PERCEIVED BENEFITS AND RISKS TOWARDS THE INTENTION TO USE FINTECH

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DECLARATION

I hereby declare that:

(1) This Research Project is the end result of my 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 project 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.

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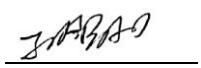
Signature: 

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DEDICATION

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ABSTRACT

Revolutions in information technology (IT) lead to the speedy growth of innovative and modern financial services, regularly named as Financial Technology (Fintech). The purpose of the research study is to find out how perceived benefits and risks (consider of both positive factors and negative factors) mutually influence the intention of customer to use Fintech. In this research, Perceived benefit factors will be economic benefit, seamless transaction and convenience, while for the Perceived risk factors will be financial risk, legal risk, security risk as well as operational risk. The perceived benefit and risk factors will be use to determine the customer intention to use Fintech. In this research, primary data collection method is used and the total number respondents were 302 participants which provide very useful information to the research. The respondent's answer was collected through Google form. All the perceived benefit and risk factors have the significant result that either positively or negatively effect to the intention to use Fintech. Lastly, this research will contribute to the basic understanding of the perceived benefit and risk factors impact to the intention to use Fintech.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The starter chapter renders the very first taste of whole ideology of the research study. As usual, background makes the story. Therefore, the first thing to start is research background. The next thing is problem statement. After that, the research objective will be discussed and the question in regard to the research will be posted out. Then it is time to dig down and discuss about the hypothesis of the study supported by the significant of study and last but not least, the chapter layout will also be discussed.

1.2 Research Background

Recently, revolutions in information technology (IT) lead to speedy growth of innovative and modern financial services, regularly named as Financial Technology (Fintech). It is an arise of new potential field which draw a huge sum of awareness in the market. Fintech is a combination of the words “financial” and “technology”. Worldwide investment in Fintech companies has started to increase significantly from USD4.05 billion (2013) to USD12.2 billion (2014) (Skan, Dickerson, & Masood, 2015). In Malaysia, Fintech had growth significantly compare to last year 2017. This is based on the statistic from Bank Negara Malaysia (BNM), it show that online banking still the dominant channel for Malaysians to perform transaction with a show of 85.1% online banking penetration with the transactions volume of 743million. However, mobile and e-money is the micropayments king because of the considerably large volume in transaction. Statistic shows us that mobile banking and e-money have 1.02billion transaction and 1.8billion transactions respectively even though only show a 40%

of mobile banking penetration (Fong, 2018). Besides that, Fintech offer new potential opportunities which allow people have access to amplify transparent environment, minimize expenses, eliminate intermediate, as well as make financial information easy to get to (Zavolokina, Dolata, & Schwabe, 2016). Fintech companies are currently growing their company range far away from the internet platform to the cell phone platform (For example: mobile payment, P2P lending and crowd-funding). This is because the conventional E-banking system offered by conventional financial institutions is now also transform in becoming innovation and distinguish financial services which similarly offered with the current modern financial providers.

1.3 Problem Statement

While Fintech has attracted a huge amount of awareness, the intention to use of Fintech is still considered shaky and uncertain. Customers are hesitant of intention to use Fintech mainly due to considerable amount of risks. To be more specific, "a research was carried out in May (2016) on Lending Club. It is known as the most well-known Peer to Peer lending business around the world. The research disclosed the company's executives sold out USD22 million loans to the investors, even the executives aware about those transactions had not met the investor's requirement. As a result, Lending Club's creator and Chief Executive Officer were resigned and then the Lending Club's stock price drop significantly by 35%" (Imbert & Marino, 2016). The breaking news lifts up doubts in regard to the Peer to Peer Lending business model. Those unforeseen Fintech utilization risk could negative the influence of customer feedback and block them the intention to use. If Fintech companies cannot attract customers and smooth the growth of intention use, then customers cannot get recovered those expenses and attain long term strategies or success.

For that reason, customers would like to find out the anticipated importance of Fintech utilization, taking into consideration both benefits as well as risks. Consumers only tend to make use of the Fintech's services if only the advantages are higher than the uncertainty. As a result, Fintech institutions are challenging to

alteration the possible advantages of Fintech utilization; at the same time reduce its possible uncertainty or hazards (Chan, 2015). Therefore, these situations lead to compulsory to study possible element which influence the intentions of customers to use Fintech.

Based on past researcher reports, past researchers report had figured out what is the most important driving force which causing people's behavior intentions in Information System (IS) literary study (Liang & Yeh, 2011; Chiang, 2013; Zhou, 2013; Kim, Mirusmonov, & Lee, 2010). On the other hand, there is amount of studies has at the same time include both advantages and uncertainty in Fintech environment. In addition, it is an essential to identify people level behavioral and try to fill up the possible breach in the people level investigate in Fintech. In order to overcome the research study breach the main objective of this research study is to find out how perceived benefits and risks (consider of both positive factors and negative factors) mutually affect the intention to use of Fintech. This research study will be use based on Theory of Reasoned Action (TRA) to create a framework (Ajzen & Fishbein, 1977). Theory of reasoned action (TRA) explains that individual behavior is driven by behavioral intentions where behavioral intentions are determinants of an individual's attitude toward the behavior. In short, a person who strongly believes that positive outcomes will result will have a positive attitude about the behavior, while a person who strongly believes in negative outcomes will have a negative attitude about the behavior (Ajzen & Fishbein, 1977). In this research, the research gap is to identify how customer's perceived benefits and risks towards the intention to use Fintech. It is important to know what are the perceived benefits and risks factor that affect the customer's intention to use Fintech

1.4 Research Objective

The main objective of the research study is to find out how perceived benefits and risks (consider of both positive factors and negative factors) mutually influence the intention of customer to use Fintech. To complete this research, a framework will be created based on the Theory of Reasoned Action (TRA).

1.4.1 Specific Objective

a) To study the relationship between positive factors and perceived benefits.

b) To study the relationship between negative factors and perceived risks.

c) To study the significant impact of perceived benefits and risks toward the intention to use Fintech.

1.5 Research Questions

The following research questions in this research are:

Research question 1: Does customers' perception of benefits and risks will significantly affect the intention to use Fintech?

Research question 2: What is the possible specific benefit and risk factors affect the intention to use Fintech?

1.6 Hypothesis

Hypothesis 1: Perceived benefit has significant relationship to the Fintech intention to use.

Hypothesis 2: Perceived risk has significant relationship to the Fintech intention to use.

Hypothesis 3: Economic benefit has significant relationship to perceived benefit.

Hypothesis 4: Seamless transaction has significant relationship to perceived benefit.

Hypothesis 5: Convenience has significant relationship to perceived benefit.

Hypothesis 6: Financial risk has significant relationship with perceived risk.

Hypothesis 7: Legal risk has significant relationship with perceived risk.

Hypothesis 8: Security risk has significant relationship with perceived risk.

Hypothesis 9: Operational risk has significant relationship with perceived risk.

1.7 Significant of the study

This investigate objective is to provide the next contributions into literature. First of all, the research tries to increase the environment of the intention use of Fintech decision to clearly consist both perceived benefits and risks (consider of both positive factors and negative factors) at the same time. Besides that, with the help of framework which created by using TRA, the research can possibly assist practitioners to better realize how the benefits as well as risks conceptualization which possible to produce benefit improving products and risk reduction services plan of action to inspire the customer intention to utilization of Fintech. Last but not least, the research results can give suggestion to the Fintech institution with precious content and info regards what is the element should consider to be put first or prevent during offer Fintech products and services to their customers.

1.8 Chapter Layout

The whole research study will involve five chapters to discuss:

In the Chapter 1, the research study overview that acts as the summaries of Chapter 2, 3, 4, and 5. Besides this, research background, problem statement as well as the research objectives, research questionnaire, hypothesis and significant of the study will be further discussed.

In the Chapter 2, there will have the discussed on the introduction and review of the relevant literature. Furthermore, the critical review of the applicable theoretical framework is required also the proposed conceptual research framework will be suggested for further research study. Hence, applicable hypothesis will be formed and then finally is the conclusion of Chapter 2.

In the Chapter 3, the research study design will be identify. Additionally, the discussion on the data collection methods, sampling design and research measurement will be carry on. Next, construct measurement and data analysis techniques will also be discussed as well as follow by conclusion of chapter 3.

In the Chapter 4, a number of statistical tests will be performed by using SPSS. All the results and finding will then be summarized and critically evaluated.

In the Chapter 5, it will justify the whole statistical result from the analysis, findings also the results of hypotheses examination found in the chapter 4. Then, chapter 5 will also criticism the implication and also figured out the constraint of the research. In addition, recommendations of future research will also be further discussed. Lastly, it leads to the construction of the conclusion of this research.

