyadiah, 2016). Moreover, time risk is the potentiality of consuming excessive time or effort in using the products or services (Lee, 2009). However, performance risk is excluded from this study as it has already been well researched in various studies (Cocosila, Archer & Yuan, 2009; Hall & Royles, 2016; Stollery & Soo, 2017). In addition, time risk is also not considered as it is less likely to be important in sharing economy context (Zhang, Yan & Zhao, 2016). According to Stones (2015), physical risk has a major effect to consumer behavioral intention in sharing economy context as Airbnb listings are not regulated in comparison with to hotels or other traditional lodge. Besides, Kim, Kim and Leong (2005) discovered that psychological risk significantly affects consumer behavioral intention in sharing economy. As a result, psychological and physical risk was added as an additional construct to perceived risk.

In addition, our study is based on multi-dimensional benefit structure to examine the benefits which are related to sharing economy. In line with Kim, Yoon and Zo (2015), epistemic benefit is one of the perceived benefit in sharing economy as the traveling objectives will be achieved by satisfying the desire to acquire new experiences. Moreover, epistemic benefit is less investigated in

sharing economy context. Furthermore, as stated by Nielsen, Hovmoller, Blyth and Sovacool (2015), convenience is recognized as one of the significant determinants in influencing people's behavior in sharing economy. Besides, convenience brings positive value to users as they are able to make a booking for ridesharing or accommodation via the use of their mobile gadgets. Therefore, epistemic benefit and convenience are added as an additional construct in perceived benefits.

2.2 Review of the Prior Empirical Studies and Hypotheses Development

2.2.1 The relationship between Epistemic Benefit (EB) and Behavioral Intention (BI) to adopt Sharing Economy

Epistemic value refers to the knowledge and experience gained upon trying new things (Pihlstrom & Brush, 2008). Kim et al. (2015) defined EB as one of the perceived benefits in the adoption of SE as the general purpose of travelling will be achieved by satisfying the desire to acquire new experiences.

According to Kim et al. (2015), EB is one of the relative advantages that will lead to a positive participation intention in consumers in SE. Besides, several past studies indicated that perceived epistemic takes part as a major factor in the adoption of IT innovations (Wang & Wu, 2013; Wells, Campbell, Valacich & Featherman, 2010). Lin and Huang (2012) also proved that epistemic value

has a positive impact on behavior of consumer's choice regarding the green products. Another research done by Wang, Liao and Yang (2013) shows that there is a significant relationship between epistemic values and BI to use mobile Apps.

On the other hand, Al-Debei and Al-Lozi (2014) concluded that epistemic value has an insignificant relationship toward the adoption intention of mobile data services in Jordan. As there were two points of view from past studies, EB should be further investigated in this study. Therefore, it can be hypothesized that:

H1: There is a significant positive relationship between EB and BI to adopt SE.

2.2.2 The relationship between Convenience (CONV) and Behavioral Intention (BI) to adopt Sharing Economy

Convenience is described as the perceived effort and time needed in completing a task (Seiders, Voss, Godfrey & Grewal, 2007). It refers to the degree in which consumers feel the goods or services can be found and used easily (Chen & Tsai, 2017). In the case of SE, convenience is anticipated to be significant in influencing consumer's behavior (Nielsen et al., 2015). According to Erving (2014), consumers are primarily motivated by convenience in order to use SE services.

According to Lee and Han (2015), convenience value would positively affect the intention to adopt mobile health services. The reason is that users who use mobile technologies are able to utilize healthcare services at their convenience

without actually travel to the healthcare centre (Lee & Han, 2015). Similar to sharing economy context, sharing economy users can make a booking for ridesharing or accommodation by using a mobile app.

Past researches validated that perceived convenience has a positive impact on perceived usefulness and the perceived usefulness has a positive relationship to usage intention (Chen & Tsai, 2017; Liu, Wu & Lin, 2018). Also, Yang and Lin (2017) proved that perceived convenience will significantly influence continuance usage intention positively. Joo (2017) further proved that convenience is a significant factor of motive in participating in SE. Hence, in line with the prior studies above, it can be hypothesized that:

H2: There is a significant positive relationship between CONV and BI to adopt SE.

2.2.3 The relationship between Perceived Psychological Risk (PSY) and Behavioral Intention (BI) to adopt Sharing Economy

A study conducted by Kanokkarn Snae Namahoot and Tipparat Laohavichien (2018) defined perceived PSY as consumer's perspective regarding operating efficiency of system and problem arise that may lead to mental anxiety, psychological discomfort, and psychological tension when performing an online transaction. Zheng, Favier, Huang and Coat (2012) explained frustration happened during online transaction activity would significantly affect consumer's self-confidence towards quality and performance of online purchased products or services. Thus, PSY is considered as one of the dominant factors that consumer concern on, especially when dealing with costly and

complicated online products or services (Ariff, Sylvester, Zakuan, Ismail & Ali, 2014).

Numerous past studies regarding the impact of PSY on BI toward adoption on SE had been investigated by researchers. Lee (2018) indicated that a positive relationship between PSY and tourist non-purchase intention in peer-to-peer accommodation exist. Kim, Kim & Leong (2005) further elaborate that probability for using peer-to-peer accommodation would be lower if tourist tends to perceive PSY as high risk. Xie (2017) stated that PSY considered as a significant risk that would largely affect BI of the user in adoption on information technology such as the virtual learning community. Hamoodi (2016) figured out a negative relationship between psychological anxiety and adoption intention exists due to inadequate knowledge on Cloud Computing and afraid of making the wrong choice. According to past studies mentioned above, it clearly shows that PSY negatively influences user's BI toward adoption on SE. Thus, it can be hypothesized that:

H3: There is a significant negative relationship between PSY and BI in SE.

2.2.4 The relationship between Physical Risk (PHY) and Behavioral Intention (BI) to adopt Sharing Economy

PHY refers to hazards to either the health or appearance of the consumer but also to the physical exhaustion and mental capacity devoted to the purchase and whether or not the service provided the consumer with saving effort (Hall & Royles, 2016). It is possible of compromise of one's physical safety when receiving sharing service (Zhang, Yan & Zhao, 2016). PHY is included as users

may result in physical harm after their participation in sharing economy (Zhang, Yan & Zhao, 2016).

Ruangkanjanases and Techapoolphol (2018) did research on the adoption of E-hailing services between female and male users in Thailand. The PHY has indeed impacted the adoption intention of E-hailing services negatively; however, it has only impacted on male user's BI to adopt. Hence it can be said that PHY has a negative relationship between the BI. Beh, Chong, Yu and Wong (2015) constructed a study on how perceived risks impacts the buying intention of KR1M Merchandises. Conclusively, perceived PHY can negatively affect the BI of consumer towards the purchase of KR1M Merchandises.

Bhukya and Singh (2015) have evidenced the negative impact of PHY on BI. This research was conducted on the effect of perceived risk dimensions on purchase intention of products on Indian private labels market. The data is collected among 352 respondents. Based on the studies and evidence above, it is hypothesized that:

H4: There is a significant negative relationship between PHY and BI to adopt SE.

2.2.5 The relationship between Trust (TRU) and Behavioral Intention (BI) to adopt Sharing Economy

According to Posey, Lowry, Roberts and Ellis (2010), TRU in an online environment refers to the way a single person assumes the selected online environment are reliable and trustworthy. Kim, Ferrin and Rao (2009) defined

Trust as the subjective perception that users fulfill their transactional obligations through the sharing economy platforms.

TRU is considered a vital factor in the world of business (Liebana-Cabanillas, Marinkovic & Kalinic, 2017; Min, Ji & Qu, 2008). Besides, the motive to buy or to adopt e-commerce services is directly linked (Mou, Shin & Cohen, 2016). If a consumer does not have TRU in the application and believe that it lacks of user value, they will refuse to accept the sharing economy (Kim et al., 2009).

TRU service marketing is vital, particularly to hold the connection between consumers and carrier vendors (Kim et al., 2009). Lee and Song (2013) claimed that TRU is crucial in examining the adoption of mobile services in internet businesses. Furthermore, the intention to undertake an online transaction can be affected by TRU (Shin, Lee, Shin, & Lee, 2010; Yan, Md-Nor, Abu-Shanab, & Sutanonpaiboon, 2009). According to Lee et al. (2018), users' TRU is linked positively to their behavioral intention to take part in sharing economy. Therefore, it is hypothesized that:

H5: There is a significant positive relationship between TRU and BI to adopt SE.

2.2.6 The relationship between Mobile Ease of Use (MEU) to Behavioral Intention (BI) to adopt Sharing Economy

MEU has the same meaning as perceived ease of use for adopting a particular system and complexity to learn and use with the mobile devices (Ooi & Tan, 2016). According to Fleischer and Wahlin (2016), perceived ease of use is one

of the motivating factors for a technology savvy to adopt Uber which in the meantime is a barrier as well for those who do not have any experience and knowledge with it.

The importance of perceived ease of use towards the consumer's behavioral intention to use has been widely recognized in numerous studies specifically in mobile context as well. For instance, MEU was found to be influential on the intention to use (IU) mobile payment (MP) in Malaysia (Teo, Tan, Ooi & Lin, 2015). Another empirical study was done by Rahman and Sloan (2017) in Bangladesh also proved that MEU was positively affecting the consumer's intention in adopting mobile commerce. Meanwhile, there was also a significant relationship found between MEU with IU in another study in Near Field Communication (NFC) MP in France (Dutot, 2015).

On the ground of these past studies, it is deposited that the MEU would be one of the significant elements that would positively influence the consumer's behavioral intention towards the SE adoption. Thus, it is proposed that:

H6: There is a significant positive relationship between MEU and the BI to participate in SE.

2.2.7 The relationship between Mobile Usefulness (MU) and Behavioral Intention (BI) to adopt Sharing Economy

MU is the subjective probability that using mobile technology would enhance the way to perform an assigned task that subsequently improve the job performance (Guriting & Ndubisi, 2006; Venkatesh, Morris, Davis & Davis,

2003). Meanwhile, in this research, MU refers to the perceived usefulness rendered by potential adopters when adopting mobile devices.

The previous scholar has demonstrated that perceived usefulness is significantly correlated with the intention to adopt MP in Virtual Social Networks (Liébana-Cabanillas, Sánchez-Fernández, & Muñoz-Leiva, 2014). A study by Tan, Ooi, Chong and Hew (2014) in Malaysia on NFC m-devices revealed that the intention to adopt MP can be significantly led by MU. The same conclusion was also drawn by Teo et al. (2015) whereby the intention to adopt MP can be increased by time-saving and portability which was perceived as mobile usefulness. Again, research pertaining to the usage of mobile shopping application (MSA) done by Hubert, Blut, Brock, Backhauset & Eberhardt (2017) was again proving that greater MU would lead to a greater BI to adopt MSA.

Fascinatingly, MU was however shown to be insignificant based on the research done by Dutot (2015) and Balachandran and Tan (2015) in France and Malaysia respectively despite the benefits of NFC MP. Since there were some contradictions in the past findings, MU is again included as one of the variables in this research to study its relationship towards behavioral intention of SE adoption. Thus, the following hypothesis has been constructed:

H7: There is a significant positive relationship between MU and BI in SE adoption.

2.2.8 The relationship between Behavioral Intention (BI) and Actual Usage (AU) of Sharing Economy

BI refers to the subjective probability of an individual's performance upon a certain action (Fishbein and Ajzen, 1975). BI also indicates a person's readiness (Turhan & Özbek, 2013). Many past studies (Szajna, 1996; Venkatesh & Davis, 2000) have acknowledged that BI is the dominant precursor of actual use.

A study constructed by Faqih and Jaradat (2015) intends to understand the adoption of mobile commerce technology. A total of 425 sets of data was collected and analyzed from 14 private universities in Jordan. It was found that BI has a significant relationship with the use behavior of mobile commerce technology. Han, Nguyen, and Nguyen (2016) studied on the reasons that affect customers' intention and usage of mobile commerce with using TAM as the base model. The data was delivered through a paper-based survey questionnaire with respondents from several cities of Vietnam. The result has shown that significant relationship is present between consumers' BI to use and actual usage of e-commerce.

BI indicates the degree of the user's effort to perform a particular behavior (Ajzen, 1991). Vasileiadis (2014) studied on the security concerns and trust in the adoption of mobile commerce, it measures how factors such as security concerns and trust impact BI and has also proven that BI has a direct effect in determining the user's acceptability and usage of mobile commerce. Based on all the studies above, it can be summarized that:

H8: There is a significant positive relationship between BI and AU of SE.

2.3 Proposed Conceptual Framework

Figure 2.1: Proposed Conceptual Framework of Extended Valence Framework
integrated with MTAM in the adoption of sharing economy
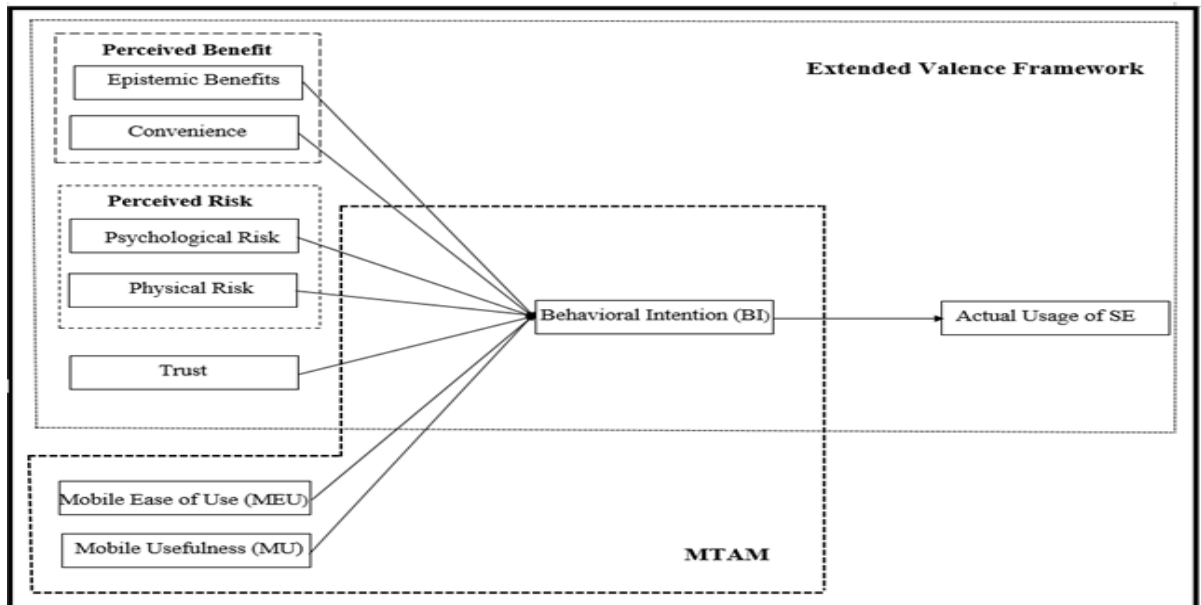
Adapted from Ooi et al. (2016) and Kim (2008)

Figure 2.1 shows the proposed research model that is made up of 1 dependent variable and 7 independent variables. The independent variables include perceived benefit (epistemic benefit and convenience), perceived risk (psychological risk and physical risk), trust, mobile ease of use (MEU) and mobile usefulness (MU). Behavioral intention serves as the dependent variable (DV) for the 7 IVs mentioned earlier. At the same time, it also acts as IV for the actual usage of SE (DV).