1.9 Conclusion

The first chapter serves as an introduction to the study including the background, problem statement, research objectives, research questions, and hypotheses of the research study. It also provides important definitions to the study. Next, literature review will be discussed in Chapter two.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In chapter 2, the discussion will first follow with literature review and then review of relevant theoretical model and lastly proposed conceptual research framework.

2.2 Review of Literature

2.2.1 Fintech

Fintech is a combination of data file which combining financial and Information Technology (IT). Fintech was not only limited to particular services (For example: provide financing) either business model (For instance: Peer to Peer lending and crowd sourcing). As an alternative, it includes the whole range of traditional financial institution services and products (Arner, Barberis, & Buckley, 2015). Fintech make on extremely innovation and disruptive services technology as products and services in modern non financial institutions (Sweeney, 2017; Chuen & Teo, 2015). Next, Freedman (2006) represented that Fintech is a building systems which value, model, as well as process financial products such as debts, shares, contracts, and monetary system. Besides that, Ernst and Young characterized that Fintech as creativity in the financial services with current technology to set as the significant enabler (crucial element that supplies the means, knowledge, or opportunity that allows for the success of an assigned task or mission). There is a past researcher delineated Fintech is a form of business organization using software and hardware application to offer financial products and services. Arner et al. (2015)

delimited that Fintech is a technology enabled which provides financial method. Besides that, Lee and Kim (2015) described Fintech is one of the technical procedure resulting by develop and establish the latest financial software that can expected to influence the whole traditional financial institution system. As a result, Fintech could possible to significantly affect the financial service's performance and also lead to grow of financial services into mobile apps environment.

Even though the connection of financial and Information Technology services is not new, Fintech still differ from current electrical financial products and services in especially the risk, opportunity, and law implication. Present-day, the anxieties of industry and policy makers were not due to the technology changing. They were worry with the question on who are going to work together (For example: Information Technology organization) in try for apply the finance technology also offering new financial products and services to consumers (Arner, Barberis, & Buckley, 2015). Besides that, the growing and strengthening the role of Information Technology is an important characteristic in the Fintech. Arner et al. (2015) described that improvement of traditional E-financial services had lead to the evolving with Fintech just as an innovative plan of action to render financial products and services. Ernst and Young make clear of that the dissimilarity between the conventional electrical finances (For instance: Online banking) and the Fintech. Especially, they mention out that the fresh role of Information Technology in Fintech. The function of Information Technology in Fintech is not only act like a facilitator or enabler to efficaciously bring financial services. However, as the innovator of new market that interrupts the current value chain which kicking out the existing channels. Fintech institution should openly offer their consumers with similar or custom-made financial services to disrupt and also substitute the present conventional channel.

For this research, Fintech is delimited as innovation and disruption of financial services by non financial companies, which Information Technology is the main key element. With the help of Fintech, customer

could involve into a diversity of mobile environment services. For example: make payment, transfer money or currency, make loans application, buy insurance policy, organization assets and management, and make investments on shares (Barberis, 2014). In this research, Fintech are cover up all the Fintech products and services such as mobile payments, insurtech, Peer to Peer lending, crowd funding, crypto currency and others.

2.2.2 Benefit-risk framework

Consumers frequently make decision making by the fragmentary or lacking information (Kim, Ferrin, & Rao, 2008). Hence, customers regularly face a level of hazard, or vulnerability, in use choices. Risk isn't the main reason that consumer depend to the situation of the intentions to use Fintech. Perceived benefits additionally furnish consumer with the inspiration for usage Fintech decisions (Wilkie & Pessemier, 1973). Joining the perceived benefit and risk, Peter and Tarpey Sr (1975) gave a net valence system expecting that customers will see products or services with positive and negative ascribes and settle on choices to augment net valence, in view of the positive and negative characteristics of the choice. The valence hypothesis is additionally predictable with speculations by Lewin (1943) and Bilkey (1953), give a hypothetical structure for this research study.

The motivation behind this exploration was to all the more likely comprehend the net valence structure dependent on the Theory of Reasoned Action (TRA). Hypothesis of Reasoned Action (TRA) pronounces that the frames of mind toward conduct are exact indicators of individual social aims (Ajzen and Fishbein, 1977; Benlian and Hess, 2011). Sketch from Theory of Reasoned Action (TRA), the expectation of customer to use Fintech would rely upon customer's discernment toward the comprehension of Fintech, which is impacted by conduct convictions. All the more explicitly, the advantages and uncertainty of Fintech utilization might be viewed as social it is possible that it is certain or

negative convictions that choose frames of mind and following conduct expectations and activities (Jurison, 1995). Thus, the positive convictions of Fintech use will expand the perceived advantages, while the negative convictions will result in perceived uncertainty. As indicated by this hypothesis, this examination sees whether purchasers would decide explicit advantage and uncertainty factors that may prompt their goal to utilize Fintech. The outcome would be an in general attitudinal assessment of Fintech utilization (For instance: by and large seen advantage and uncertainty), prompting the expectation of client to utilize Fintech.

2.3 Review of Relevant Theoretical Framework

Sources	Research environment	Research complacent	Main component of benefits	Main component of risk
(Kim, Ferrin, & Rao, 2008)	Electronic-commerce	Examine the past history of trust and uncertainty based on the benefits risks framework	Single dimension	Single dimension
(Lee M. C., 2009)	E-banking	Explained the intention to adopt online banking combining perceived benefits and risks	Financial benefit Information Transaction speed transparency	Security risk or privacy risk Social risk Financial risk Performance risk
(Benlian & Hess, 2011)	Software as a service (Saas)	Assessed the major opportunities and risks	Cost advantage Strategic flexibility Focus on core	Performance risk Economic risk Strategic risk

		associated with the intention to adopt Saas	competences Access to specialized resources Quality improvement	Security risk Managerial risk
(Liu, Yang, & Li, 2012)	Mobile payment	Investigated the mobile adoption based on the risk-benefits analysis	Single dimension	Financial risk Privacy risk Psychological risk
(Tingchi Liu, Brock, Cheng Shi, Chu, & Tseng, 2013)	Online group shopping	Investigated perceived benefits, risk, and trust	Price benefits Convenience benefits Recreational benefits	Financial risk Psychological risk Product risk Time risk
(Lee, Park, & Kim, 2013)	Social network service (SNS)	Investigated benefit and risk factors influencing intention to share information in SNS	Self-clarification Social validation Relationship development Social control Self-presentation	Security risk Stigma risk Face risk Relational risk Role risk
(Farivar & Yuan, 2014)	Social commerce	Analyzed users' social network usage using benefits, risk and trust	Social benefit Commerce benefit	Social risk Commerce risk
(Abramova & Böhme,	Bitcoin	Explained drivers and	Transaction process	Financial losses

2016)		inhibitors of Bitcoin use	Security and control Decentralization	Legal risk Operational risk Adoption risk

Table 1: Benefit-risk Framework used by past researcher

Table 1 show that significant written report had examined the benefits risks structure influencing the decision making procedure to receive or aim use Information Technology (IT) administrations (Lee, Park, & Kim, 2013; Lee M.C., 2009; Abramova & Bohme, 2016; Benlian & Hess, 2011; Farivar & Yuan, 2014; Kim, Ferrin, & Rao, 2008; Lee, Chae, & Cho, 2013). Most of these examinations have estimated the perceived benefit and risks through a multi dimensional idea that ordinarily contain various advantage and uncertainty types. There is an examination suggested that a decision making model about internet business acquiring aims. In the examination, they thought that perceived advantages and uncertainty in a solitary measurement, not a multi-measurement (Kim, Ferrin, & Rao, 2008). A research recommended that a hypothetical model to clear up customer's expectation to utilize web based banking. In this examination, perceived risks was comprehended in a multi-dimensional way (Includes of security or privacy, financial, social, time or convenience, performance risks), however perceived advantage was viewed as single build(Lee M. C., 2009). An exploration of research opportunities and dangers associated with receiving software as a service (SaaS), Perceived by Information Technology (IT) officials from adopter and non-adopter firms. In this investigation, they recommended five kinds of advantages (cost advantage, strategic flexibility, focus on core competencies, access to specialized resources, and quality improvements) alongside five sorts of uncertainty (performance, economic, strategic, security, and managerial risks) associated with SaaS appropriation (Benlian & Hess, 2011).