CHAPTER 3 : RESEARCH METHODOLOGY

3.1 Research Design

The objective of conducting this research was to determine the impacts of perceived benefit (EB, CONV), perceived risk (PSY, PHY), trust and MTAM (MU, MEU) on BI as well as user acceptance toward SE in Malaysia under travel industry. This research was conducted through the primary data collection which was self-administered survey questionnaire. This study mainly focused on quantitative study to collect the attitude and behaviour of respondents toward SE through Likert scale, it was suitable to use survey questionnaire as it could generate reliable data that reflect to the current situation and collect huge amount of data within the stipulated period with lower cost (Kelley, Clark, Brown, & Sitzia, 2003).

According to Setia (2016), cross-sectional study means a research tool that the investigator used to measure the outcome and exposure based on data collected for a specific period of time. A cross-sectional study was used as it was commonly used to be conducted in a shorter time and lower cost to assess the relationship between variables (Setia, 2016). Thus, it gave an easier way to form a hypothesis for future research (Levin, 2006). Target respondent in this research are travelers who are also SE users.

3.2 Population, Sample and Sampling Procedures

3.2.1 Population

The population involved in this study are the travelers who are also SE users. In this study, the traveler is being defined as the person who is making a journey or trip from a place to another while the SE users are meant to be those who have used any SE applications before (passenger rather than a driver for e-hailing services; guest rather than a host for accommodation).

3.2.2 Sampling Size

The sample is a subset that represents the targeted population in research (Sekaran & Bougie, 2010). Sampling is crucial as surveying the entire population is unrealistic due to time and budget constraints (Saunders, Lewis & Thornhill, 2009). Zikmund, Babin, Carr, and Griffin (2010) stated that the size of sampling depends on the researcher's consideration. According to Saunders, Lewis and Thornhill (2016), the population of 10 million required a minimum of 384 samples with 5% margin error to arrive at 95% confidence level. Hence in this study, a sample size of 500 was adopted as aligned with past studies in e-commerce (Al-Bakri & Katsioloudes, 2015) and internet banking (Fock & Koh, 2006).

3.2.3 Sampling Technique

Sampling techniques can be divided into probability sampling and non-probability sampling (Saunders et al., 2009). Non-probability sampling was selected as the sampling frame of travelers who are also SE users in Malaysia was unknown. Purposive sampling was selected in this study as the appropriate respondents can be identified based on the researcher's judgement (Hair, Bush & Ortinau, 2003). Each target respondent was selected based on their experience in travel and SE applications usage.

3.3 Data collection method

Self-administered survey and self-collection were used on data collection as it promoted cost and time efficiency, reaching out to more population, and reducing interviewer error (Bowling, 2005).

3.3.1 Primary data

Primary data is known as the direct data that is collected through the appropriate procedure and structured for a specific research project at present (Saunders et al., 2016). In this research, primary data was obtained through the distribution of a survey questionnaire to the target respondents.

3.3.2 Pre-Test

Pre-test was carried out by distributing the drafted questionnaire to 3 mobile commerce academicians for the review of the appropriateness and feasibility of the questionnaire, which was corresponded with a study by Ooi and Tan (2016).

3.3.3 Pilot Test

Once a completed survey has been complied, it needs to be pilot tested (Jones, Baxter & Khanduja, 2013). Pilot test was constructed to test the reliability and validity of the context and the instrument as well as the refinement of the instrument (Saunders et al., 2016; Gurung & Raja, 2016). As per Bartlett (2013), the ideal number of pilot tester is between 25 to 50 target respondent. Therefore, 30 target respondents in Perak were involved in the pilot test as Perak was one of the targeted locations in this study.

3.3.4 Data Collection / Sampling Location

Sampling location refers to the place or area that was chosen in a research to gather the intended information from the target respondents. According to Hair (2016), a research should be conducted in an efficient, suitable and economical

manner, therefore East Malaysia was excluded due to insufficient resources of time and budget (Moorthy et al.,2014).

Table 3.1 shows the number of visitors in Malaysia from 2011 to 2017. According to Domestic Tourism Survey 2017, Selangor (25491 visitors), Perak (20110 visitors), Kuala Lumpur (19049 visitors), Pahang (16491 visitors), Kedah (13305 visitors) and Johor (13141 visitors) recorded the highest number of visitor in 2017. Therefore, these states had been chosen as the sampling location for this study.

Table 3.1: Number of visitors in Malaysia

State	Number of Visitors ('000)						
	2011	2012	2013	2014	2015	2016	2017
Johor	9,716	9,486	10,360	11,637	11,589	12,207	13,141
Kedah	9,751	8,474	8,706	11,373	12,425	13,188	13,305
Kelantan	9,210	10,312	11,560	12,047	9,070	8,646	9,624
Melaka	7,485	8,413	9,783	11,582	11,552	12,268	12,625
Negeri Sembilan	7,019	8,366	7,688	8,555	9,984	10,130	10,822
Pahang	7,102	7,689	9,099	13,027	14,398	14,168	16,491
Pulau Pinang	9,601	7,601	6,319	7,858	9,341	12,565	12,643

Perak	9,142	12,998	13,997	14,596	15,966	16,783	20,110
Perlis	1,448	980	1,057	923	1,410	1,410	1,414
Selangor	15,739	17,886	21,089	21,800	22,063	24,124	25,491
Terengganu	7,094	7,939	9,593	9,499	11,483	12,010	12,979
Sabah	14,673	17,301	15,783	16,220	15,722	16,518	17,792
Sarawak	8,902	10,573	12,271	13,608	15,355	16,282	17,670
W.P. Kuala Lumpur	13,353	12,538	14,440	15,419	15,080	16,784	19,049
W.P. Labuan	311	179	253	308	310	354	381
W.P. Putrajaya	458	698	876	830	1,188	1,816	1,872
TOTAL	**131,002**	**141,433**	**152,875**	**169,282**	**176,937**	**189,253**	**205,408**

Sources: Domestic Tourism Survey 2017 from Department of Statistics Malaysia [DOSM]

Table 3.1a illustrates the number of visitors with a percentage for the selected states. Out of the total number of visitors in Malaysia, Selangor constituted 12.41% visitors, Perak 9.79%, Kuala Lumpur 9.27%, Pahang 8.03%, Kedah 6.48% and Johor 6.40%. The total population percentage contributed by these 6 states is 52.38%.

Table 3.1a: Number and percentage of visitors for selected states (Abstract)

State	No. of visitors	Percentage
Selangor	25491	12.41%
Perak	20110	9.79%
Wilayah Persekutuan Kuala Lumpur	19049	9.27%
Pahang	16491	8.03%
Kedah	13305	6.48%
Johor	13141	6.40%
Total	107587	52.38%

Sources: Domestic Tourism Survey 2017 from Department of Statistics Malaysia [DOSM]

In this study, transportation hub which is defined as a transfer center for travelers to accommodate and switch between different transportation modes (Zhong, Yin, Zhang, He & Ran, 2018) was chosen as one of the sampling location as travelers can exchange their mode of transportation and be involved in sharing economy by calling Grab/Uber to travel to or from the transportation hubs that ease their journey (Tariq, 2018). Airport which is also considered as

a transportation hub (Carvalho, Marques, & Costeira, 2017) had been chosen as the sampling location in this study.

Table 3.1b summarizes the reasons for choosing the selected transportation hub. Kuala Lumpur International Airport had been selected as the targeted transportation hub for Selangor as it achieved the most tourist arrivals in 2016 (DOSM, 2018). Since there are only 2 airports in Perak, and Pangkor airport is currently without scheduled airline operations, hence Sultan Azlan Shah Airport had been chosen as the targeted location for the state. Due to the reason that there was no airport in Kuala Lumpur, Kuala Lumpur Sentral was chosen as the sampling location for that state as it was the largest transportation hub in Kuala Lumpur (Malaysian Industrial Development Authority, 2009). Similar reason as Perak state, Sultan Haji Ahmad Shah Airport was chosen as sampling location for Pahang because of the other airport, Tioman Airport has no scheduled airline operations currently (Malaysia Airport Holding Berhad, 2017). Next, Langkawi International Airport has the highest passenger movement in Kedah as compared to Alor Setar Airport, and thus it had been selected as a targeted location for that stated (Malaysia Airport Holding Berhad, 2017. Lastly, for Johor state, Senai International Airport was selected as it is the only international airport in Johor State (Ministry of Transport Malaysia, 2016)

Table 3.1b: Reasons for choosing the selected transportation hub

State	Transportation Hubs	Reasons	Selected Location
Selangor	- Subang International Airport - KLIA - KLIA 2	Tourist Arrivals: Subang International Airport (35,606), KLIA (2,412,537), KLIA 2 (2,144,684) (DOSM, 2018)	Kuala Lumpur International Airport
Perak	- Sultan Azlan Shah Airport - Pangkor Airport	Pangkor airport is currently without scheduled airline operations (Malaysia Airport Holding Berhad, 2017)	Sultan Azlan Shah Airport
Wilayah Persekutuan Kuala Lumpur	Kuala Lumpur Sentral	KL Sentral is the transportation hub in Malaysia (Malaysian Industrial Development Authority, 2009)	Kuala Lumpur Sentral
Pahang	-Sultan Haji Ahmad Shah Airport - Tioman Airport	Tioman Airport is currently without scheduled airline operations	Sultan Haji Ahmad Shah Airport

		(Malaysia Airport Holding Berhad, 2017)	
Kedah	-Alor Setar Airport -Langkawi International Airport	Passenger movement: Alor Setar Airport (802,304), Langkawi International Airport (2,767,707) (Malaysia Airport Holding Berhad, 2017)	Langkawi International Airport (LIA)
Johor	Senai International Airport	It is the only one international airport in Johor State (Ministry of Transport Malaysia, 2016)	Senai International Airport (SIA)

<u>Sources</u>: Developed for research

A cross-sectional delivery of 500 sets of survey questionnaires was delivered to travelers in Federal Territory of Kuala Lumpur, Selangor, Perak, Pahang, Kedah, and Johor for a duration of 1 month from 1st September 2018 to 30th September 2018. Based on the percentage of visitors, the number of questionnaires to be distributed in each selected state was calculated and shown in Table 3.1c. There were 119 sets of questionnaires distributed in Selangor, 93 sets in Perak, 88 sets in Kuala Lumpur, 77 sets in Pahang, 62 sets in Kedah and 61 sets in Johor.

Table 3.1c: Number of questionnaires to be distributed for each chosen location

State	Percentage	Number of questionnaires to be distributed
Selangor	12.41%	12.41/52.38×500 = 119
Perak	9.79%	9.79/52.38×500 = 93
Wilayah Persekutuan Kuala Lumpur	9.27%	9.27/52.38×500 = 88
Pahang	8.03%	8.03/52.38×500 = 77
Kedah	6.48%	6.48/52.38×500 = 62
Johor	6.40%	6.40/52.38×500 = 61
Total	52.38%	52.38/52.38×500 = 500

Sources: Developed for research

3.4   Variables and Measurement

Table 3.2: Definitions and Sources of IVs and DVs

Variables	Definitions	Sources
Epistemic Benefits	Refers to the knowledge gained upon trying new things	Pihlstrom & Brush (2008)
Convenience	Described as the perceived effort and time required in completing a task	Seiders et al. (2007)
Psychological Risk	Perspective of consumer regarding the operating efficiency of system and problem arise when performing online transaction which may lead to mental anxiety, psychological discomfort as well as psychological tension.	Kanokkarn Snae Namahoot and Tipparat Laohavichien (2018)
Physical Risk	Refers to hazards to either the health or appearance of the consumer but also to the physical exhaustion and mental capacity devoted to the purchase and whether or not the service provided the consumer with saving effort	Hall & Royles (2016)
Trust	The degree to which an individual assumes that those within his or her selected online environment are reliable and are trustworthy with information that makes the individual vulnerable.	Posey, Lowry, Roberts and Ellis (2010)

Mobile Ease of Use	Same meaning as perceived ease of use for adopting particular system and complexity to learn and use with the mobile devices	Ooi & Tan (2016)
Mobile Usefulness	Subjective probability that using the mobile technology would improve the way a user could complete an assigned task and explains how they lead to improvement in job performance for the particular individual	Guriting & Ndubisi (2006); Venkatesh et al. (2003)
Behavioral Intention	Refers to a person's subjective probability that he will perform some behavior.	(Fishbein and Ajzen, 1975)
Actual Usage of Sharing Economy	It is predicted by behavioral intention and user's intention to use sharing economy will significantly affect actual behavior in adoption of sharing economy.	Bugembe, J. (2010)

Source: Developed for the research

Table 3.3: Questionnaire items and Sources of IVs and DVs

Variables	List of items	Number of items	Sources
Epistemic Benefits	-If I heard about new sharing economy services, I would look for ways to experiment with it. -I always look forward to a new sharing economy application so as I can get new knowledge about new technologies and services. -Among my peers, I am usually the first to explore new sharing economy application. -In general, I am not hesitant to try out new sharing economy application.	4	Al-Debei and Al-Lozi (2014)
Convenience	- Using sharing economy application is efficient for me at anytime and anyplace. - Using sharing economy application is convenient at anytime and anyplace. - Using sharing economy application makes my life easier. - Using sharing economy application fits in with the pace of my life.	4	Yang and Lin (2017)

Psychological Risk	- The thought of choosing sharing economy application makes me feel psychologically uncomfortable. - The thought of choosing sharing economy application gives me a feeling of unwanted anxiety. - The thought of choosing sharing economy application causes me to experience unnecessary tension. - I would worry a lot when choosing sharing economy application.	4	Lee (2018)
Physical Risk	-Sharing economy application provides me booking transparency information. For example; driver's name, house owner's name and driver's or house owner's contact number, etc. - I feel safe when using the sharing economy application because everything is recorded systematically - I feel safe and secured when using sharing economy application.	3	Ruangkanjanases and Techapoolphol (2018)

Trust	- The sharing economy application is trustworthy. - The sharing economy application is honest in its dealings with me. - The sharing economy application keeps its commitments to its users.	3	Cheung et al. (2015)
Mobile Ease of Use	- Learning to operate sharing economy would be easy for me. - My interaction with sharing economy application would be clear and understandable. - I would find sharing economy application to be flexible to interact with. - It would be easy for me to become skillful at using sharing economy application. - I would find sharing economy application easy to use.	5	Ooi and Tan (2016)
Mobile Usefulness	- Using sharing economy application would enable me to travel to destination/find accommodation more quickly more quickly. - Using sharing economy application would improve my travel experience for either transportation or accommodation. - Using sharing economy application would enhance my effectiveness on travel for either	5	Ooi and Tan (2016)

	transportation or accommodation. - Using sharing economy application would make me easier to travel from one destination to another destination / finding accommodation. - I would find sharing economy application useful in my travel experience for either transportation or accommodation.		
Behavioral Intention	- Assuming I had access to sharing economy application, I intend to use it. - Given that I had access to sharing economy application, I predict that I would use it. - I plan to use sharing economy application in the next few months.	3	Faqih and Jaradat (2015)
Actual Usage of Sharing Economy	- How often do you use sharing economy application in accommodation? - How often do you use sharing economy application in transportation? - How often do you use sharing economy for other services?	3	Faqih and Jaradat (2015)

Source: Developed for the research

Table 3.4: Measurement of Variables

	Variables	Measurements	Scale of Measurements
Demographic Profile	Gender	Nominal	-
	Race	Nominal	-
	Age Range	Ordinal	-
	Education Level	Ordinal	-
	Monthly Income Level	Ordinal	-
	Have you travelled before?	Nominal	-
	Do you know what is sharing economy?	Nominal	-
	Have you used sharing economy for accommodation and transportation before?	Nominal	-
Independent Variables	Epistemic Benefits	Interval	6-point Likert Scale
	Convenience	Interval	6-point Likert Scale
	Psychological Risk	Interval	6-point Likert Scale
	Physical Risk	Interval	6-point Likert Scale
	Trust	Interval	6-point Likert Scale

	Mobile Ease of Use	Interval	6-point Likert Scale
	Mobile Usefulness	Interval	6-point Likert Scale
	Behavioral Intention	Interval	6-point Likert Scale
Dependent Variables	Behavioral Intention	Interval	6-point Likert Scale
	Actual Usage of Sharing Economy	Interval	6-point Likert Scale

Source: Developed for the research

In this research, a 6-point Likert scale is applied as it was aimed to eliminate respondents from irresponsible answering with a moderate option (Chomeya, 2010). According to Chang (1994), 6-point Likert scale is coded from "1" for strongly disagree to "6" strongly agree. The dependent variable, actual usage of sharing economy was also being measured in a 6-point Likert Scale with"1" is coded for Never to "6" for Several times a day in line with the study done by Teo & Lim (2000).