An explored the advantage and uncertainty elements that impact the aim to share data on an informal community administration just as discovered that customer's conduct would expand their advantages and limit their risk in the training. This investigation proposed five kinds of benefits (self-clarification, social control,

social validation, relationship development, and self-presentation) likewise five sorts of risks (security risk, relational risk, stigma risk, face risk, and role risk) identified with setting data sharing (Lee, Park, & Kim, 2013). A proposed of hypothetical model to investigate customer's informal organization appropriation conduct, thinking about the perceived benefits, perceived risks, with trust from the advantage risk structure. They received two positive components (social and commerce benefits) as perceived benefits notwithstanding two negative elements (social and commerce risks) as perceived risks (Farivar & Yuan, 2014). An examination investigated the drivers and inhibitors of Bitcoin use. They proposed an advantage chance system incorporated with an innovation acknowledgment model to give clarification on the utilization of Bitcoin. There are 3 variables of perceived benefits (seamless transaction, security and control, and decentralization) and 4 variables of perceived risks (financial losses, legal risk, operational risk, and adoption risk) were incorporated into their examination (Abramova & Böhme, 2016).

2.4 Proposed Conceptual Framework

This exploration contemplate proposed a system of advantage as well as risk by set up together the positive (perceived benefit) and negative (perceived risk) factors identified with the intention to use Fintech. Past investigations connected the multi-social conviction develops to confirm the by and large perceived benefit and risk, just as the expectation of customer to utilize Fintech. Three main considerations of perceived benefit will be examine in these explores which are economic benefit, seamless transaction, and convenience. Four main considerations of perceived risk will be examine in these explores which are financial risk, legal risk, security risk, and operational risk. As a result, this examination accepted that positive and negative elements impact the in general perceived benefits and risk, which will give noteworthy impact to the Fintech intention to use. The proposed model is summarized in Figure 1.

The Theory of Reasoned Action (TRA) is an all around investigated intention hypothesis theory that claims that guarantees that mentalities toward a conduct are

exact indicators of individual expectations (Ajzen & Fishbein, 1977; Benlian & Hess, 2011). The Fintech's intention is controlled by Fintech users' generally speaking attitudinal thought of Fintech use by applying the Theory of Reasoned Action (TRA) to the Fintech setting. It is perceived that user think about accessible services in addition to pick services, with the best esteem (Kim, Ferrin, & Rao, 2008). At the point when user settles on a hazardous choice, they are eager to go for broke to acquire gains or advantages.

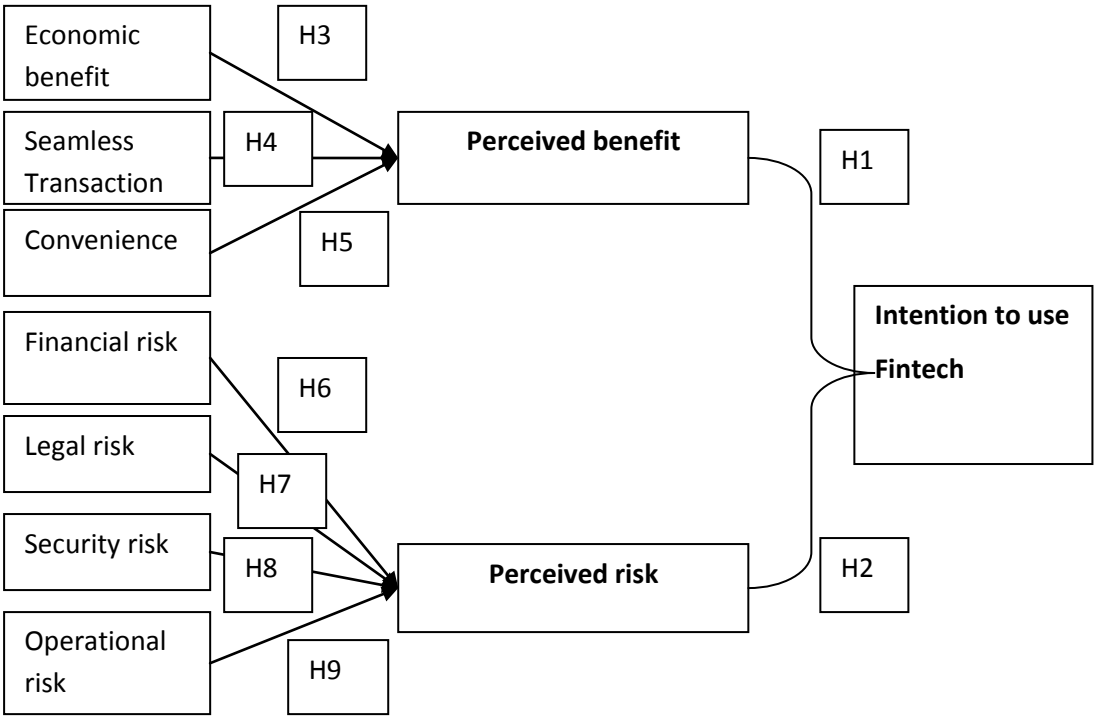

Figure 1: Theoretical and Conceptual Framework

2.5 Hypothesis Development

Perceived benefits have been commonly utilized as an immediate determinant of specific Information System intentions (Kim, Ferrin, & Rao, 2008; Lee, Park, & Kim, 2013; Tingchi Liu, Brock, Cheng Shi, Chu, & Tseng, 2013). Perceived benefit is characterized as "a users' view of the potential that Fintech aim to utilize will result in a positive result" in this examination. Past examinations have call attention to that perceived benefits have the capacity to decidedly impact user aim to utilize Information Technology (IT) services for various applications (Abramova & Bohme, 2016; Benlian & Hess, 2011; Farivar & Yuan, 2014; Lee,

Park, & Kim, 2013; Lee M.C., 2009; Lee, Chae, & Cho, 2013). A handphone payment study discovered that perceived benefits can essentially influence mobile payment usage (Liu, Yang, & Li, 2012). Similarly, Abramova and Bohme (2016) showed that perceived advantages affect Bitcoin use.

Perceived risks related with products or services have picked up importance in the user and innovative investigation. A perceived risk is a boundary for users while considering Fintech utilization. This exploration defined that the perceived risk as "a users' impression of the vulnerability and the conceivable negative outcomes with respect to the Fintech aim to use." In the Information System writing, perceived risks contrarily influence the aims to utilize Information Technology (IT) services (Abramova & Bohme, 2016; Benlian & Hess, 2011; Farivar & Yuan, 2014; Lee, Park, & Kim, 2013; Lee M.C., 2009; Lee, Chae, & Cho, 2013). Just as Abramova and Bohme (2016) found that multi-faceted perceived risk can altogether and adversely impact Bitcoin use.

According to the hypothetical establishments plus exact proof of the literature review, this research assume that customer's perceived benefit as well as risk play a critical jobs in the shaping of the expectation to utilize Fintech. The perceived benefit has a positive relationship to the Fintech intention to use, while the perceived risk has a negative relationship to the Fintech intention to use. Therefore, the following hypotheses are created:

Hypothesis 1: Perceived benefit is positive relationship to the Fintech intention to use.
Hypothesis 2: Perceived risk is negative relationship to the Fintech intention to use.

Factors of perceived benefit for the intention of customer to use Fintech:

Users' inspirations have been sorted as extrinsic and intrinsic factors from the psychological assessment hypothesis (Davis, Bagozzi, & Warshaw, 1992). Extrinsic motivation refers to the execution of a movement to achieve a specific objective (For example: prizes, bonus, and commission), at the same time as

intrinsic motivation refers to the execution of an action for no undeniable support other than the act of playing out the action without anyone else (Davis, Bagozzi, & Warshaw, 1989). Two of the extrinsic also intrinsic elements have been observed to be impact the perceived benefits with behavioral aims in the Information System writing. This exploration concentrated on the extrinsic motivation factors, because Fintech users intention to use Fintech for their useful benefits, not for their enjoy benefits. Hence, this examination proposed three extrinsic motivations as the benefit elements of the in general perceived benefit which are economic benefit, seamless transaction, and convenience.

Economic benefit is the most widely recognized and dependable extrinsic inspiration for Fintech (Chuen & Teo, 2015). With regards to Fintech, the economic benefit comprises of cost decreases and monetary profits from Fintech exchanges. Several Fintech applications such as cell phone remittance or Peer to Peer lending perhaps will propose lower exchange expenses to customer contrast with the conventional budgetary specialist organizations through legitimately giving institutionalized administrations on a versatile channel without intermediary (Mackenzie, 2015). Other Fintech applications, for example, P2P loaning or crowdfunding, that for the most part offer administrations on the web or through a mobile platform, possibly will also give higher returns to lenders, and lower loan fees to borrowers, than the conventional financial institutions through utilizing a match-making platform with a lower overhead expense (Gerber, Hui, & Kuo, 2012; Lee & Lee, 2012).