3.5   Data Analysis Technique

SAS Enterprise Guide 7.1. had been applied to perform data analysis.

3.5.1 Descriptive Analysis

Vetter (2017) defined descriptive analysis as a method applied to explain, compute and transform all collected research data into the understandable form. Descriptive analysis describes target respondent's demographic characteristics through frequency and percentage distribution as it used to describe percentage or number of genders in a particular sample (Thompson, 2009). Korb (n.d.) indicated that frequency distribution apply when data is discrete which means that there are distinct categories that allow target respondents to choose. For instance, race consists of three categories which are Chinese, Malay and Indian. Age, education level, monthly income, genders, and traveler's status are considered as discrete data as all of these consist of different categories to choose. Mean and standard deviation can be measured through central tendency and variability or dispersion respectively (Vetter, 2017).

3.5.2 Inferential analysis

3.5.2.1 Reliability test

Reliability test ensures recorded result show trustable, consistent and free from any random error when applying the same data collection techniques (Saunders, Lewis & Thornhill, 2009). Cronbach's alpha had been used to test the reliability of the result generated in this research. George and Mallery (2003) said that α value that falls in between 0.7 to 0.8 could be considered as acceptable, however, α value that falls below 0.5 considered as unacceptable.

3.5.2.2 Normality test

Normality test uses skewness and kurtosis to test the normality assumption (Fitrianto & Chin, 2016). According to Brown (2006), data can be seen as normally distributed if skewness within the limit of -3 and +3 while kurtosis within the limit of -10 to +10 implied a normally distributed data.

3.5.2.3 Correlation test

According to Ratner (2009), Pearson correlation coefficient (r) determines the strength of the linear relationship between two continuous variables. It is represented by "r" and range from -1 to +1. "r" that shows negative symbol indicates a strong negative linear relationship between variables, whereas, "r" with positive symbol represents a strong positive linear relationship between variables (Ratner, 2009). When r=0, it indicates no association between two variables. Pearson correlation coefficient could not indicate the degree of the association between two variables when the correlation is not linear (Ratner, 2009).

3.5.2.4 Simple linear regression analysis

Simple linear regression analysis had been applied to investigate the correlation between an independent variable (IV) and a dependent variable (DV) (Karamazova, Zenku & Trifunov, 2017). There is three regression line which includes positive linear correlation, negative linear correlation and no correlation (Devault, 2017). The regression line that shows constant indicate no correlation between two variables, whereas, regression line that shows upward slope demonstrates a positive linear relationship (Devault, 2017). However, the regression line that shows a descending slope indicates a negative linear relationship between two variables exists (Devault, 2017).

Table 3.5: Equation for Simple Linear Regression Analysis

$y = \beta_0 + \beta_1\chi + \varepsilon$
y = Acceptance toward sharing economy
β_0 = y intercept of the regression line
β_1 = slope
χ = Behavioral intention
ε = Random error

Source: Developed for the research

3.5.2.5 Multiple linear regression analysis

Multiple linear regression analysis was used to investigate the correlation between multiple IVs and a DV (Karamazova et al., 2017). There are several assumptions that need to be satisfied when calculating a regression equation which includes linear relationship between IV and DV through residual plots, absence of collinearity or multicollinearity, data for IV and DV must be normally distributed, and equal variances (homoscedasticity) for data values of IV and DV (Saunders et al., 2016). Homoscedasticity test means "having same scatter" (Stephanie, 2015) and it assumes data values for IVs and DVs consist of similar variances (Saunders et al., 2016).

Table 3.6: Equation for Multiple Linear Regression Analysis

$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \varepsilon$
y = Behavioral intention
α = Intercept
β = Slope of regression surface
x_1= Psychological Risk
x_2= Privacy Risk
x_3= Epistemic Benefit
x_4= Convenience
x_5= Trust
x_6= Mobile Ease Of Use
x_7= Mobile Usefulness
ε = Random error

Source: Developed for the research

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

The data for pilot test and final survey were presented and the results of descriptive analysis, central tendencies measurement, scale measurement, and inferential analysis were illustrated and analyzed accordingly.

4.1 Pilot Test Analysis

Table 4.1: Reliability Test (Pilot Test)

Variables	Cronbach's Alpha	Number of items
EB	0.776	4
CONV	0.910	4
PSY	0.935	4
PHY	0.891	3
TRU	0.883	3
MEU	0.866	5
MU	0.902	5
BI	0.777	3
AU	0.638	3

Source: Developed for the research

To examine the reliability and validity of the questionnaire, 30 sets of questionnaire being distributed at Sultan Azlan Shah Airport as a pilot test for this research. The results of the pilot reliability test are as shown in Table 4.1. According to Nunnally and Bernstein (1978) (as cited in Filieri & McLeay, 2013), the variables are considered reliable if the value of Cronbach's alpha exceeds the acceptable threshold of 0.7. As shown from the results, all the variables are reliable excluding AU as they have surpassed the threshold of 0.7. As there are 3 items in the AU, it was found that the removal of AU2 yields the Cronbach's alpha value of 0.756 (> 0.7). However, the AU2 item is retained in this study as there was an argument justifying that an increase in sample size would lead to acceptable values for Cronbach's alpha (Javali, Gudaganavar & Raj, 2011).

4.2 Descriptive Analysis

The target respondents of this study are travelers who have used SE applications to travel from one place to another place before. A cross-sectional approach and 500 sets of survey questionnaires were administered to travelers in Federal Territory of Kuala Lumpur, Selangor, Perak, Pahang, Kedah, and Johor from 1st November 2018 to 30th November 2018. The response rate of the survey conducted was 94.6% as only 473 sets of questionnaire were collected. Out of the questionnaires collected, there were only 468 sets found to be complete. The remaining 5 sets were excluded from the analysis of data due to incomplete responses or missing information.

4.2.1 Demographic Profile of the Respondents

Table 4.2.1: Sharing Economy Users

Have you used SE application for accommodation and transportation before?	Frequency	Percentage
Yes	468	100%
Types of SE application that used before	Frequency	Percentage
Uber	274	29.91%
GrabCar	445	48.58%
Airbnb	182	19.97%
Other	15	1.63%

Source: Developed for the research

From Table 4.2.1, it shows that Uber, GrabCar, and Airbnb are the most common SE applications used by the respondent, representing 29.91%, 48.58% and 19.97% respectively. On the other hand, the user of other SE applications such as My Car and Socar are the remaining 1.63% of respondents.

Table 4.2.2: Reasons of participating in SE

Reasons of participating in SE	Frequency	Percentage
Pleasure / Enjoyment / Excitement / Fun	115	9.70%
Money saving	318	26.81%
Time saving	248	20.91%
Convenience	326	27.49%
Gain recognition / respect / good image	23	1.94%
Sustain environmental friendliness / energy saving or efficiency / natural resources	88	7.42%
Gain new social interactions / bonding / friendship	68	5.73%

Source: Developed for the research

Based on Table 4.2.2, it demonstrates the reasons for participating in SE based on the results from 468 responds. Convenience constitutes the highest percentage for the reason of participating in SE, which is 27.49%. Meanwhile, gain recognition / respect / good image constitutes the lowest percentage at 1.94%. The remaining factors for respondents to take part in SE are money saving, time-saving, enjoyment, sustain environmental friendliness and gain new social interactions, which represents 26.81%, 20.91%, 9.70%, 7.42% and 5.73% respectively.

Table 4.2.3: Hindrance from participating in SE

Hindrance from participating in SE	Frequency	Percentage
Lack of trust towards the sharing economy platform in terms of safety, security and privacy	300	33.19%
Lack of efficacy in the sharing economy due to insufficient information	103	11.39%
Lack of legal protection	185	20.46%
Lack of monitoring, governing and control by the government	113	12.50%
Fear of strangers	203	22.46%

Source: Developed for the research

Table 4.2.3 shows the hindrances confronted by respondents from participating in SE. Safety, security and privacy are the greatest obstacles preventing the respondents from taking part in SE, which accounts for 33.19% of 468 respondents while lack of efficacy represents the lowest percentage of 11.39% and with fear of stranger (22.46%), followed by lack of legal protection (20.46%), lack of monitoring, governing and control (12.5%) and lastly lack of efficacy due to insufficient information (11.39%).

Table 4.2.4: Gender of Respondents

Gender	Frequency	Percentage
Male	283	60.47%
Female	185	39.53%

Source: Developed for the research

Based on Table 4.2.4, 60.47% of respondents are male and 39.53% of respondents are female from the surveys collected.

Table 4.2.5: Race of Respondents

Race	Frequency	Percentage
Malay	167	35.68%
Chinese	213	45.51%
Indian	70	14.96%
Other	18	3.85%

Source: Developed for the research

Based on Table 4.2.5, Chinese respondents constitute the highest percentage which is 45.51%, followed by Malay and India, which constitute 35.68% and 14.96% respectively. Meanwhile, out of 468 respondents, 3.85% come from other races.

Table 4.2.6: Highest Education Completed

Race	Frequency	Percentage
SPM / O-Level	72	15.38%
STPM / Pre-U / A-Level / UEC / Foundation / Matriculation	71	15.17%
Diploma / Advanced Diploma	73	15.60%
Bachelor Degree	195	41.67%
Master	27	5.77%
PhD / Doctoral Degree	5	1.07%
Other qualification	25	5.34%

Source: Developed for the research

Based on Table 4.2.6, 41.67% of the respondents have Bachelor Degree qualification, while PhD/Doctoral Degree comprises the lowest percentage which is 1.07%. The remaining highest education level achieved are Diploma, SPM, STPM/Pre-U, Master and other qualification such as ACCA and CPA Australia which constitute 15.60%, 15.38%, 15.17%, 5.77% and 5.34% respectively.

Table 4.2.7: Age

Age	Frequency	Percentage
Below 20 years old	90	19.23%
20 to 30 years old	301	64.32%
31 to 40 years old	44	9.40%
41 to 50 years old	21	4.49%
51 to 60 years old	9	1.92%
Above 60 years old	3	0.64%

Source: Developed for the research

According to Table 4.2.7, out of 468 respondents, 301 respondents are 20 to 30 years old, and 3 respondents are 60 years old and above. Meanwhile, 19.23% and 9.40% of respondents are aged below 20 years old and between 31 to 40 years old. Next, there are 4.49% of respondents are aged in between 41 to 50 years old and 1.92 % of respondents stands between 51 to 60 years old.

Table 4.2.8: Monthly Income Level

Monthly Income	Frequency	Percentage
RM1,000 or below	200	42.74%
RM1,001 to RM2,000	40	8.55%
RM2,001 to RM4,000	114	24.36%
RM4,001 to RM6,000	60	12.82%
RM6,001 to RM8,000	27	5.77%
RM8,001 to RM10,000	16	3.42%
Above RM10,000	11	2.35%

Source: Developed for the research

Based on Table 4.2.8, 42.74% of 468 respondents with monthly income RM 1,000 or below constitutes the highest proportion while the monthly income above RM 10,000 constitutes the lowest proportion which is 2.35%. On the other hand, 24.36% and 12.82% of respondents fall under the income group of RM 2,001 to RM 4,000 and RM 4,001 to RM 6,000. The remaining monthly income level are RM1,001 to RM2,000, RM 6,001 to RM8,000 and RM8,001 to RM10,000 which constitute 8.55%, 5.77% and 3.42% respectively.

4.3 Central Tendencies Measurement

Central tendency measurement is a central or typical value for a probability distribution which is used to identify the central position of the data set. The most commonly used measurement is mean which equals to average. In addition, the standard deviation is

adapted to determine the degree of variation of data set. Insignificant amount of standard deviation shows the collected data are closer to the mean.

Table 4.3: Central Tendencies Measurement of Variables

Variable	Items	Mean	Standard Deviation
EB	EB1	4.415	0.906
	EB2	4.485	0.940
	EB3	3.568	1.211
	EB4	4.299	1.141
CONV	CONV1	4.810	0.868
	CONV2	4.853	0.879
	CONV3	4.868	0.845
	CONV4	4.558	0.927
PSY	PSY1	2.889	1.062
	PSY2	2.882	1.111
	PSY3	2.786	1.110
	PSY4	2.844	1.156
PHY	PHY1	4.323	0.942
	PHY2	4.150	0.996
	PHY3	4.115	0.941
TRU	TRU1	4.169	0.870

	TRU2	4.230	0.814
	TRU3	4.288	0.851
MEU	MEU1	4.778	0.770
	MEU2	4.658	0.762
	MEU3	4.641	0.801
	MEU4	4.665	0.810
	MEU5	4.840	0.839
MU	MU1	4.934	0.867
	MU2	4.889	0.823
	MU3	4.812	0.824
	MU4	4.983	0.804
	MU5	4.991	0.799
BI	BI1	4.795	0.755
	BI2	4.763	0.775
	BI3	4.780	0.898
AU	AU1	2.673	1.241
	AU2	3.122	1.174
	AU3	2.451	1.291

Source: Developed for the research

Based on Table 4.3, it illustrates the mean and standard deviation of each construct. EB2 and EB3 have the highest and lowest mean with the value of 4.485 and 3.568 respectively. This indicates that the majority of respondents give green light to the

variables stated in the questionnaire. Moreover, the standard deviation of EB1, EB2, EB3, and EB4 were 0.906, 0.940, 1.211 and 1.141 respectively. This demonstrates that most respondents recognize the items of EB.

In term of CONV, the highest and lowest mean was achieved by CONV3 and CONV4 with the value of 4.868 and 4.558. This signifies that the target respondents agree with the items of CONV. Furthermore, the highest and lowest standard deviation was belonging to CONV4 and CONV3 at 0.927 and 0.845 respectively. This proves that the target respondent agrees with the question as all of the variables are close to 1. Standard deviation ranges from zero to one is regarded as consistent.

In addition, PSY1 and PSY3 have the highest and lowest mean with the value of 2.889 and 2.786 respectively. This implies that the data collected disagreed with the items of PSY. Besides, the highest and lowest standard deviation was owned by PSY4 and PSY1 at 1.156 and 1.062 respectively. This illustrates that PSY possessed high consistency with all of the variables.

On the other hand, for PHY, the highest and lowest mean was recorded by PHY1 and PHY3 with the value of 4.323 and 4.115 respectively. This indicated that the data gathered to comply with the items in the questionnaire. Next, the highest and lowest standard deviation was belonging to PHY2 and PHY3 at 0.996 and 0.941 respectively. In short, the data collected agree that PHY influences SE adoption as a low standard deviation represents a closed dispersion to mean.

Additionally, in term of TRU, TRU3 holds the highest mean which is 4.288, whereas TRU1 holds the lowest mean which is 4.169. This proves that the items are somewhat agreed upon by the target respondents. Moreover, the highest and lowest standard deviation was recorded by TRU1 and TRU2 at 0.870 and 0.814 respectively. The

standard deviation of TRU demonstrates that it has high consistency as all of the standard deviation of TRU is close to "1". In short, most of the target respondents have TRU in SE.

In the context of MEU, the greatest mean was owned by MEU1 at 4.778 while MEU3 recorded the lowest mean at 4.641 which proves that most of the data collected agree that MEU impacts SE adoption. Besides, the highest and lowest standard deviation was being owned by MEU1 and MEU3 with the figure of 0.810 and 0.762 respectively. In a few words, most of the data collected agree that MEU influences SE adoption.

Next, MU5 and MU3 have the greatest and lowest mean with the value of 4.991 and 4.812 respectively which signifies that the majority of target respondents go along with items in the questionnaire. However, the highest and lowest standard deviation was held by MU1 and MU5 at 0.867 and 0.799 respectively which indicates that MU has high consistency with the items.

Furthermore, in the case of BI, BI2 hold the lowest mean of 4.762 as compared to BI1 that holds the greatest mean of 4.795 which explains that the data collected makes a deal with questionnaire items. Meanwhile, the highest and lowest standard deviation was being held by BI3 and BI1 with the figure of 0.898 and 0.755 respectively. In short, the data gathered demonstrates that the impact of BI AU to be true.

Lastly, in the context of AU, AU3 and AU2 have the lowest and highest mean with the value of 2.451 and 3.122. This proves that a greater number of respondents are either using sharing economy less than once a month or several times a month. The standard deviation for AU is ranged between 1.174 and 1.291. In short, it shows that the respondents are either uses the sharing economy less than once a month or several times a month.

4.4 Scale Measurement

4.4.1 Normality Test

Table 4.4.1: Normality Test

Variable	Items	Skewness	Kurtosis
EB	EB1	-0.839	1.629
	EB2	-0.786	1.038
	EB3	-0.309	-0.590
	EB4	-0.780	0.483
CONV	CONV1	-0.662	0.840
	CONV2	-0.733	1.257
	CONV3	-0.696	1.113
	CONV4	-0.430	0.232

PSY	PSY1	0.414	-0.194
	PSY2	0.269	-0.491
	PSY3	0.396	-0.316
	PSY4	0.375	-0.357
PHY	PHY1	-0.873	1.236
	PHY2	-0.567	0.511
	PHY3	-0.646	0.482
TRU	TRU1	-0.524	0.786
	TRU2	-0.389	0.692
	TRU3	-0.510	0.866
MEU	MEU1	-0.904	2.420
	MEU2	-0.401	0.850
	MEU3	-0.617	0.761
	MEU4	-0.710	1.668
	MEU5	-0.844	1.838
MU	MU1	-1.047	2.624
	MU2	-0.674	1.023

	MU3	-0.491	0.665
	MU4	-0.615	0.753
	MU5	-0.691	1.036
BI	BI1	-1.024	3.684
	BI2	-1.043	3.317
	BI3	-0.915	2.129
AU	AU1	0.823	0.295
	AU2	0.820	1.701
	AU3	0.461	0.063

Source: Developed for the research

Table 4.4.1 illustrates the normality test results for each variable. Skewness is the degree of asymmetry in frequency distribution (Kaloyanov, 2011). Given that the value of skewness is positive, it will be positively skewed and tend to have a longer tail to the left and vice versa (Saunders et al., 2009). Moreover, kurtosis measures the edge or flatness of distribution as compared to a normal distribution (Saunders et al., 2009). A positive kurtosis value illustrates a more peaked distribution and vice versa. As proposed by Kline (2005) and Hair et al. (2010), the distribution of data is considered normal if the skewness is within the range of ± 3 while a range of ± 10 for kurtosis. As shown in Table 4.4.1, the value of skewness range between -1.047 and 0.823 whereas values of kurtosis range from -0.590 to 3.684. Hence, the distribution of the data in this study is normal as all the criterion for skewness and kurtosis of ± 3 and ± 10 were archieved.

4.4.2 Reliability Test

Table 4.4.2: Reliability Test

Variables	Cronbach's Alpha	Number of items
EB	0.750	4
CONV	0.865	4
PSY	0.904	4
PHY	0.801	3
TRU	0.878	3
MEU	0.879	5
MU	0.907	5
BI	0.863	3
AU	0.834	3

Source: Developed for the research

Table 4.4.2 illustrates the outcome of a reliability test for each variable. The highest and lowest Cronbach's alpha value belongs to MU and EB at 0.907 and 0.750 respectively. A variable is considered reliable if Cronbach's alpha reaches the minimum threshold of 0.7 (Nunnally & Bernstein, 1994). Thus, all items adapted in the questionnaire for this study are considered reliable.

4.5 Inferential Analysis

4.5.1 Linearity

Figure 4.5.1.1: Scatter Plot for EB nd BI
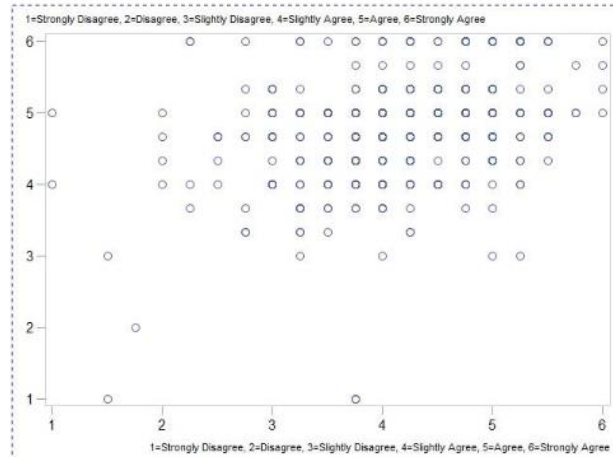
Source: Developed for the research

Figure 4.5.1.2: Scatter Plot for CONV and BI
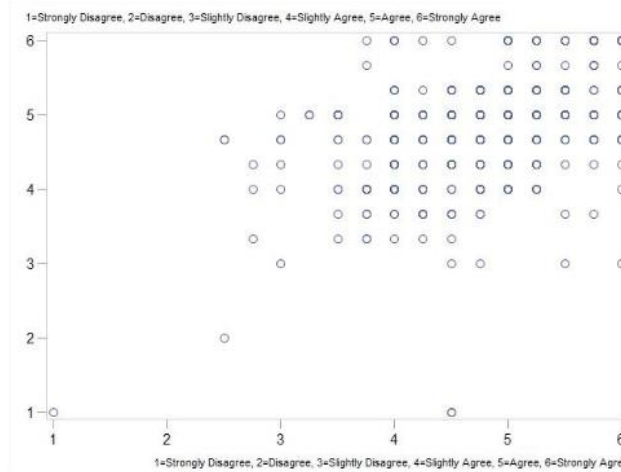
Source: Developed for the research

Figure 4.5.1.3: Scatter Plot for PSY and BI
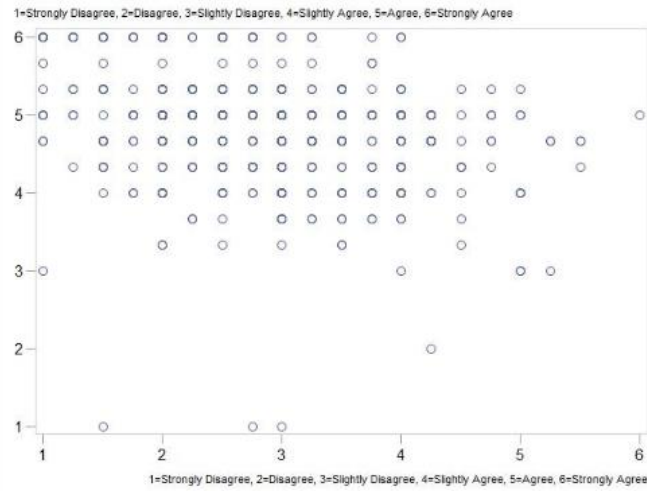
Source: Developed for the research

Figure 4.5.1.4: Scatter Plot for PHY and BI
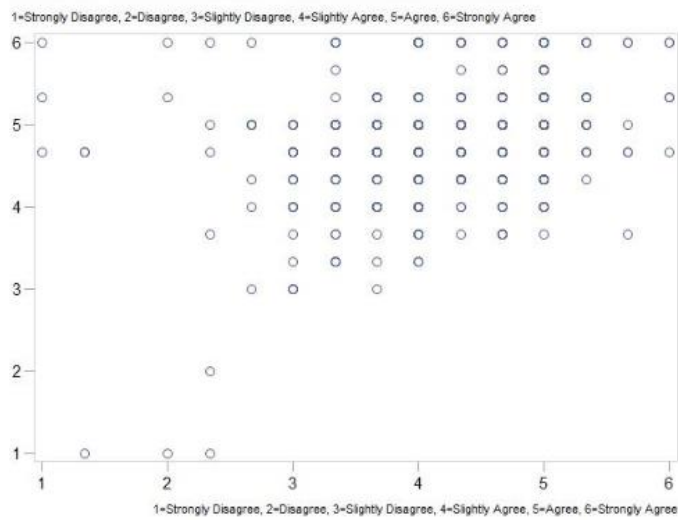
Source: Developed for the research

Figure 4.5.1.5: Scatter Plot for TRU and BI
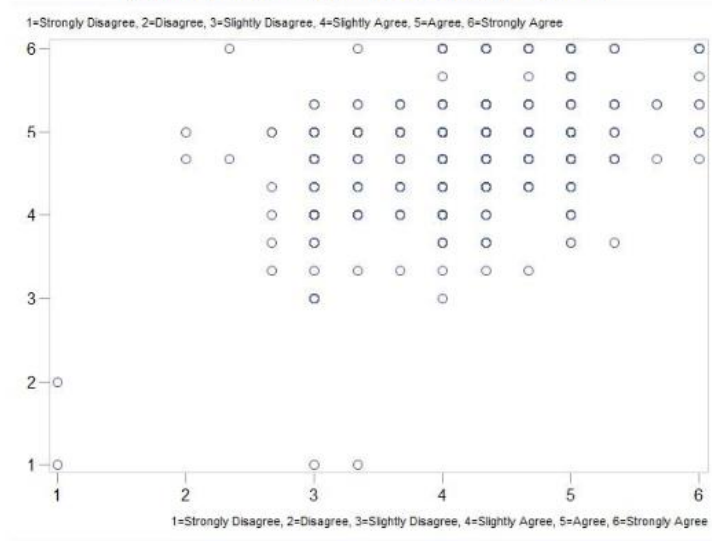
Source: Developed for the research

Figure 4.5.1.6: Scatter Plot for MEU and BI
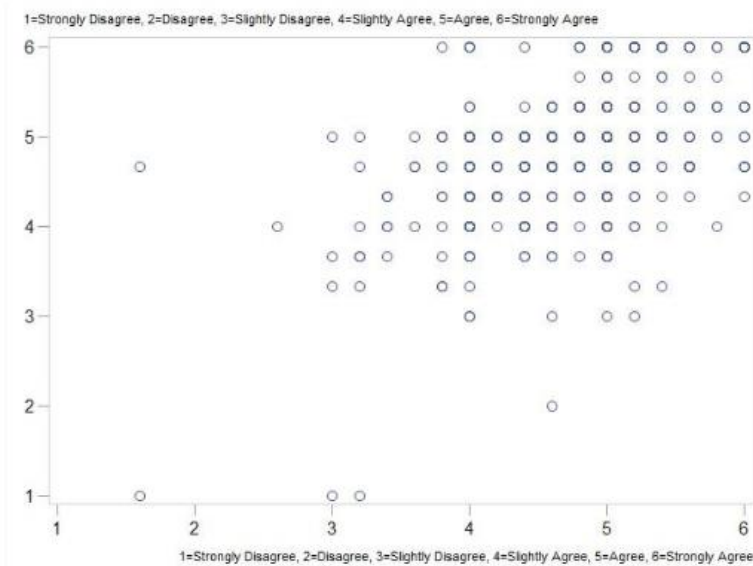
Source: Developed for the research

Figure 4.5.1.7: Scatter Plot for MU and BI
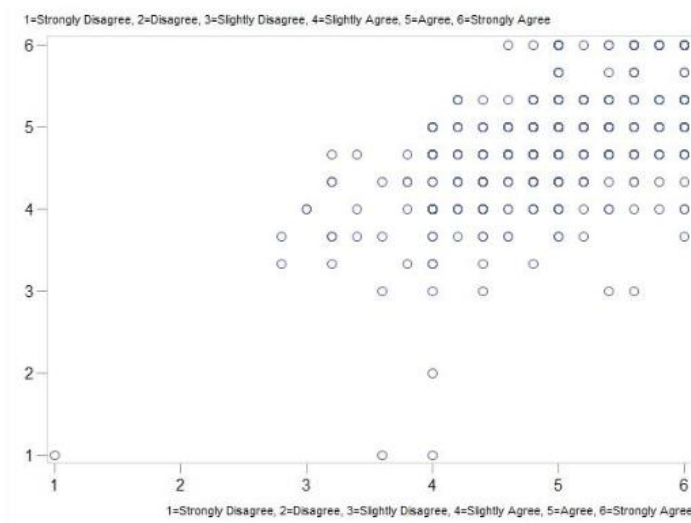
Source: Developed for the research

As shown in Figure 4.5.1.1 to 4.5.1.7, the scatter plots imply that EB, CONV, TRU, MU, and MEU are positively correlated to BI as the points are plotted along the straight line, while PSY and PHY are negatively correlated to BI. In short, it achieved the linearity assumption for MLR analysis.

4.5.2 Homoscedasticity

Figure 4.5.2: Residual by Predictive for BI
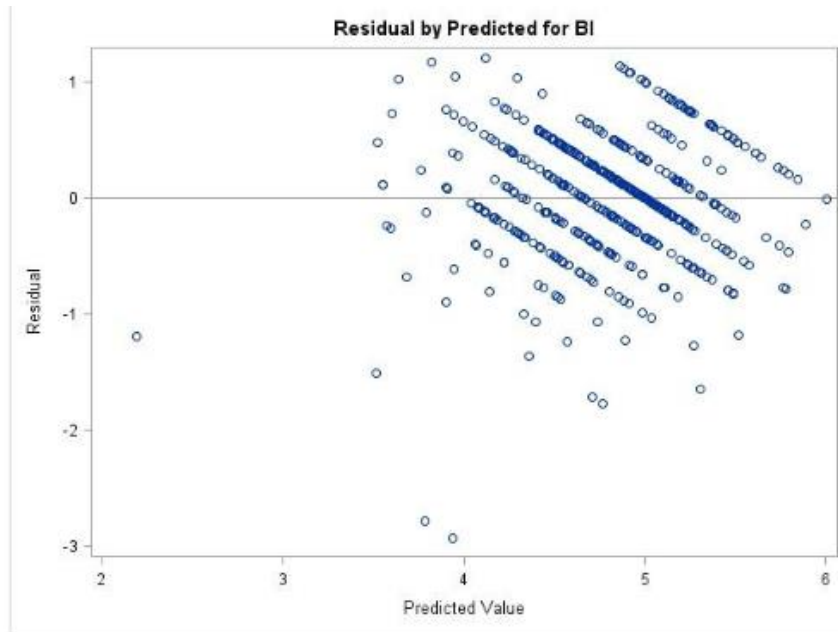
Source: Developed for the research

The homoscedasticity assumption can be tested via the residuals plots versus predicted value. As shown in figure 4.5.2, it can be seen that the homoscedasticity assumption is satisfied as the residuals are scattered uniformly along a straight line.