A seamless transaction alludes to the exchange related advantage of utilizing Fintech (For instance: buy, money transfer, lend, and invest). Seamless transaction practice is a critical normal for Fintech exchanges with the point of wipe out conventional financial institutions. For example, banks through the finance procedure. It let user to oversee exchanges on savvy stages, bringing about straightforward and expedient budgetary exchanges (Chishti, 2016; Zavolokina, Dolata, & Schwabe, 2016). In addition, modern financial providers such as Information Technology (IT) institution have the capacity to construct and offer new, inventive and customer benevolent budgetary products and services to customer since they legitimately offer their products and services through the

seamless transaction. The seamless transaction empowers that Fintech organizations can grow new and creative budgetary products and services to contend with customary monetary establishments and get by in the fund showcase. Along these lines, these Fintech organizations are rebuilding the business biological systems of the budgetary services industry.

Convenience is another one of the extrinsic inspirations of Fintech, which is controlled by versatility and moment openness (Chuen & Teo, 2015; Sharma & Gutierrez, 2010). Convenience alludes to adaptability in time and area (Okazaki & Mendez, 2013); the most essential factor in the accomplishment of on the web and portable services (Kim, Mirusmonov, & Lee, 2010). Users could encounter first-time comfort and effectiveness through cell phones without heading out to money related organizations. Next, convenience possibly will be helpful as a substantial indicator of the utilization of portable financial frameworks (Shen, Huang, Chu, & Hsu, 2010). Since cell phones are imperative directs in Fintech, when contrasted with conventional financial service providers, convenience over the course of mobile platforms is an objective motivation to decide the perceived benefit of the intention to use Fintech.

Economic benefit, seamless transaction, and convenience may influence the generally perceived benefit of Fintech, consequently influencing the goal to utilize Fintech. By itself, this research has the following hypotheses are created:

Hypothesis 3: Economic benefit is positive relationship to perceived benefit.
Hypothesis 4: Seamless transaction is positive relationship to perceived benefit.
Hypothesis 5: Convenience is positive relationship to perceived benefit.

Factors of perceived risk for the intention of customer to use Fintech:

Besides than the perceived benefits, advancement normally attach together with risks (Schierz, Schilke, & Wirtz, 2010). As Fintech is a developing and one of the special services, Fintech users are in threat to sweeping dangers. For Fintech, the danger of the shot of inadequate or fizzled tasks is extremely tricky for the goal of client to utilize Fintech. Past researcher utilized the perceived risk structure

created by Cunningham (1967) to build up the individual risks factors impacting the by and large perceived risk of Fintech (Cunningham, 1967). Perceived risk order into six measurements which are performance, financial consideration, opportunity or time, safety, social factors, and psychological factors (Cunningham, 1967). After exchanging the Cunningham (1967) structure to the Fintech setting, this examination study built up the supporting by 4 kind of risks as above 6 dimensions perceived risk component which are security risk, financial risk, legal risk, and operational risk. These four types of perceived risk factors able to identify clearly about the Fintech context and appropriate provide useful information which are not cover in the six dimensions.

Financial risk in other way refers to the likely or possibility of financial loss immerses in the financial transactions of using financial technology (Forsythe, Liu, Shannon, & Gardner, 2006). Past multiple research studies involving Information System literature had revealed that perceived financial risk is the most dependable indicator of on the web and cell phone user behavior (Abramova & Bohme, 2016; Benlian & Hess, 2011; Tingchi Liu, Brock, Cheng Shi, Chu, & Tseng, 2013). The financial losses of Fintech, brought about by the breakdown of the budgetary exchange framework, monetary misrepresentation, moral danger, and extra exchange expenses connected with the first selection value (Jesse McWaters, 2015; Zavolokina, Dolata, & Schwabe, 2016), are negative relationship to the intention to use Fintech. Hence, it shows a positive relationship in perceived risk of Fintech.

Legal risk alludes to a vague lawful status and the absence of all inclusive guidelines for Fintech. For instance, Malaysia's Bank Negara Malaysia (BNM) have come a framework to enables the experimentation of Fintech solutions in a live environment before it is rolled out for the market. The elements in the framework include of proactive stance (protect data security and privacy), and safeguards (protect the financial system of the country). As Fintech is first time occur in the this potential market, the absence of guidelines in regards to the money related misfortune and security issues of Fintech has brought about user fear, doubt, and uneasiness. Therefore, legal risk shows an increase in the perceived risk of Fintech.

Security risk is characterized as the potential misfortune in light of extortion or a hacking that bargains the security system of the financial deal of Fintech. With regards to e-services, security risk is conceptualized as the likelihood of a protection assault; this is a basic concern encompassed by consumers (Lwin, Wirtz, & Williams, 2007). Fraud and programmer intrusion can prompt user financial related misfortune just as disregard user's security, which is a noteworthy worry of numerous on the web and cell phone users (Lee M. C., 2009). The utilization of Fintech is joined with a generally high misfortune potential such as secrecy, individual information, transactions (Schierz, Schilke, & Wirtz, 2010); this likewise builds the perceived risk of financial technology.

Operational risk is a basic worry for user, as because many major operational misfortunes have hit vast financial organization, prompting the extreme monetary unsettling influence or breakdown of these establishments (For example: Lending Club). Operational risk alludes to the potential misfortune because of deficient or fizzled interior procedures, workers and frameworks (Barakat & Hussainey, 2013). On the off chance that the hazard shot of Fintech institution financial systems and operations is high, user would not aim to utilization Fintech. Other than that, absence of operational abilities and quick reactions, the breakdown of frameworks, and lacking interior procedures will result in user's doubt and disappointment, prompting the obstruction to use Fintech.

Because of the perceived risks (financial misfortune, security issues, the unclear of regulations), users will settle on utilization choices dependent on the great notoriety of Fintech organizations as far as operational skills and advance frameworks. In this way, the four kinds of risks may essentially influence the in general perceived risk of Fintech, along these lines adversely impacting the expectation of utilization Fintech. Therefore, this examination proposes the following hypotheses are created:

Hypothesis 6: Financial risk is positive relationship with perceived risk.
Hypothesis 7: Legal risk is positive relationship with perceived risk.
Hypothesis 8: Security risk is positive relationship with perceived risk.
Hypothesis 9: Operational risk is positive relationship with perceived risk.

2.6 Conclusion

In chapter 2, the relationships between dependent variable and independent variables are clearly defined in the hypotheses form. Besides that, the relevant theoretical frameworks have been review as well and lead to the hypothesis development. In next chapter, the whole hypotheses will be tested by using suitable quantitative research method such as data collection, sampling design, research instrument, construct measurement, and techniques used for data analysis.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter begins with research design, follows by methods of data collection, following by sampling design, and then research instrument and constructs measurement. Lastly will be the techniques used for data analysis.

3.2 Research Design

This research used quantitative data which can quantify and measurable, while the data will obtain from primary data which through questionnaires. There are including perceived benefits (Economic benefit, Seamless Transaction, and Convenience) and perceived risks (Security risk, Financial risk, Legal risk, and Operational risk) to the use of testing the intention of customer to use Fintech. In order to estimate and run necessary outputs and tests, SPSS software had been used to identify the impacts of perceived benefit as well as risk as the independent variables to the intention to use Fintech.

3.3 Data collection methods

As stated in a report by Fellegi (2003), data collection is defined as "the process of gathering the necessary information for each selected element in the survey". Data collection is an important part for every research study because the quality of input data may influence the results of a research. Accuracy, reliability and validity of research findings can be improved by using proper data collection techniques (Sagor, 2000). Data can be classified as primary and secondary, depending on the source of data (Giri & Bannerjee, 2001). For these research

studies, primary sources are tools to answer those hypotheses and research question.

3.3.1 Primary Data

Primary data is collected directly from the field of investigation for the desired purpose and these data are original in nature (Giri & Bannerjee, 2001). In other words, primary data is the original data collected for a particular research goal (Hox & Boeije, 2005). According to Sandahl, Powers and Kavmark (2012), primary data is created accordingly to the purpose of a research study; therefore the data collected has a direct relationship to the investigation at hand. Primary research is frequently conducted by using surveys, interviews, observations, and statistical analysis to understand people, societies, and cultures better (Driscoll, 2011).

Questionnaire is used to collect primary data for this research study because it is the most frequent method of primary data collection. It is a self-administrated paper based data collection instrument that is filled by respondents. Permission and consent are obtained from the participants before they fill up the questionnaire of this research study. All collected statistical information will be processed to analyze by using the statistical method analysis technique to come out the results in the Chapter 4. As stated in the book written by Burns and Bush (2005), questionnaires serve five key functions:

1) Translate the research objectives into specific questions
2) Standardize questions with the intention that respondents respond to the same stimuli
3) Foster cooperation and make sure respondents stay motivated
4) Permanent records for the research
5) Accelerate the process of data analysis

In this research, sample size of 302 questionnaires were dispense to the whole Malaysia including Sabah and Sarawak. The questionnaires will be set with a well structure organizing format to let respondents have a clear and time saving during answering the questions. By using questionnaires method in this research, it will be able provide the most accurate and most up-to-date information based on the opinion given from the respondents.