4.5.3 Pearson Correlation Analysis

Table 4.5.3: Pearson Correlation Coefficients

Pearson Correlation Coefficients, N=468									
Prob >r under H0: Rho=0									
Variables	EB	CONV	PSY	PHY	TRU	MEU	MU	BI	AU
EB	1								
CONV	0.456	1							
	<.0001								
PSY	-0.090	-0.199	1						
	0.052	<.0001							
PHY	0.230	0.317	-0.041	1					
	<.0001	<.0001	0.377						
TRU	0.340	0.422	-0.207	0.471	1				
	<.0001	<.0001	<.0001	<.0001					
MEU	0.386	0.511	-0.124	0.280	0.485	1			
	<.0001	<.0001	0.007	<.0001	<.0001				
MU	0.350	0.584	-0.121	0.313	0.419	0.626	1		
	<.0001	<.0001	0.009	<.0001	<.0001	<.0001			
BI	0.349	0.460	-0.265	0.316	0.436	0.496	0.583	1	
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
AU	0.189	0.205	0.046	0.082	0.161	0.114	0.159	0.224	1
	<.0001	<.0001	0.326	0.076	0.001	0.014	0.001	<.0001	

Source: Developed for the research

Note: EB = Epistemic Benefit, CONV = Convenience, PSY= Psychological Risk, PHY = Physical Risk, TRU = Trust, MEU = Mobile Ease Of Use, MU = Mobile Usefulness, BI = Behavioral Intention, AU = Actual Use of Sharing Economy

Based on Pearson Correlation Coefficients in Table 4.5.3, there are significant and positive relationship between each EB (r=0.349), CONV (r=0.460), TRU (r=0.436), MEU (r=0.496), MU (r= 0.583) with BI. Meanwhile, PHY (r=0.316) and PSY (r=-0.265) have a negative relationship with BI. Among all the correlations between the variables and BI, MEU shows the strongest positive

relationship with BI while PHY demonstrates the weakest negative relationship with BI. Multicollinearity problem was not detected as none of the correlation values exceeds 0.90 (Hair et al., 2010).

4.5.4 Simple Linear Regression

Table 4.5.4.1: SLR model analysis for BI and AU

Root MSE	1.046	R-Square	0.050
Dependent Mean	2.749	Adjusted R-Square	0.048
Coefficient Variance	38.059		

Source: Developed for the research

As per Table 4.5.4.1, R-Square value is represented by 0.050. BI interprets the 5.04% variation in AU.

Table 4.5.4.2: Parameter Estimates of BI and AU

Parameter Estimates							
Variable	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Tolerance	Variance Inflation
Intercept	1.142	0.327	3.5	0.0005	0		0
BI	0.336	0.068	4.97	<.0001	0.224	1	1

Source: Developed for the research

According to Table 4.5.4.2, BI (p<.0001) has a significant relationship with AU since its p-value indicates lesser than 0.05. BI shown a positive effect on AU as a unit increase in BI will cause AU to increase by 0.336 unit. In addition, the multicollinearity problem was not detected for BI as the tolerance value exceeds 0.1 while the variance inflation value is below 10.

Hypothesis 8 (H1): Accepted

From BI and AU relation, it indicates that P-value is less than 0.05 (p<.0001). Therefore, H0 (BI is not positively related to AU) is rejected and H1 is accepted. In short, there is significant and positive relationship between BI and AU.

4.5.5 Multiple Linear Regression

Table 4.5.5.1: MLR model analysis

Root MSE	0.542	R-Square	0.436
Dependent Mean	4.779	Adjusted R-Square	0.428
Coefficient Variance	11.335		

Source: Developed for the research

Table 4.5.5.1 implies that R-Square for the seven IVs is 0.436. This indicates that 43.62% of the changes in BI can be explained by all the IVs which are EB, CONV, PSY, PHY, TRU, MEU and MU.

<div align="center">Table 4.5.5.2: Parameter Estimates</div>

Parameter Estimates						
IVs	Parameter Estimates	t Value	P-value	Standardized Estimates	Tolerance	VIF
Intercept	1.446	5.89	<.0001	0		0
EB	0.077	2.14	0.033	0.086	0.748	1.337
CONV	0.044	0.97	0.335	0.046	0.546	1.832
PSY	-0.120	-4.54	<.0001	-0.164	0.934	1.071
PHY	0.068	1.92	0.056	0.078	0.750	1.334
TRU	0.101	2.37	0.018	0.107	0.601	1.664
MEU	0.129	2.43	0.016	0.117	0.524	1.910
MU	0.370	7.38	<.0001	0.364	0.506	1.978

Source: Developed for the research

Referring to Table 4.5.5.2, multiple regression equation is constructed as:

$$BI = 1.446 + 0.077EB + 0.044CONV - 0.120PSY + 0.068PHY + 0.101TRU + 0.129MEU + 0.370MU$$

PHY is shown to be positive in the MLR equation above as the questions for PHY in the questionnaire distributed are positively coded. Inherently, this implied that PHY and BI are still negatively correlated although the outcome is shown to be positive.

CONV has the least significant impact on BI as BI only increase by 0.044 when CONV increased by one unit. MU has the greatest effect on BI as a unit increase in MU will cause BI to increase by 0.370 unit. Furthermore, BI will increase by 0.129 when MEU increased by one unit. Subsequently, for every one unit increase in TRU, BI will rise by 0.101 unit. Moreover, one unit increase in EB will have an impact on BI to rise by 0.077. When there is one unit decrease in PHY, BI will increase by 0.068 unit. Meanwhile, for PSY, a unit increase will cause BI to drop by 0.120 unit. In addition, the multicollinearity problem is not detected amongst IVs as the tolerance value of all IVs are more than 0.1 and variance inflation value are less than 10.

Hypothesis 1 (H1): Accepted

From EB and BI relation, it indicates that P-value is less than 0.05 (p-value =0.033). Therefore, H0 (EB is not positively correlated to BI) is declined and H1 is accepted. In short, there is a significant and positive relationship between EB and BI.

Hypothesis 2 (H1): Rejected

From CONV and BI relation, it indicates that P-value is more than 0.05 (p-value =0.335). Therefore, H0 (CONV is not positively correlated to BI) is accepted and H1 is declined. In short, CONV and BI have an insignificant relationship.

Hypothesis 3 (H1): Accepted

From PSY and BI relation, it indicates that P-value is less than 0.05 (p-value <0.001). Therefore, H0 (PSY is not negatively correlated to BI) is declined and H1 is accepted. In short, there is a significant and negative relationship between PSY and BI.

Hypothesis 4 (H1): Rejected

From PHY and BI relation, it indicates that P-value is more than 0.05 (p-value =0.056). Therefore, H0 (PHY is not negatively correlated to BI) is accepted and H1 is declined. In short, PHY and BI have an insignificant relationship.

Hypothesis 5 (H1): Accepted

From TRU and BI relation, it indicates that P-value is less than 0.05 (p-value =0.018). Therefore, H0 (TRU is not positively correlated to BI) is declined and H1 is accepted. In short, there is a significant and positive relationship between TRU and BI.

Hypothesis 6 (H1): Accepted

From MEU and BI relation, it indicates that P-value is less than 0.05 (p-value =0.016). Therefore, H0 (MEU is not positively correlated to BI) is declined and H1 is accepted. In short, there is a significant and positive relationship between MEU and BI.

Hypothesis 7 (H1): Accepted

From MU and BI relation, it indicates that P-value is less than 0.05 (p-value <0.001). Therefore, H0 (MU is not positively correlated to BI) is declined and H1 is accepted. In short, there is a significant and positive relationship between MU and BI.

Table 4.5.5.3: ANOVA Table

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	104.419	14.917	50.830	<.0001
Error	460	134.987	0.293		
Corrected Total	467	239.406			

Source: Developed for the research

From table 4.5.5.3, the overall F test is significant (F= 50.380, P<.0001), which P is lesser than 0.05 which means that the model as a whole account for a dominant portion of the changes in the dependent variable. Hence at least one of the IVs can be used to model DV, model fit is achieved.

Table 4.5.5.4: ANOVA of BI and AU

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	27.044	27.044	24.710	<.0001
Error	466	509.928	1.094		
Corrected Total	467	536.971			

Source: Developed for the research

From the table 4.5.5.10, the overall F test is significant (F= 24.710, P<0.001), which P is lesser than 0.05 which means that the model as a whole account for a substantial portion of the changes in the dependent variable. Hence the IV can be used to model DV, model fit is achieved.

4.6 Conclusion

The pilot test analysis, descriptive analysis, scale measurement, and inferential analysis had been discussed comprehensively.

CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATIONS

5.0 Introduction

Descriptive analysis, scale measurement, and inferential analysis had been summarized in this chapter. Meanwhile, the discussion of major findings, implications of the study, limitations, recommendations, and conclusion had been presented and justified accordingly.

5.1 Summary of Statistical Analysis

5.1.1 Descriptive analysis

468 sets collected data showed 100% of respondents had used sharing economy for accommodation and transportation. Majority of respondents choose to use

GrabCar as their transportation which comprises 445 respondents (48.58%) whereas Other such as MyCar and Socar constitute the lowest percentage of usage with 15 respondents (1.63%). The remaining types of sharing economy used before by respondents were Uber and Airbnb which consist of 274 respondents (29.91%) and 182 respondents (19.97%) respectively.

Besides, convenience and money saving were the dominant reasons that encourage respondents' participation in sharing economy, which consist of 326 respondents (27.49%) and 318 respondents (26.81%) respectively. This is followed by time-saving, enjoyment, sustain environmental friendliness, gain new social interactions and gain recognition, which comprises of 248 respondents (20.91%), 115 respondents (9.70%), 88 respondents (7.42%), 68 respondents (5.73%) and 23 respondents (1.94%) accordingly. However, lack of trust in extend of safety, security, and privacy represent the major hindrance that restricts respondents from participating in sharing the economy with 300 respondents (33.19%). A minority of respondents perceived that lack of monitoring, governing and control by the government as well as lack of efficacy due to insufficient information are the hindrances to participate in sharing economy which was 113 respondents (12.5%) and 103 respondents (11.39%) respectively. The remaining of hindrance factors were fear of strangers and lack of legal protection, which comprised of 203 respondents (22.46%) and 185 respondents (20.46%) respectively.

Regarding monthly income level, majority of respondents categories under income group of RM1,000 or below, which comprises of 200 respondents (42.74%) whereas monthly income above RM10,000 constitutes lower proportion which was 11 respondents (2.35%). Meanwhile, the remaining of monthly income level group were RM2,001 to RM4,000 (114 respondents; 24.36%), RM4,001 to RM6,000 (60 respondents; 12.82%), RM1,001 to RM2,000 (40 respondents; 8.55%), RM6,001 to RM8,000 (27 respondents;

5.77%), and RM8,001 to RM10,000 (16 respondents; 3.42%). In addition, the range for mean scores achieved for all IVs and DVs were EB (3.568 to 4.485), CONV (4.558 to 4.868), PSY (2.786 to 2.889), PHY (4.115 to 4.323), TRU (4.169 to 4.288), MEU (4.641 to 4.840), MU (4.812 to 4.991), BI (4.763 to 4.795) and AU (2.451 to 3.122). Besides, the range for standard deviation achieved for all IVs and DVs were EB (0.906 to 1.211), CONV (0.845 to 0.927), PSY (1.062 to 1.156), PHY (0.941 to 0.996), TRU (0.814 to 0.870), MEU (0.762 to 0.839), MU (0.799 to 0.867), BI (0.755 to 0.898) and AU (1.174 to 1.291).

5.1.2 Scale measurement

According to normality test conducted, skewness value range between -1.05 and 0.82 while kurtosis value range between 0.59 and 3.68 was within the threshold of ± 3 for skewness and ± 10 for kurtosis. This implied that data were normally distributed. According to the reliability test, all IVs and DVs were considered reliable since Cronbach's alpha for all variables exceeds the minimum threshold of 0.7. In brief, data collected was reliable and valid as normality test and reliability test had been achieved.

5.1.3 Inferential analysis

5.1.3.1 Linearity

The linearity assumption for Multiple Linear Regression model analysis had been met since the scatter plots show EB, CONV, TRU, MU and MEU are positively correlated to BI, whereas PSY and PHY are negatively correlated to BI.

5.1.3.2 Homoscedasticity

Based on the graph of residual plots versus predicted value, homoscedasticity assumption had been achieved as the variables are scattered evenly along a diagonal straight line.

5.1.3.3 Pearson Correlation Analysis

Based on Pearson Correlation Coefficients Analysis, it signified that a positive relationship had been identified between each EB (r=0.349), CONV (r=0.460), TRU (r=0.436), MEU (r=0.500), MU (r= 0.583) toward BI. However, PSY (r=-0.265) and PHY (r=0.316) showed a negative correlation toward BI. Multicollinearity problem was not found as all of the correlation values do not exceed 0.90 (Hair et al., 2010).

5.1.3.4 Simple Linear Regression

According to Simple Linear Regression model analysis, R-squared value was recorded as 0.0504. This indicated that 5.04% of the variation in AU can be explained by BI. Besides, there is a significant correlation between BI (p=<.0001) and AU (p=<.0001) since their p-value is less than 0.05.

5.1.3.5 Multiple Linear Regression

Based on Multiple Linear Regression model analysis, R-squared value was 0.4362 which implied that 43.62% of the variation in BI can be explained by the seven IVs which are EB, CONV, PSY, PHY, TRU, MEU and MU. The analysis result showed that five IVs which were EB, PSY, TRU, MEU, and MU had a significant relationship to BI as p-value was less than 0.05. However, contradict results had been found in which CONV and PHY did not have any significant relationship towards BI since p-value showed more than 0.05. In short, no multicollinearity problem among IVs had been identified since the variance inflation value and a tolerance value of seven IVs was lower than 10 and higher than 0.1 respectively.

5.2 Discussion of Major Findings

The desired outcome of this paper is to identify determinants that bring impact on sharing economy adoption in the travel industry. In brief, it was supported that psychological risk had significant negative relationship toward behavioral intention in actual usage of sharing economy whereas epistemic benefit, trust, mobile usefulness and mobile ease of use showed that there were significant positive relationships on behavioral intention in actual usage of sharing economy. However, contradict results had been found as the finding showed insignificant relationships of convenience and physical risk in sharing economy adoption. Meanwhile, a significant relationship between behavioral intention and actual usage of the sharing economy had been proved.

5.2.1 Epistemic Benefit (EB) in relation to Behavioral Intention (BI) in Sharing Economy (SE) adoption

Based on the research result, EB has been proved that it will positively and significantly affect BI in adopting SE. This indicates that the desire to acquire new experiences will motivate Malaysian users to participate in SE for transportation and accommodation. This outcome is corresponding to the past researches by Wells, Campbell, Valacich and Featherman (2010), Wang and Wu (2013), Lin and Huang (2012), and Wang, Liao and Yang (2013). According to Kim, Yoon and Zo (2015), SE adopters have unique consumption preference such as emphasize on high cultural experience which means they prefer to learn and experience new cultures that are different from their own. The consumers who possess that characteristic will choose to involve themselves in SE activities in order to satisfy their curiosity. By referring to the

finding from this research, the benefit to get new knowledge from exploring sharing economy application would absolutely inspire the participation in SE. Hence, it can be concluded that the proposed hypothesis is supported.

5.2.2 Convenience (CONV) in relation to Behavioral Intention (BI) in Sharing Economy (SE) adoption

The research finding shows that CONV has an insignificant relationship with BI in adopting SE. This indicates that perceived effort and time required to complete a task are not significantly affecting the Malaysian SE users' in adopting SE. This result contradicts with past studies of Yang and Lin (2017) which discuss the determinants of intention in continue to use social network, location-based and mobile technologies services, and Joo (2017) that investigate on the intentions to use car sharing services. This may be due to different context of study and sampling locations. SE activities are not available in some of the rural areas in Malaysia which can hinder the convenience that promoted by SE.

From another point of view, SE applications have never missed the role of convenience. Therefore, consumers may no longer perceive convenience as a critical factor when they want to involve in SE. In short, it can be concluded that the developed hypothesis is not supported.

5.2.3 Perceived Psychological Risk (PSY) in relation to

Behavioral Intention (BI) in Sharing Economy (SE)

Adoption

According to research findings, PSY has a significant negative impact on BI toward usage of SE application, which was consistent to past studies investigated by Lee (2018), Xie (2017) and Hamoodi (2016). This proved that users of SE tend to view perceived PSY as a significant risk that would definitely affect the adoption of using SE for their transportation and accommodation. The result signified that if traveler perceived a high level of PSY, it would lower down the possibility of traveler involves in SE services as their choice for transportation and accommodation (Lee, 2018).

It implied that PSY such as a feeling of troublesome, unwanted anxiety, psychological discomfort and unnecessary tension in using SE would restrict users from using SE (Lee, 2018). Moreover, poor interaction experience with SE may hinder traveler's peace of mind from continuing considering SE platform as their choices as well. In brief, the hypothesis development was supported.

5.2.4 Physical Risk (PHY) in relation to Behavioral Intention

(BI) in Sharing Economy (SE)   adoption

The research finding shows that PHY has an insignificant relationship with BI in adopting SE. Users do not perceive physical risk as a significant risk when

using sharing economy. It does not align with past studies (Bhukya & Singh, 2015; Beh, Chong, Yu & Wong, 2015; Ruangkanjanases & Techapoolphol, 2018). According to Hall & Royles (2016), Physical risk is minimal as information such as name, photo, car plate and rating of the driver is being provided after the driver accepts the user's hail to pick the user up, which the user can match the information before the hopping into the car. Users do have the right to cancel ride anytime if the information does not tie.

Another point of view by Hall & Royles (2016) is that, the driver could not recklessly take a different route as the whole journey can be monitored through the mobile phone app, any huge discrepancy in the route will be noticed by the user immediately. Hence, it concluded that the developed hypothesis is not supported.

5.2.5 Trust (TRU) in relation to Behavioral Intention (BI) in Sharing Economy (SE) adoption

The research findings illustrate that TRU has a positive relationship with BI in participating SE which go along with the prior studies (Lee & Song, 2013 ; Mou, Shin & Cohen, 2016). Moreover, the results are coherent with the earlier research by Lee et al. (2018). It demonstrated that TRU has a positive relationship with BI and has a significant impact in adopting SE. Meanwhile, Kim et al. (2009) had proven that consumers will refuse to adopt SE if they do not have TRU towards the SE application. Additionally, based on Lee, Chan, Balaji & Chong (2018), trust reflects the users' readiness to take the risks to fulfil their needs. Therefore, trust indeed plays a pivotal role in ascertaining

their willingness to engage in SE as participating in SE often involves different potential risks (Lee, 2018). Therefore, it can be concluded that the developed hypothesis is supported.

5.2.6 Mobile Ease of Use (MEU) in relation to Behavioral Intention (BI) in Sharing Economy (SE) adoption

Based on the findings, MEU was found to be significantly and positively associated with BI in adopting SE application. Such results corresponded with the past studies done by Teo, Tan, Ooi & Lin (2015) on mobile payment in Malaysia; Rahman and Sloan (2017) related to mobile commerce in Bangladesh and Dutot (2015) on NFC MP in France which illustrated the significant and positive relationship between MEU and BI. This was mainly because consumers will tend to adopt the SE application only when they feel that such application is user friendly and easy to use (Ooi & Tan, 2016). Meanwhile, it might be a barrier for those who do not have any knowledge and experience with it to adapt to such innovation (Fleischer & Wahlin, 2016). Thus, the hypothesis of a significant positive relationship between MEU and BI in SE application adoption is supported.

5.2.7 Mobile Usefulness (MU) in relation to Behavioral

Intention (BI) in Sharing Economy (SE) adoption

The research outcome implied that MU and BI have a significant and positive relationship in SE application adoption and it was found that MU has the greatest impact on BI. Such a result was aligned with the past studies conducted by Liébana-Cabanillas, Sánchez-Fernández, & Muñoz-Leiva (2014), Tan, Ooi, Chong and Hew (2014), Teo et al. (2015) and Hubert, Blut, Brock, Backhauset & Eberhardt (2017) that concluded that MU was significantly and positively associated with the BI in adoption of MP and MSA. This signified that the SE adopters perceived MU of SE application as one of the dominant factors that will lead to their participation in SE for transportation and accommodation.

According to the data analysis, the mobile usefulness of the SE application such as improving travel experience, enhancing effectiveness and efficiency of travel would definitely encourage the usage of SE application. Thus, it could be concluded that the proposed hypothesis of significant positive relationship of MU and BI in adoption of SE application is supported.

5.2.8 Behavioral Intention (BI) in relation to Sharing

Economy (SE) Adoption

According to the research findings, it suggested that BI has a positive and significant relationship to SE as how past studies (Faqih & Jaradat, 2015; Han, Nguyen, & Nguyen, 2016; Vasileiadis, 2014) implied. An individual's

behavioral intention is followed by actual usage (Szajna, 1996). In the past, many researches (Szajna, 1996; Venkatesh & Davis, 2000) have identified that BI is the major determinant of actual use using TAM model as a foundation of predicting individual's acceptance towards a particular technology. Thus, the hypothesis of a significant positive relationship between BI and SE application adoption is supported. Furthermore, low value 5.04% R-squared of BI to AU can be explained by how the model is constructed. According to Cohen (1988), 26% of R-squared value is considered substantial, 13% is moderate and 2% is weak. Therefore, the result of R-squared value in this study is acceptable. Also, the low R-squared may be due to the small number of IVs in predicting DV, in this study, BI is the only IV that predicts the AU. Hence, it indicates that BI is only one small factor that affects AU, there are many other factors that can contribute toward AU as well (Blais, Gidengil & Nevitte, 2004).

5.3 Implications of the Study

5.3.1 Managerial Implications

According to the findings above, there are five out of seven IVs (EB, PSY, TRU, MEU, and MU) that show significant relationships with BI in adopting SE and one IV (BI) has a significant relationship with AU of SE. Therefore, SE providers should consider those important factors to improve current services, meet consumers' needs, and obtain a superior position in the market.

The result shows that EB has a significant and positive relationship toward BI in adopting SE. EB is defined as the value acquired from a product or service that provide novelty, satisfy curiosity, and meet the desire for knowledge

(Sweeney & Soutar 2001). Therefore, SE providers may try to provide innovative and unique services in order to attract more consumers. For instance, they should create seasonal specials and particular one-off events such as offering a special code for discount or e-coupon in conjunction with specific festivals. By introducing different themes in a limited time period, it will raise the consumers' interest in exploring and experiencing the latest trend. For example, SE providers for accommodation may come out with special themes on the latest trend inspired by popular movie whereby the host may then decorate their property align with the themes for consumers to have a better enjoyment in exploring and experiencing the trendy stuff. Also, they may adapt the latest payment method when designing the application such as face scan payment technology.

Next, the result reveals that PSY has a significant and negative relationship to BI in adopting SE. Most of the consumers agreed that choosing sharing economy application will create unwanted psychological discomfort, anxiety, and tension. Hence, SE providers should seek for ways in avoiding consumers from having psychological discomfort by taking into consideration of consumers' emotion. SE providers should then adjust their strategies tailored to the consumers' emotional needs and identify the problems associated with the services by communicating regularly with consumers and providing solutions to them accordingly. For example, SE providers should encourage the consumers to give feedback or recommendation on the services provided by adding credits or points for them once their suggestions are accepted. SE providers can disclose their privacy and security assurances or service guarantee policies in order to enhance consumers' confidence. Apart from that, the government may intervene in the SE activities by requiring the SE providers to register themselves with the government before committing in SE activities as a verification of legal business. For instance, the government can revise the Land Public Transport Act 2010 in a way which E-hailing drivers are subjected to such act. The Act is a governing tool in protecting consumers' interest by

requiring the drivers to maintain their vehicle's condition. Besides, the government should implement some regulations and policies to protect the sake of SE application users. The government should revise the Consumer Protection Act to accommodate SE activities. Regulations related to consumer data privacy in SE applications should be enforced. Also, a guide for SE users can be published by the government which elaborates the right of SE users to increase consumer's knowledge.

Consistent with previous empirical researches, the results from this study indicated that TRU will influence BI positively. In this context, TRU is defined as consumer's belief in SE platforms may fulfill their transactional obligations (Kim, Ferrin & Rao, 2009). Platform qualities are the main drivers that affect consumers' TRU in SE platform (Lee et al., 2018). SE providers are recommended to emphasize on both system quality and information quality and allocate resources on them to enhance the qualities of the SE platform. System quality can be improved by troubleshooting and eliminating the factors which caused the problem of lagging or applications being forced to stop when in use, whereas information quality can be improved by ensuring that the information is accurate, relevant, and no misleading statements are provided. In addition, consumers' TRU in SE context can be established through online activities such as features associated with SE application. SE providers should introduce reliable SE applications that provide high secured online transaction services that ensure information confidentiality, security, and quick response time. Furthermore, pre- and post-service factors should be considered by SE providers as well. Consumers' trust may be affected by company reputation, reliable delivery fulfillment, returns and refunds assurance, and disclosure of security and privacy assurances, thus SE provider should make sure those aspects are well delivered. To further enhance consumer's trust, SE platform may provide relevant training to the service providers (the host or driver) to ensure that they have the relevant knowledge of how to deal with customers in a professional way hence increasing trust. From another point of view, the SE

participants should be encouraged to use their power of word-of-mouth to share their past experiences to the public, therefore the consumers' trust level toward SE will be increased.

Apart from that, MEU has a significant and positive influence BI in adopting SE. In other words, the consumers feel that the complexity to learn and use SE applications would affect their BI. The user interface of SE applications should be simple and easy to use (Teo, Tan, Ooi & Lin, 2015). Application developers are advised to simplify the registration, searching, booking, checking, and transaction process. Besides, the interface design should also be improved by using simple and understandable words. Difference languages should be provided to address the need for different users. Taking into consideration of new users, a tutorial on how to use the application should be shown when the users use it for the first time.

Based on the result, MU was found to have a positive significant relationship towards BI in adopting SE. MU refers to the extent that the performance of the job would be improved by using a particular technology (Guriting & Ndubisi, 2006). SE providers should motivate consumers to use the application by emphasizing its benefits, effectiveness, and usefulness. They should continue to redesign and upgrade the SE application so that it can fulfill the user's need by fitting into the fast-paced lifestyle (Rahman & Sloan, 2017). Moreover, SE providers should ensure that SE users can easily get access to service providers for booking and communicating details effectively besides making payment in an efficient manner. In addition, the SE applications can be established with rules restricting both the SE users and providers to simply cancel the booking made, whereby only selected valid reasons may be accepted in order to cancel the booking. The elimination of booking cancellation will ensure the consumer can enjoy the services requested without the need to search for another service provider. Also, SE development managers can consider expanding the market

to more geographical areas including rural areas, thus there will be more choices for the SE users and have higher chances to access to SE activities. Since MU is the most significant positive factor for BI in adopting SE, the SE marketers are suggested to promote their business by advertising on the usefulness of SE applications.

Finally, this research discovers that BI and AU are significant and positively correlated in which the respondents will have actual participation in SE if they have the thought to involve in SE. SE providers should investigate on which group of the consumer may have a higher probability to participate in SE. The market segmentation should be carried out by the SE marketer to divide their potential consumers into groups based on different characteristics. They can divide the market based on demographic characteristics (age, income, and occupation), psychographic characteristics (social class, lifestyle, and personality), or behavioral characteristics (consumer knowledge, user attitudes, and loyalty status). After that, they should target the potential groups of consumer and advertise their services to them.

5.3.2 Theoretical Implications

Insights are provided to the determinants that drive consumers to participate in SE. MTAM was rarely used in previous studies to investigate the SE adoption. This study provides a more comprehensive conceptual framework for future research as it integrated MTAM and extended valence framework in addressing the BI and the SE adoption in the travel industry. As MEU and MU in MTAM were found to be part of the significant determinants in affecting the BI of

people in SE adoption, this could act as fundamental for the future researcher to investigate further in other studies in the similar context.

Furthermore, this study further modifies the components of extended valence framework such as EB and CONV in perceived benefit, PHY and PSY in perceived risk, and trust that may affect the SE adoption. This study reveals that there are significant relationships between EB, PSY, TRU, MEU, MU, and BI. These IVs are useful for future researchers to conduct a study in a relevant context. In contradict with past researches, the result showed that CONV and PHY have no significant relationships with BI in adopting SE in Malaysia. Researchers may reconsider to keep or remove the IVs when modifying the extended valence framework.

Besides, different from past studies, 6-point Likert scale had been applied in this study to avoid respondents from reckless answering with a moderate option (Chomeya, 2010). As most of the previous studies conducted were using 5-point or 7-point Likert scale, the results of this research indicated that 6-point Likert scale was appropriate to be used as it passed the acceptable threshold of the reliability test as well. According to the result, the Cronbach's alpha values of all variables exceeded 0.7 which indicated all variables were reliable. Therefore, the 6-point Likert scale may be considered by future researchers in developing their conceptual framework.

5.4 Limitations of the Research

It was common that research conducted by researcher contain certain limitations that go beyond our control. There were several criticisms that had been discovered and need to be taken into consideration.

First and foremost, a cross-sectional study had been conducted to gather data as a whole to study the relationships of seven independent variables (IVs) on BI and adoption of SE at a single point of time. However, the perception of respondents towards the adoption of SE would vary from time to time. Thus, the timing for collecting data might not be fully reliable and no representative as a cross-sectional study measure prevalent but do not consider incident cases (Carlson & Morrison, 2009).

Besides, the underrepresentation of target population is one of the limitations of this study. In this research, we did not include non-users as part of our target respondent. As the target respondents for this study was only travelers who are SE users, the results generated cannot be concluded that it represents the whole population's perception and BI toward adoption of SE in Malaysia. It would be questionable regarding the intention of non-users toward SE usage.

Furthermore, another limitation is inaccurate or incomplete data collected due to unconscientious responses and missing information found in the survey questionnaire. Lack of conscientious responses by target respondents might be due to misleading or trouble in grasping the meaning of some terms or words in the survey questionnaire. Meanwhile, a survey questionnaire that consists of missing information or incomplete responses were excluded from the analysis of data. Missing information or insufficient of responses collected might generate inaccurate and bias results in the analysis of data. Data would be underrepresented when target population do not respond well or answer completely in the survey questionnaire. Thus, it cannot guarantee that the response collected can be fully reliable and meet the validity of data.