3.4 Sampling Design

3.4.1 Target Population

It points to a gather of the objects or some elements which connected to this research (Bajpai, 2011). The particular research purpose is to investigate and also to understand those interviewee's responses regarding the causes that affect customer intention to use Fintech in whole Malaysia (include Sabah and Sarawak). Therefore, this research focuses on target populations who are Malaysian and reside in Malaysia. The ages are targeting to above 18years old and have individual account of bank in order to enjoy benefit and feature of Fintech. The reason of age requirements set at 18years old and above due to the legal age with contractual capacity. There will be no any restraints about gender, race, religion as well as ethnic.

3.4.2 Sampling Frame and Sampling Location

It also relates to the all population, where sample was taken, meanwhile the sampling locations is the location where the population stay (Zikmund W. G., Babin, Carr, & Griffin, 2013). The survey related instrument will be dispersed to that interviewee from different places in whole Malaysia. Therefore, the particular sampling frame is for people that are Malaysian and live in country of Malaysia as well as at the same time the sampling places is all within whole Malaysia.

3.4.3 Sampling Elements

This particular research study will be distributed in whole Malaysia with an internet survey (For example: Google form). The target respondents can be pupils, on the job adults as well as relevant people. This population is chosen. This is because of they can be future user who uses Fintech because now Fintech in Malaysia still less people use it and fresh. By focusing them, intention to use Fintech will be understand well on what make them use it (perceived benefit and risk factors).

3.4.4 Sampling Technique

Probability as well as non probability was two usually in use sampling techniques utilized by past researchers for their research (Zikmund W. G., Babin, Carr, & Griffin, 2013). For this research, non probability method has been applied. This is because it is low-priced, broadly used as well as doesn't involve huge population size. For sure, it assists to cut down the expenditure of sampling. The quota sampling method is also classified as non probability sampling method to make sure the different small amount of groups in population will be classified on relevant features in proportion to the interviewer's required elements (Zikmund W. G., Babin, Carr, & Griffin, 2013). Therefore, quota sampling method is chosen in these studies as it is expedient, speedy and low in expenditure (Hair Jr, Wolfinbarger, Money, Samouel, & Page, 2015).

3.4.5 Sampling Size

Identify proper amount of sample size is a catchy and also a problematic work. Roscoe's rules of thumb, to examine samples, for more than thirty as well as less than five hundreds are consider suitable for most of the research (Roscoe, 1975). At the same time as Comrey and Lee (2013) stated that the subsequent measurement of the sample size: fifty consider as very poor, one hundred consider as poor, two hundred consider as fair, three hundred consider as good, five hundred consider as very good, and

also more than one thousand is consider as superior. Those sample sizes for past researcher's research (Yang & Mao, 2014; Rahman, Khan, & Islam, 2013; Lim & Ting, 2014; Pi, Liao, Liu, & Lee, 2011) are around two hundred to four hundred. Therefore, the proposed target area sample size of the research is also targeted for three hundred respondents.

3.5 Research Instrument

The questionnaire is regard as a technique of how the data has been collected from respondents which they are requested to provide answer of the same series of the questions in the predetermined sequences (Vaus, 2002). For the research, all questionnaires will be dispersed to obtain first hand data from the respondents regrading intention to use Fintech. Those self administered based questionnaire has been utilized in this particular study that is the interviewee has the responsibility to study and response to the provided questions set via online method (Zikmund W. G., Babin, Carr, & Griffin, 2013). Obviously, the cost is low-budget to do, obtain speedier response answers and with no geographic restriction.

3.5.1 Purpose of Using Questionnaire

The questionnaire method can help to capture respondent's cognitive content and also has feeling about several problems (Celsi, Money, Samouel, & Page, 2011). In addition, Zikmund W. G., Babin, Carr, and Griffin (2013) indicate that questionnaire assists investigator to allocate the recent business issue by gathering all useful information by conducting a research question. Furthermore, the particular questionnaire was undoubtedly necessary because the data is superior as the questions asked.

3.5.2 Questionnaire Design

A structured questionnaire was utilized as the survey in this examination. The survey was arranged and dispersed on the website (Google Form). The

hyperlink to the study site (Google Form) was spread to respondents through email or other internet based life. Respondents are mentioned to browse the choices or pick a fitting scale point gave in the overview instrument. For this research study, the particular survey instrument is classified into many segment, it will be asking about perceived benefit and risk, factors of perceived benefit and risk, and intention to use Fintech as well as the respondent's profile. In the respondent's profiles, the questions will be asked are gender, age, monthly income and education level. Based the respondent's profile, it might be able to provide appropriate answer to this study. To improve the credibility as well as dependability of the data information collected, all respondents did not be asked willingness to answer the questionnaires.

3.6 Construct Measurement

There are many information sources that researchers can search for and consider when deciding upon the constructs that a study will measure. These information sources comprise of literature review from previous studies that addressed similar topics, inputs from peers and experts, and client-commissioned studies (Roller & Lavrakas, 2015).

3.6.1 Origin of Construct

The sources of the construct measurement used in this research study are adapted from the past studies.

Constructs	Survey	Authors
Perceived benefit (PB)	Perceived benefit 1: Using Fintech has many advantages. Perceived benefit 2: I can easily and quickly use Fintech.	(Kim, Ferrin, & Rao, 2008) (Benlian & Hess, 2011)

	Perceived benefit 3: Using Fintech is useful for me. Perceived benefit 4: Using Fintech yields a more superior outcome quality than traditional financial services.	
Perceived risk (PR)	Perceived risk 1: Using Fintech is associated with a high level of risk. Perceived risk 2: There is a high level of uncertainty using Fintech. Perceived risk 3: Overall, I think that there is little benefit to use Fintech compared to traditional financial services.	(Kim, Ferrin, & Rao, 2008) (Benlian & Hess, 2011)
Economic benefit (EB)	Economic benefit 1: Using Fintech is cheaper than using traditional financial services. Economic benefit 2: I can save money when I use Fintech. Economic benefit 3: I can use various financial services with a low cost when I use Fintech.	(Featherman & Pavlou, 2003) (Lee M. C., 2009)
Seamless transaction (ST)	Seamless transaction 1: I can control my money without the middleman when I use Fintech. Seamless transaction 2: I can use various financial services at the same time (e.g. one stop processing) when I use Fintech. Seamless transaction 3: I can have the peer-to-peer transactions between providers and users without middle man when I use Fintech.	(Chishti, 2016)

Convenience (CV)	Convenience 1: I can use financial services very quickly when I use Fintech. Convenience 2: I can use financial services anytime anywhere when I use Fintech. Convenience 3: I can use financial services easily when I use Fintech.	(Okazaki & Mendez, 2013)
Financial risk (FR)	Financial risk 1: Financial losses are likely when I use Fintech. Financial risk 2: Financial fraud or payment frauds are likely when I use Fintech. Financial risk 3: Financial losses due to the lack of the interoperability with other services are likely when I use Fintech.	(Featherman & Pavlou, 2003) (Lee M. C., 2009)
Legal risk (LR)	Legal risk 1: My use of Fintech is uncertain due to many regulations. Legal risk 2: It is not easy to use Fintech due to the government regulation. Legal risk 3: There is a legal uncertainty for Fintech users. Legal risk 4: It is difficult to use various Fintech applications due to the government regulation.	(Barakat & Hussainey, 2013) (Abramova & Böhme, 2016)
Security risk (SR)	Security risk 1: I worry about the abuse of my financial information (e.g. transaction and private information) when I use Fintech. Security risk 2: My financial information is not secure when I use	(Featherman & Pavlou, 2003) (Lee M. C., 2009)

	Fintech. Security risk 3: I worry that someone can access my financial information when I use Fintech.	
Operational risk (OR)	Operational risk 1: Fintech companies are not willing to solve the issues when financial losses or financial information leakages occur. Operational risk 2: The organizational responses of Fintech companies are too slow when financial losses or financial information leakages occur. Operational risk 3: I worry about the way Fintech companies respond to financial losses or financial information leakages.	(Barakat & Hussainey, 2013)
Intention to use Fintech (IF)	Intention to use Fintech 1: I would positively consider Fintech in my choice set. Intention to use Fintech 2: I would prefer Fintech. Intention to use Fintech 3: I intend to continue to use Fintech. Intention to use Fintech 4: I will use Fintech in the future.	(Cheng, Lam, & Yeung, 2006) (Lee M. C., 2009)

Table 2: Construct measurement of past studies

3.6.2 Data Scale Measurement

Measurement is integral to statistics and no statistics would be possible without the concept of measurement (Weisburd & Britt, 2007). Likert scale was first introduced by Likert in 1932 to measure attitudes or

opinions of respondents (Brown, 2011). The original scale used a series of questions with five response alternative: (i) strongly approve (ii) approve (iii) undecided (iv) disapprove and (v) strongly disapprove (Boone & Boone, 2012). In this research study, a five-point Likert scale was used. The scale used for this research is ranging from 1(Extreme low) to 5 (Extreme high).

Variables	**Likert Scale**
Dependent Variable Intention to use Fintech **Independent Variable** Perceived benefits ➢ Economic benefit ➢ Seamless transaction ➢ Convenience Perceived risks ➢ Financial risk ➢ Legal risk ➢ Security risk ➢ Operational risk	1=Extreme low 2=Low 3=Neutral 4=High 5=Extreme High

Table 3: Scale Measurement

3.7 Data Analysis Techniques

As mentioned in a report by University (2011), SPSS is the acronym of Statistical Package for Social Sciences that have been in development for more than thirty years. It is a powerful, user-friendly software package for data manipulation and statistical data analysis (Landau, 2004). In this research study, IBM SPSS Statistics 20 software is used to analyze the data collected.

3.7.1 Reliability Test

Basically, reliability is the ability of a questionnaire to generate the same results under the same conditions (Field & Hole, 2002). A questionnaire is said to be reliable when it is free from random error and therefore gives consistent results. In other words, reliability indicates internal consistency of a measurement scale (Khalid, Abdullah, & Kumar M, 2012). The Cronbach‟s Coefficient Alpha test is one of the most popularly used way for measurement of internal coherency (McCrae, Kurtz, Yamagata, & Terracciano, 2011). It is necessary for researchers to calculate Cronbach‟s alpha when Likert scale is used in the study as this will increase the reliability of items (Khalid, Abdullah, & Kumar M, 2012). The higher the alpha score, the more reliable the measurement scale (Clow & James, 2013). Santos (1999) mentioned that Cronbach‟s alpha range more than 0.7 is to be considered as good and also accepted as reliability coefficient. Cronbach‟s alpha score must not less than 0.7 and will be consider not reliability.

Coefficient Alpha (α) Scope	**Strength of Relationship**
0.0 to 0.5999	Poor Reliability
0.6 to 0.6999	Moderate Reliability
0.7 to 0.7999	Good Reliability
0.8 to 0.8999	Very Good Reliability
Above 0.90	Excellent Reliability

Table 4: Cronbach's Alpha Measurement

3.7.2 Descriptive Analysis

The definition of descriptive analysis is the transformation of a sample of data into source of information that can be easily understand and explained, and it also is an analysis conducted before statistical analysis (Aaker, Kumar, & Day, 2007). The data can be gathering through personal

interview, survey questionnaires and others method. In this analysis, mean, mode, and standard deviation will be discussed. Therefore, median, mean, mode, as well as standard deviation are consider as the most powerful descriptive statistics for examiner to interpret the data.

3.7.3 Pearson Correlation

Pearson's correlation coefficient or (r) can be defined as is a degree of the strength on how the dependent and independent variables relate to each other. -1 to +1 is the range of the coefficient. -1 indicates a perfectly negative relationship while +1 indicates a perfectly positive relationship, and thus 0 indicates no linear relationship. In conclusion, of the nearer values are to -1 or +1, the stronger the linear correlation can be (Zikmund W., Babin, Carr, & Griffin, 2010). When Pearson correlation coefficient among two variables are high (>0.80), then the multicollinearity problem is occur (Kumari, 2008). Furthermore, these researches, Pearson Correlation Coefficient is utilizing to explore correlation among predictor variable (Economic benefit, seamless transaction, and convenience) and dependent variable (Perceived benefit). Besides that, also analyze the correlation between independent variable (Financial risk, Security risk, Legal risk, and Operational risk) and dependent variable (Perceived risk). Lastly, Pearson correlation Coefficient will analyze the correlation between independent variable (Perceived benefit, and Perceived risk) and dependent variable (Intention to use Fintech). If r is positive, the dependent variable is directly related to the independent variable where if the r is negative, then vice versa correlated.

Size of Correlation	**Interpretation**
0.90 to 1.00 (-0.90 to -1.00)	Very high positive (negative) correlation
0.70 to 0.90 (-0.70 to -0.90)	High positive (negative) correlation
0.50 to 0.70 (-0.50 to -0.70)	Moderate positive (negative) correlation

0.30 to 0.50 (-0.30 to -0.50)	Low positive (negative) correlation
0.00 to 0.30 (-0.00 to -0.30)	Little if any correlation

Table 5: Measurement of Pearson Correlation

3.7.4 Multicollinearity Analysis

The higher of collinearity, the higher probability that a good sign of the result will turned out insignificant and get rejected from model (Hair, Babin, Money, & Samuel, 2003). Collinearity analysis is a good indicator to check the significance of a model as when the value is high; it carries the insignificance of the model (Hair, Babin, Money, & Samuel, 2003). Thus, multicollinearity problem can be discovered by collinearity in the terms of Tolerance and Variance Inflation Factor (VIF). Referring to Hair et al. (2003), the maximum value of VIF is 5.0, so if VIF value is higher than 5.0, it would shows a multicollinearity problem. Besides that, a tolerance value of 0.10 or lower, multicollinearity problem is occurred (Hair, Babin, Money, & Samuel, 2003).

3.7.5 Multiple Linear Regression Analysis

Multiple linear regression (MLR) model can be defined as an evolvement of simple linear regression which contains only one independent variables, X, into more than one independent variables, which are applied to forecast a single dependent variable, Y (Stockburger, 2001). It is used in this research study to measure the significance of relationship between dependent and independent variables. The general multiples linear regression model for a research study can be written as follows (Fagbemi, Ajibolade, Arowomole, & Ayadi, 2011):

$$y = \beta_0 + \beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \ldots + \beta_k\chi_k + \varepsilon$$

Where, y= Dependent variable

β_0 β_1 β_2 β_3 β_k = Regression coefficients

χ_1 χ_2 χ_3 χ_k = Independent variables

ε = Error term

3.8 Conclusion

This chapter describes research design, methods of information collected, and then the sampling design continue with the research instrument also the construct measurement, as well as data analysis techniques which applied to analyze information. Chapter 3 provides a linkage to Chapter 4 and these two chapters are interrelated. The following chapter will illustrate the patterns and analyze the findings that are related back to this research questions along with hypotheses.

CHAPTER 4

RESEARCH RESULTS AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter will present the result and analysis of 302 respondents gathered for this research study. Every part of results is obtained from the output of IBM SPSS statistics version 20. This chapter consists of descriptive analysis, reliability test, multicollinearity analysis, pearson correlation, and multiple linear regression analysis. There are few tests will be explained by using three model which are Perceived Benefit Model, Perceived Risk Model, and Intention to use Fintech Model. The reason to separate become three model instead of one model is mainly because of this research framework. This research framework are forming together by three multiple linear regression model so by explaining it clearly and understanding, three separate model is the best way to interpret it .

4.2 Descriptive Analysis

The definition of descriptive analysis is the transformation of a sample of data into source of information that can be easily understand and explained, and it also is a analysis conducted before statistical analysis (Aaker, Kumar, & Day, 2007). Total 302 sets of data are received from the web-based questionnaire. The purpose of descriptive analysis is to study the overall statistic of the respondents' demographic background.

		Frequency	Percent	Cumulative Percent
Gender	Female	147	48.7	48.7
	Male	155	51.3	100
Age	18-24	84	27.8	27.8
	25-34	101	33.4	61.3
	35-44	62	20.5	81.8
	Above 45	55	18.2	100
Monthly Income	Less than RM2,500	76	25.2	25.2
	RM2, 501-RM3,500	69	22.8	48.0
	RM3, 501-RM4,500	64	21.2	69.2
	RM4, 501-RM5,500	42	13.9	83.1
	Above RM5, 500	51	16.9	100
Education Level	Primary/ Secondary school	71	23.5	23.5
	Undergraduates	181	59.9	83.4
	Masters	44	14.6	98.0
	PhD	6	2.0	100

Table 6: Descriptive Analysis

	Gender	Age	Monthly Income	Education Level
Mean	1.5132	2.2914	2.7450	1.9503
Mode	2.00	2.00	1.00	2.00
Median	2.0000	2.0000	3.0000	2.0000
Standard Deviation	0.5006	1.0633	1.4111	0.6777
Min	1	1	1	1
Max	2	4	5	4

Table 7 Descriptive Analysis (Central Tendency)

Based on the above Table 6, a total of 302 respondents are constructed by 147 males (48.7%) and 155 females (51.3%). Moreover, from the table 6 above, there are total of four range of age group, the majority groups of respondents are under

the range from 25-34 years old, which is 101respondents (33.4%), then follow by the range from 18-24 is 84 respondents (27.8%), and the remains will be divided by the range from 35-44 and above 45 years old are 62 respondents (20.5%) and 55 respondents (18.2%) respectively. In terms of monthly income, it has been ranged into five income groups. Most of the respondents had their income less than RM 2,500 with 76 respondents (25.2%). It follows by the income group ranged from RM 2,501 – RM 3,500 and RM 3,501 – RM 4,500, which is 69 respondents (22.8%) and 64 respondents (21.2%) respectively. At last, the income group of RM 4,501 – RM 5,500 and above RM 5,500, with 42 respondents (13.9%) and 51 respondents (16.9%) respectively. Lastly, in term of education level, it is formed by four levels, and most of the respondents are undergraduates, with 181 (59.9%) of respondents. It follows by 71 (23.5%) of respondents, which are from primary / secondary school. The least will be the group of PhDs, which only 6 (2%) of respondents. The remaining respondents are from the Master, with 44 respondents (14.6 %).