Another limitation that had been encountered was the exclusion of East Malaysia as a targeted sampling location. Initially, the number of visitors in Sabah and Sarawak constitute one of the highest numbers of visitors in Malaysia. However, Sabah and Sarawak had been excluded and replaced by Kedah and Johor due to the time limit and financial constraint. Kedah and Johor had been selected as a replacement for Sabah and Sarawak due to the number of visitors for Kedah and Johor constitute the highest percentage among the remaining unselected states.

In conclusion, there were numerous limitations had been identified, but it did not impact on the significance of the research findings. The shortcomings discovered should be put into consideration for future improvement and enhance the quality of research finding.

5.5 Recommendations for Future Study

Several recommendations are being proposed in overcoming deficiencies that had been identified. To enhance data accuracy and validity, it is suggested to conduct a longitudinal study which involves continuous study in surveying same variables over a considerably longer time frame (Caruana, Roman, Sanchez, & Solli, 2015). A longitudinal study can capture the changes of the pattern for respondent's pre and post adoption towards actual usage of SE.

Besides, the inclusion of travelers who are non-users of SE as target respondent is also recommended. It cannot simply assume that responses from non-users would not bring any significant impact on research finding. It might have a possibility that non-users had the intention to use SE application in future and underrepresentation of the target population may affect the end result of research finding (Chetty, 2016). By targeting

both users and non-users, it could provide a clearer picture for the target population's BI on SE application and the result generated would be more precise.

In order to avoid any improper or incomplete response, it would be more efficient to conduct survey questionnaire by using the method of interviewing the respondent and apply open-ended question over close-ended question. Open-ended question may be useful in determining respondent's thought and feeling on SE concept efficiently and aid in preventing any irresponsible answering with a middle option by structuring the questionnaire's question into multiple interrelated questions. Thus, the reliability and validity of data could be improved.

Last but not least, in order to enrich the generalizability of research findings, East Malaysia should be included as a sampling location to ensure data collected are reflecting BI of users and non-users in Malaysia.

5.6 Conclusion

Conclusively, this study provides a deeper understanding on how EB, CONV, PHY, PSY, TRU that are derived from extended valence framework can be integrated with MEU and MU, which are derived from MTAM in affecting BI of people towards SE adoption. The research findings show that PHY and CONV are not significantly related to BI in SE adoption which inconsistent with past studies, and it has been discussed in depth and justified accordingly. With this research, the SE providers, as well as the government, may make use of the findings to enhance and optimize their strategies for better and wider adoption of SE applications in the travel industry. In addition, future researchers may take into consideration of the limitations of this study when further investigating other significant determinants that would give an impact to SE adoption.

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APPENDIX

Appendix A: Reasons of participating in SE
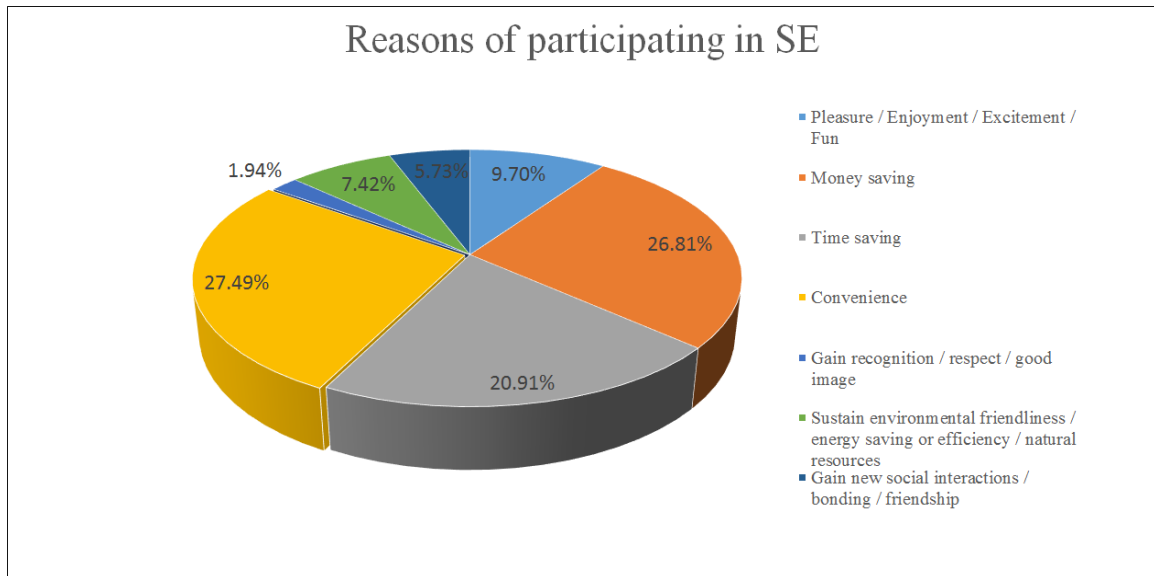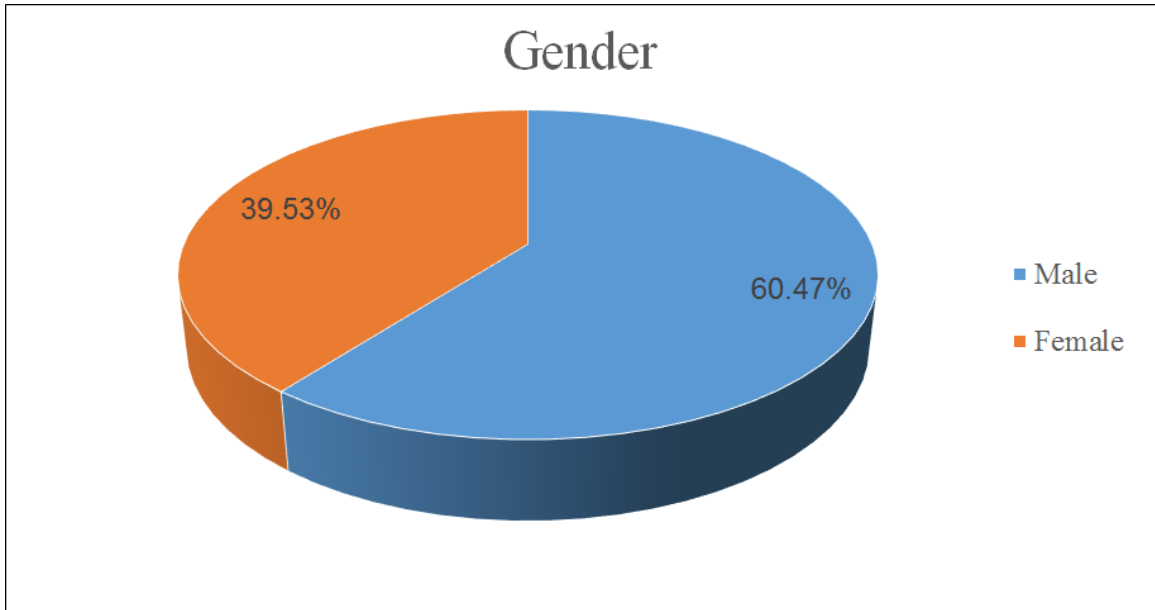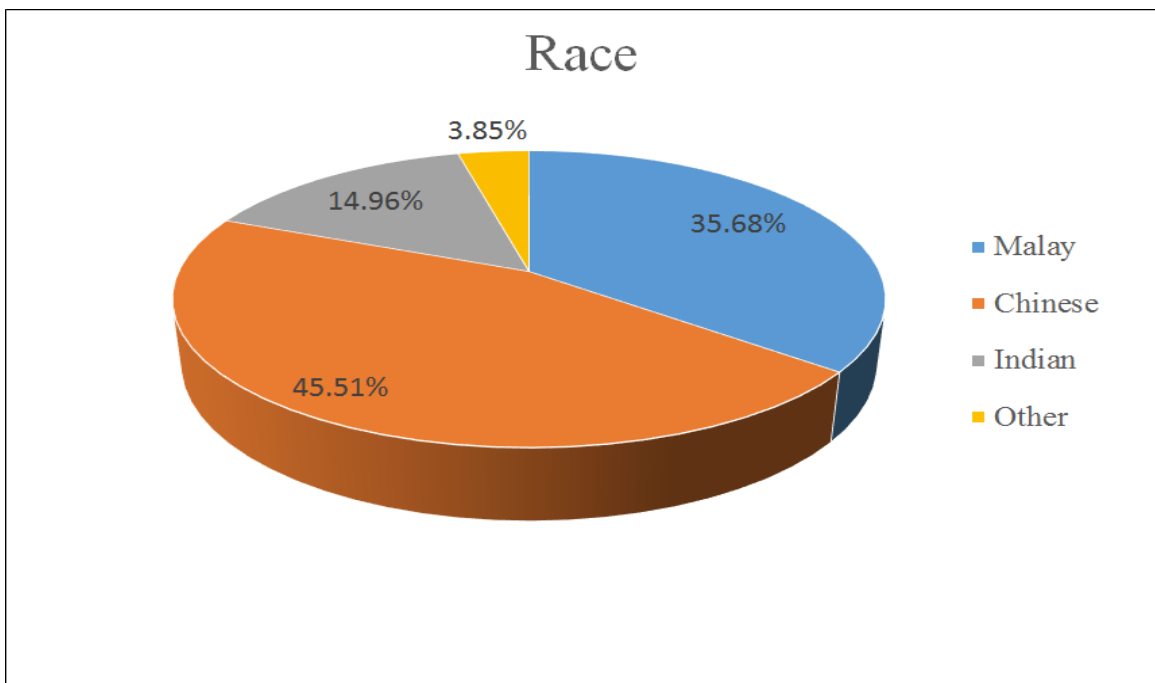

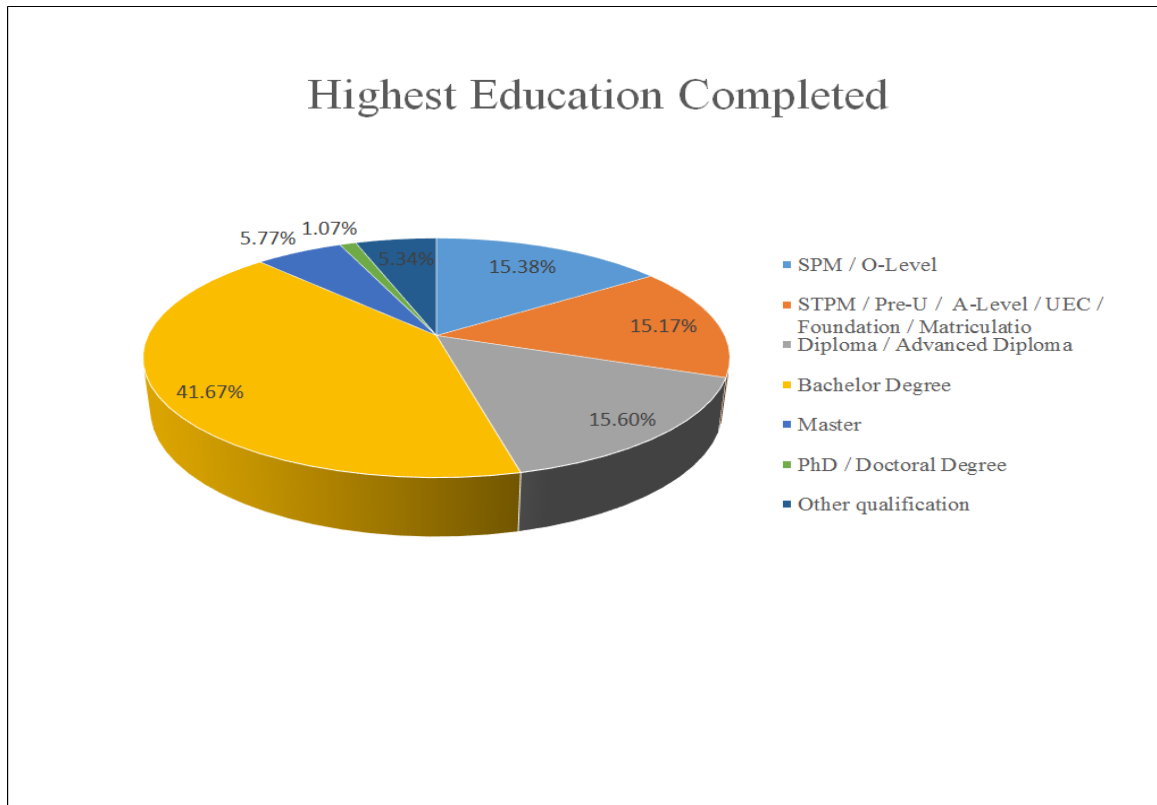## Appendix B: Hindrance from participating in SE
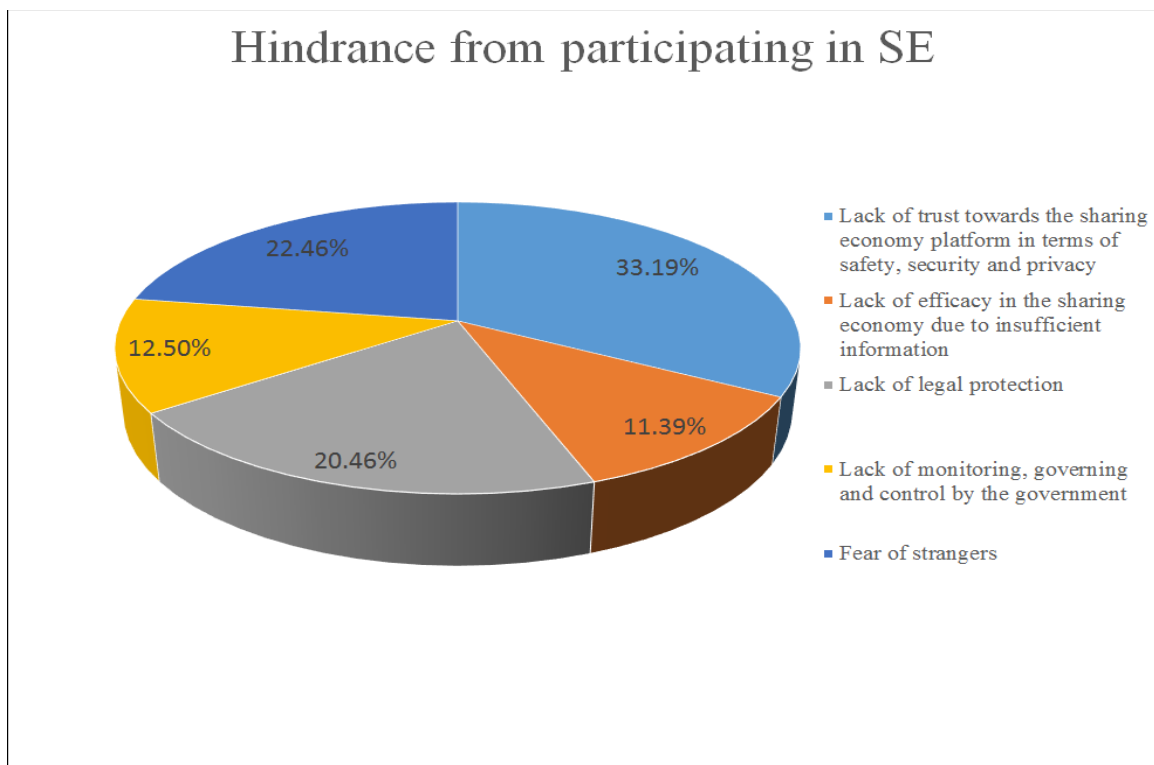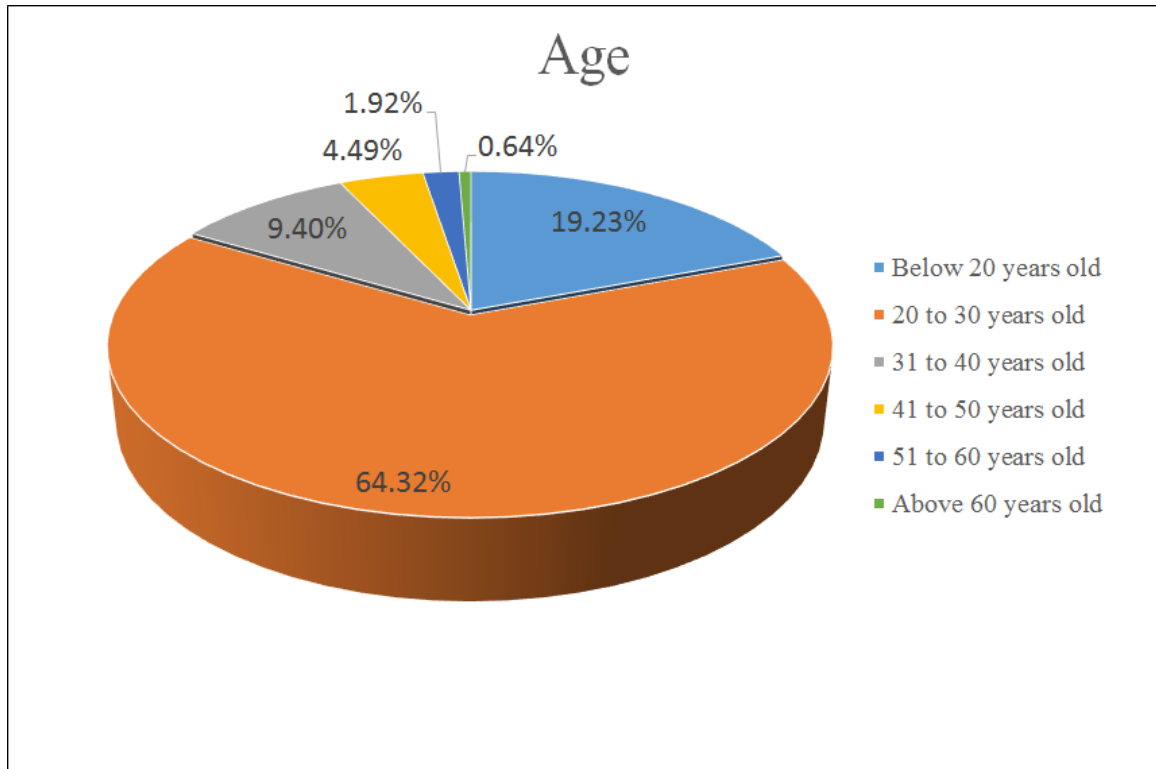
Appendix C: Gender of respondents