Based on the above Table 7, Mean (average) for the gender, age, monthly income and education level are 1.5132, 2.2914 (average age is between 25-34 and 35-44), 2.7450 (average monthly income is between RM2, 501-RM3, 500 and RM3, 501-RM4, 500), and 1.9503 (average education level is between primary/secondary school and undergraduate) respectively. Next, the mode (most frequently occurring) for the gender, age, monthly income and education level are 2.000 (Male), 2.000 (25-34 age), 1.000 (Less than RM 2,500), and 2.000 (Undergraduates) respectively. In addition, the median for the gender, age, monthly income and education level are 2.0000, 2.0000 (median age is at around 25-34), 3.0000 (median monthly income is at around RM3, 501-RM4, 500), and 2.0000 (median education level is at around undergraduates level) respectively. Besides that, the standard deviation for the gender, age, monthly income and education level are 0.5006, 1.0633, 1.4111, and 0.6777 respectively. A low standard deviation indicates that the data points tend to be very close to the mean while a high standard deviation indicates that the data points are spread out over a large range of values.

4.3 Pearson Correlation

Pearson's correlation coefficient or (r) can be defined as is a degree of the strength on how the dependent and independent variables relate to each other. -1 to +1 is the range of the coefficient. -1 indicates a perfectly negative relationship while +1 indicates a perfectly positive relationship, and thus 0 indicates no linear relationship. In conclusion, of the nearer values are to -1 or +1, the stronger the linear correlation can be (Zikmund W. , Babin, Carr, & Griffin, 2010). If the correlation coefficient between two variables is high (>0.80), then multicollinearity problem is occur (Kumari, 2008) The following pearson correlation test will be explain using three model which are Perceived Benefit Model, Perceived Risk Model, and Intention to use Fintech Model.

Correlations

		PB	EB	ST	CV
PB	Pearson Correlation	1	.694**	.620**	.675**
	Sig. (2-tailed)		.000	.000	.000
	N	302	302	302	302
EB	Pearson Correlation	.694**	1	.667**	.606**
	Sig. (2-tailed)	.000		.000	.000
	N	302	302	302	302
ST	Pearson Correlation	.620**	.667**	1	.586**
	Sig. (2-tailed)	.000	.000		.000
	N	302	302	302	302
CV	Pearson Correlation	.675**	.606**	.586**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	302	302	302	302

**. The correlation is significant at 0.01 level (2-tailed).

Table 8: Correlations for Perceived Benefit Model

Based on the Table 8 above, PB is Perceived Benefit; EB is Economic Benefit; ST is Seamless Transaction; and CV is Convenience.

4.3.1 Correlation of Economic Benefit and Perceived Benefit; Seamless Transaction and Perceived Benefit; Convenience and Perceived Benefit

The result from above Table 8, shown that there is moderate positive correlation of 0.694 between the Economic Benefit and Perceived Benefit and it is significant at the 0.01 level. Besides that, there is moderate positive correlation of 0.620 between the Seamless Transaction and Perceived Benefit and it is significant at the 0.01 level. Lastly, there is an adequate positive correlation of 0.675 between the Convenience and Perceived Benefit and it is significant at the 0.01 level. According to Kumari (2008), if all construct's value are not above the value of 0.80 then it indicates that the entire construct are not the same and repetitive which brings a good result.

Correlations

		PR	FR	LR	SR	O.R
PR	Pearson Correlation	1	.765**	.688**	.613**	.662**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	302	302	302	302	302
FR	Pearson Correlation	.765**	1	.739**	.663**	.660**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	302	302	302	302	302
LR	Pearson Correlation	.688**	.739**	1	.597**	.680**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	302	302	302	302	302
SR	Pearson Correlation	.613**	.663**	.597**	1	.711**

	Sig. (2-tailed)	.000	.000	.000		.000
	N	302	302	302	302	302
O.R	Pearson Correlation	.662**	.660**	.680**	.711**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	302	302	302	302	302

**. The correlation is significant at 0.01 level (2-tailed).

Table 9: Correlations for Perceived Risk Model

From the Table 9 above, PR is Perceived Risk; FR is Financial Risk; LR is Legal Risk; SR is Security Risk; and OR is Operational Risk.

4.3.2 Correlation of Financial Risk and Perceived Risk; Legal Risk and Perceived Risk; Security Risk and Perceived Risk; Operational Risk and Perceived Risk

Based on the result from above Table 9 (Perceived Risk Model), it shown that there is a great positive correlation of 0.765 between the Financial Risk and Perceived Risk and it is significant at the 0.01 level. Next, there is an adequate positive correlation of 0.688 between the Legal Risk and Perceived Risk and it is significant at the 0.01 level. In addition, there is an adequate positive correlation of 0.613 between the Security Risk and Perceived Risk and it is significant at the 0.01 level. Furthermore, there is moderate positive correlation of 0.662 between the Operational Risk and Perceived Risk and it is significant at the 0.01 level. Lastly, all construct's value are not above the value of 0.80 then it indicates that the entire construct are not the same and repetitive which brings a good result (Kumari, 2008).

Correlations

		PB	PR	IF
PB	Pearson Correlation	1	.451**	.666**
	Sig. (2-tailed)		.000	.000
	N	302	302	302
PR	Pearson Correlation	.451**	1	.463**
	Sig. (2-tailed)	.000		.000
	N	302	302	302
IF	Pearson Correlation	.666**	.463**	1
	Sig. (2-tailed)	.000	.000	
	N	302	302	302

**. The correlation is significant at the 0.01 level (2 tailed).

Table 10: Correlations for Intention to use Fintech Model

From the Table 10 above, PB is Perceived Benefit; PR is Perceived Risk; and IF is Intention to use Fintech.

4.3.3 Correlation of Perceived Benefit and Intention to use Fintech; Perceived Risk and Intention to use Fintech

From the result above Table 10 (Intention to use Fintech Model), it indicates a low positive correlation of 0.451 between the Perceived Benefit and Intention to use Fintech and it is significant at the 0.01 level. Lastly, the result showed an adequate positive correlation of 0.666 between the Perceived Risk and Intention to use Fintech and it is significant at the same level. This shows all construct's value are not above the value of 0.80 then it indicates that the entire construct are not the same and repetitive which brings a good result (Kumari, 2008).

4.4 Multicollinearity Analysis

The higher of collinearity, the higher probability that a good sign of the result will turned out insignificant and get rejected from model (Hair, Babin, Money, & Samuel, 2003). Collinearity analysis is a good indicator to check the significance of a model as when the value is high, it carries the insignificance of the model (Hair, Babin, Money, & Samuel, 2003). Thus, multicollinearity problem can be discovered by collinearity in the terms of Tolerance and Variance Inflation Factor (VIF). Referring to Hair et al. (2003), the maximum value of VIF is 5.0, so if VIF value is higher than 5.0, it would shows a multicollinearity problem. Besides that, a tolerance value of 0.10 or lower, multicollinearity problem is occurred (Hair, Babin, Money, & Samuel, 2003). The following multicollinearity analysis will be explain using three model which are Perceived Benefit Model, Perceived Risk Model, and Intention to use Fintech Model.

Construct	Tolerance	VIF
Economic benefit (EB)	0.484	2.0661
Seamless transaction (ST)	0.503	1.9881
Convenience (CV)	0.573	1.7452

Table 11: Multicollinearity analysis for Perceived Benefit Model

Construct	Tolerance	VIF
Financial risk (FR)	0.371	2.6954
Legal risk (LR)	0.388	2.5773
Security risk (SR)	0.427	2.3419
Operational risk (OR)	0.386	2.5906

Table 12: Multicollinearity analysis for Perceived Risk Model

Construct	Tolerance	VIF
Perceived benefit (PB)	0.797	1.2547

Table 13: Multicollinearity analysis for Intention to use Fintech Model

Based on the above Table 11, 12, and 13, the Variance Inflation Factor (VIF) for all the models were less than 5.0. Besides that, the Tolerance Value for all three Models was ranging between 0.371 and 0.797. The result revealed that the multicollinearity problem was not significant in this study.