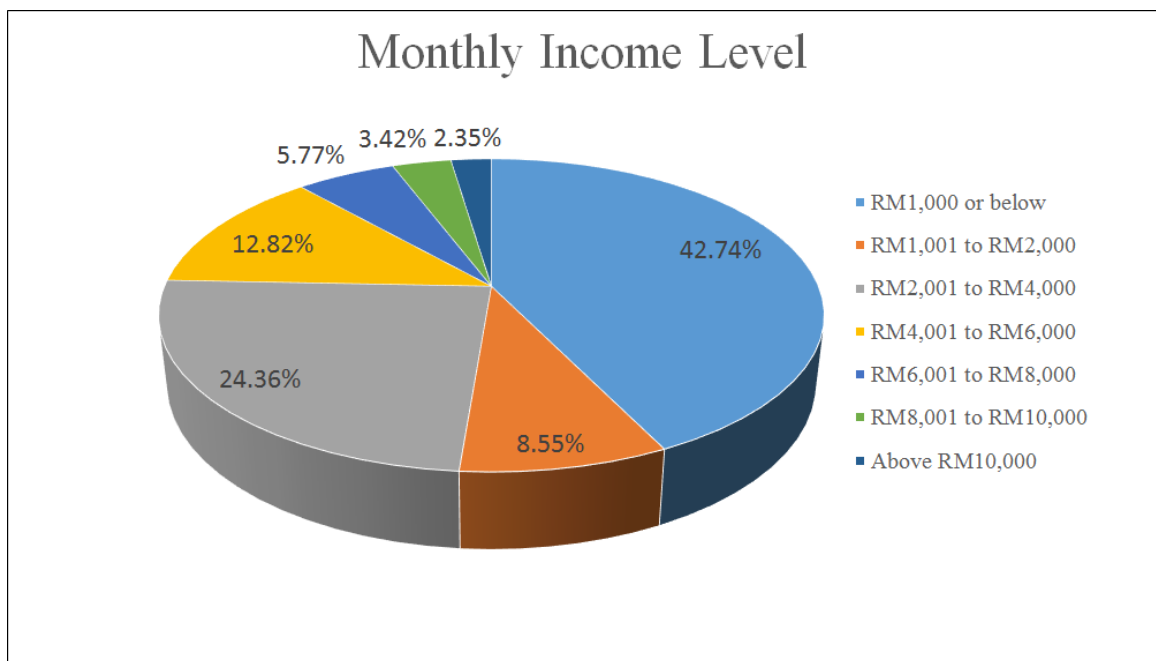
Appendix D: Race of respondents

Appendix E: Highest education completed

Appendix F: Age of respondents

Appendix G: Monthly income level

Appendix H: Permission to Conduct Survey

UNIVERSITI TUNKU ABDUL RAHMAN

Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

24ᵗʰ August 2018

To Whom It May Concern

Dear Sir/Madam,

Permission to Conduct Survey

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

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

The students are as follows:

Name of Student	Student ID
Ng Qin En	15ABB05536
Fong Zhi Xin	15ABB05606
How Xun Hang	15ABB03045
Ng Hui Jie	15ABB05604
Seow Khai Jun	15ABB02937

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

Thank you.

Yours sincerely,

....
Dr Zam Zuriyati Binti Mohamad
Head of Department,
Faculty of Business and Finance
Email: zuriyati@utar.edu.my

....
Dr Leong Lai Ying
Supervisor,
Faculty of Business and Finance
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Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (605) 468 8888   Fax: (605) 466 1313
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Tel: (603) 9086 0288   Fax: (603) 9019 8868
Postal Address: PO Box 11348, 50744 Kuala Lumpur, Malaysia
Website: www.utar.edu.my

Appendix I: Survey Questionnaire

Universiti Tunku Abdul Rahman

Faculty of Business and Finance
Bachelor of Commerce (Hons) Accounting
Final Year Project

Contemporary Paradigm of Travel Industry: Determinants of Sharing Economy Adoption

Survey Questionnaire

Dear Respondent,

Warmest greeting from Universiti Tunku Abdul Rahman (UTAR)

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

The purpose of this survey is to conduct a research to investigate the determinants that affect the behavioral intention and actual usage towards sharing economy in Malaysia under travel industry. Sharing economy is defined as a peer-to-peer-based interaction activity of acquiring, providing or sharing access to goods and services that are facilitated by a community based online platform (e.g. Uber, GrabCar, Airbnb, etc.).

Please answer all questions to the best of your knowledge. There are no right or wrong responses to any of these statements. All responses are collected only for academic research purpose and will be kept strictly confidential.

Thank you for your participation.

Instructions:

1) There are **FOUR (4)** sections in this questionnaire. Please answer **ALL** questions in **ALL** sections.
2) Completion of this form will take you less than 5 minutes.
3) The contents of this questionnaire will be kept **strictly confidential**.

Voluntary Nature of the Study

Participation in this research is entirely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. There is no foreseeable risk of harm or discomfort in answering this questionnaire. This is an anonymous

questionnaire; as such, it is not able to trace response back to any individual participant. All information collected is treated as strictly confidential and will be used for the purpose of this study only.

I have been informed about the purpose of the study and I give my consent to participate in this survey.

YES ( )   NO ( )

Note: *If yes, you may proceed to next page or if no, you may return the questionnaire to researchers and thanks for your time and cooperation*

Section A: Demographic Profile

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

Q1) Have you traveled before? (Eg.: for vacation/holiday, business trip, commute, etc purpose)

☐ Yes **(Please proceed to Q2)**

☐ No **(Thank you for your participation. The questionnaire ends here)**

Q2) Have you used sharing economy for accommodation or transportation before?

☐ Yes **(Please proceed to Q3)**

☐ No **(Thank you for your participation. The questionnaire ends here)**

Q3) Gender: ☐ Female ☐ Male

Q4) Race:

☐ Malay ☐ Chinese ☐ Indian

☐ Other (Please specify): _____

Q5) Age:

☐ Below 20 years old

☐ 20 to 30 years old

☐ 31 to 40 years old

☐ 41 to 50 years old

☐ 51 to 60 years old

☐ Above 60 years old

Q6) Highest education completed:

☐ SPM / O-Level

☐ STPM / Pre-U / A-Level / UEC / Foundation / Matriculation

☐ Diploma / Advanced Diploma

☐ Bachelor Degree

☐ Master

☐ PhD / Doctoral Degree

☐ Other qualification (Please specify): _____

Q7) Monthly income level:

☐ RM1,000 or below

☐ RM1,001 to RM2,000

☐ RM2,001 to RM4,000
☐ RM4,001 to RM6,000
☐ RM6,001 to RM8,000
☐ RM8,001 to RM10,000
☐ Above RM10,000

Q8) The reason(s) for me to participate in sharing economy: (you may tick more than one option)

☐ Pleasure/Enjoyment/Excitement/Fun
☐ Money saving
☐ Time saving
☐ Convenience
☐ Gain recognition/respect/good image
☐ Sustain environmental friendliness/energy saving or efficiency/natural resources
☐ Gain new social interactions/bonding/friendships
☐ Other (Please specify:_____)

Q9) The reason(s) that may deter me from participating in sharing economy:
   (You may tick more than one option)
☐ Lack of trust towards the sharing economy platform in terms of safety, security and privacy
☐ Lack of efficacy in the sharing economy due to insufficient information
☐ Lack of legal protection
☐ Lack of monitoring, governing and control by the government
☐ Fear of strangers
☐ Other (Please specify:

   _____)

Q10) Types of sharing economy application that I have used: (you may tick more than one option)
☐ Uber
☐ GrabCar
☐ Airbnb
☐ Other (Please specify:

   _____)

Section B: Determinants of Behavioral Intention to Adopt Sharing Economy

This section seeks your opinion regarding the influence of perceived benefit, perceived risks, trust, mobile ease of use and mobile usefulness on behavioral intention in sharing economy. **Sharing economy mentioned in this survey is referring to accommodation and transportation services.** Respondents are asked to indicate the extent to which they agree or disagree with each statement using 6-point Likert scale [(1) = strongly disagree; (2) = disagree; (3) = slightly disagree; (4) = slightly agree; (5) = agree and (6) = strongly agree] response framework. Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
EB	**Epistemic Benefit**						
EB1	If I heard about new sharing economy application, I would look for ways to experiment with it.	1	2	3	4	5	6
EB2	I always look forward to a new sharing economy application so as I can get new knowledge about new technologies and services.	1	2	3	4	5	6
EB3	Among my peers, I am usually the first to explore new sharing economy application.	1	2	3	4	5	6
EB4	In general, I am not hesitant to try out new sharing economy application.	1	2	3	4	5	6

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
CONV	**Convenience**						
CONV 1	Using sharing economy application is efficient for me at anytime and anyplace.	1	2	3	4	5	6
CONV 2	Using sharing economy application is convenient for me at anytime and anyplace.	1	2	3	4	5	6
CONV 3	Using sharing economy application makes my life easier.	1	2	3	4	5	6
CONV 4	Using sharing economy application fits in with the pace of my life.	1	2	3	4	5	6
PSY	**Psychological Risk**						
PSY1	The thought of choosing sharing economy application makes me feel psychologically uncomfortable.	1	2	3	4	5	6
PSY2	The thought of choosing sharing economy application gives me a feeling of unwanted anxiety.	1	2	3	4	5	6
PSY3	The thought of choosing sharing economy application causes me to experience unnecessary tension.	1	2	3	4	5	6
PSY4	I would worry a lot when choosing sharing economy application.	1	2	3	4	5	6

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
PHY	**Physical Risk**						
PHY1	Sharing economy application provides me booking transparency information. For example; driver's or house owner's name and driver's or house owner's contact number, etc.	1	2	3	4	5	6
PHY2	I feel safe when using the sharing economy application because everything is recorded systematically.	1	2	3	4	5	6
PHY3	I feel safe and secured when using sharing economy application.	1	2	3	4	5	6
TRU	**Trust**						
TRU1	The sharing economy application is trustworthy.	1	2	3	4	5	6
TRU2	The sharing economy application is honest in its dealings with me.	1	2	3	4	5	6
TRU3	The sharing economy application keeps its commitments to its users.	1	2	3	4	5	6
MEU	**Mobile Ease Of Use**						
MEU1	Learning to operate sharing economy application would be easy for me.	1	2	3	4	5	6
MEU2	My interaction with sharing economy application would be clear and understandable.	1	2	3	4	5	6

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
MEU3	I would find sharing economy application to be flexible to interact with.	1	2	3	4	5	6
MEU4	It would be easy for me to become skillful at using sharing economy application.	1	2	3	4	5	6
MEU5	I would find sharing economy application easy to use.	1	2	3	4	5	6
MU	**Mobile Usefulness**						
MU1	Using sharing economy application would enable me to travel to destination/find accommodation more quickly.	1	2	3	4	5	6
MU2	Using sharing economy application would improve my travel experience for either transportation or accommodation.	1	2	3	4	5	6
MU3	Using sharing economy application would enhance my effectiveness on travel experience for either transportation or accommodation.	1	2	3	4	5	6
MU4	Using sharing economy application would make me easier to travel from one destination to another destination/ finding accommodation.	1	2	3	4	5	6
MU5	I would find sharing economy application useful in my travel experience for either transportation or accommodation.	1	2	3	4	5	6

Section C: Behavioral Intention to participate in Sharing Economy

This section is seeking your opinion regarding the behavioral intention to participate in Sharing Economy. Respondents are asked to indicate the extent to which they agree or disagree with each statement using 6-point Likert scale [(1) = strongly disagree; (2) = disagree; (3) = slightly disagree; (4) = slightly agree; (5) = agree and (6) = strongly agree] response framework. Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

No	Questions	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
BI	**Behavioral Intention**						
BI 1	Assuming I had access to sharing economy application, I intend to use it.	1	2	3	4	5	6
BI 2	Given that I had access to sharing economy application, I predict that I would use it.	1	2	3	4	5	6
BI 3	I plan to use sharing economy application in the next few months.	1	2	3	4	5	6

Section D: Actual Use of Sharing Economy

This section is seeking your opinion regarding the actual use of sharing economy. Respondents are asked to indicate the frequency of actual use of sharing economy using 6-point Likert scale [(1) = Never; (2) = Less than once a month; (3) = A few times a month; (4) = A few times a week; (5) = About once a day and (6) = Several times a day] response framework. Please circle one number per line to indicate the actual frequency of use with the following statements.

No	Questions	Never/almost never	Less than once a month	A few times a month	A few times a week	About once a day	Several times a day
AU	**Actual Use of Sharing Economy**						
AU 1	How often do you use sharing economy application in accommodation?	1	2	3	4	5	6
AU 2	How often do you use sharing economy application in transportation?	1	2	3	4	5	6
AU 3	How often do you use sharing economy application for other services?	1	2	3	4	5	6

Questionnaire ends.
Thank you for your participation.