4.5 Reliability Test

The Cronbach‟s Alpha Coefficient is applied as the reliability test for the variables in this research study. As mentioned, reliability is the ability of a questionnaire to generate the same results under the same conditions (Field & Hole, 2002) and a questionnaire is reliable when it is free from random error. The following reliability test will be explain using three model which are Perceived Benefit Model, Perceived Risk Model, and Intention to use Fintech Model.

Variables	No. of Items	Cronbach‟s alpha Coefficient
Economic Benefit (IV)	3	0.842
Seamless Transaction (IV)	3	0.837
Convenience (IV)	3	0.852
Perceived Benefit (DV)	4	0.891

Table 14: Reliability test for Perceived Benefit Model

Variables	No. of Items	Cronbach‟s alpha Coefficient
Financial Risk (IV)	3	0.885
Legal Risk (IV)	4	0.897
Security Risk (IV)	3	0.841
Operational Risk (IV)	3	0.881
Perceived Risk (DV)	3	0.806

Table 15: Reliability test for Perceived Risk Model

Variables	No. of Items	Cronbach‟s alpha Coefficient
Perceived Benefit (IV)	4	0.891
Perceived Risk (IV)	3	0.806
Intention to use Fintech (DV)	4	0.791

Table 16: Reliability test for Intention to use Fintech Model

As mentioned, Santos (1999) stated which Cronbach‟s alpha score of 0.7 is considering good and can be acceptable. Cronbach‟s alpha score must not less than 0.7 and will be consider not reliability. Based on the Table 14, Table 15, and Table 16, all three models (Perceived Benefit, Perceived Risk and Intention to use Fintech Model) shown that the Cronbach‟s alpha Coefficient are above 0.7, indicate the questionnaire constructed for each variable is reliable for this study.

4.6 Multiple Linear Regression Analysis

Multiple linear regression (MLR) model can be defined as an evolvement of simple linear regression which contains only one independent variables, X, into more than one independent variables, which are applied to forecast a single dependent variable, Y (Stockburger, 2001). The application of the analysis into this research can result to the study of the significance relationship between independent and dependent variables.

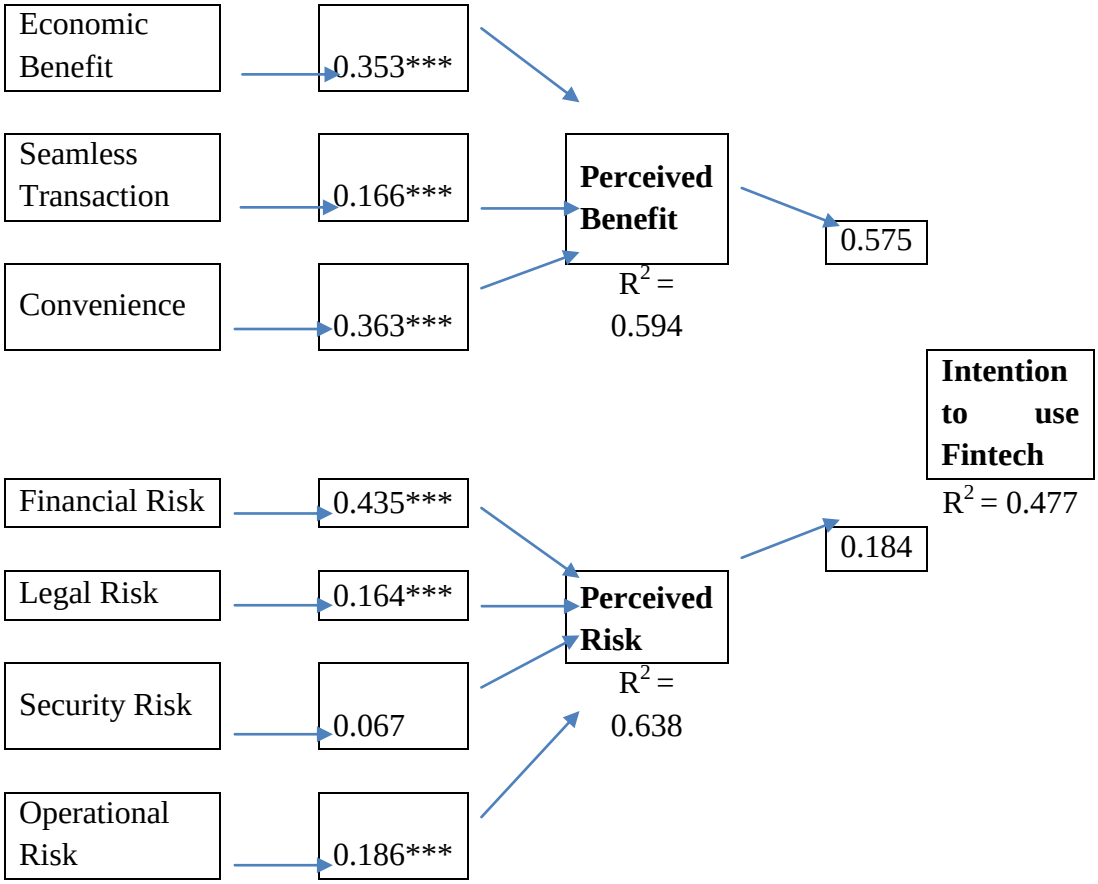

Figure 2: Results of the Structural Model Framework

Note: Significance Level: * Sig at 0.100, **Sig at 0.05, ***at 0.01.

Based on the Figure 2, it explains the outcomes of the structural model. The structural model consisted of 3 different models, which are Perceived Benefit Model, Perceived Risk Model and Intention to use Fintech Model. The R^2 for the Perceived Benefit Model is 0.594, it show that the model is 59.40% fit between the perceived benefit factors (Economic benefit, Seamless transaction, and Convenience) and the Perceived Benefit. Besides that, for the Perceived Risk Model, the R^2 is 0.638, it show 63.80% the model is fit between the perceived risk factors (Financial risk, Legal risk, Security risk, and Operational risk) and the Perceived Risk. Lastly, for the Intention to Use Fintech Model, the R^2 is 0.477. It shows that only 47.60% the model is fit between the independent variable (Perceived Benefit and Perceived Risk) and the dependent variable (Intention to use Fintech). All the hypotheses were been proved for significance except H8.

Hypothesis	Relationship	Beta	Std Error	p-value	Decision
H3	Relationship between economic benefit and perceived benefit.	0.353	0.051	0.000	Proved
H4	Relationship between seamless transaction and perceived benefit.	0.166	0.052	0.001	Proved
H5	Relationship between convenience and perceived benefit.	0.363	0.050	0.000	Proved

Table 17: Result of Path Coefficients and Hypotheses Testing for Perceived Benefit Model

Based on the SPSS output, the following multiple regression equation was made:

Perceived Benefit = 0.497 + 0.353 (Economic Benefit) + 0.166 (Seamless Transaction) + 0.363 (Convenience)

Based on multiple linear equation above, three optimistic relationships between three independent variables is revealed in which consisting of economic benefit, seamless transaction and convenience. This research explains that an increase of one value unit of Economic Benefit, the Perceived Benefit will rise by 0.353 units

while other independent variables stay constant. Besides that, an increase of one value unit of Seamless Transaction, the Perceived Benefit will rise by 0.166 units while other independent variables stay constant. In addition, an increase of one value unit of Convenience, the Perceived Benefit will increase by 0.353 units while other independent variables stay constant.

H3: Economic benefit is positive relationship to perceived benefit.

Based on the Table 17, the independent variable, economic benefit (EB) is valued a p-value of 0.000, which is less than the 0.05 significance level. This resulted having a significant relationship with the perceived benefit and the beta coefficient is positive, which is meeting the hypothesis established.

H4: Seamless transaction is positive relationship to perceived benefit.

Based on the Table 17, the independent variable, seamless transaction (ST) is valued a p-value of 0.001, which is less than the 0.05 significance level. This resulted having a significant relationship with the perceived benefit and the beta coefficient is positive, which is meeting the hypothesis established.

H5: Convenience is positive relationship to perceived benefit.

Based on the Table 17, the independent variable, convenience (CV) is valued a p-value of 0.000, which is less than the 0.05 significance level. This resulted having a significant relationship with the perceived benefits and the beta coefficient is positive, which is meeting the hypothesis established.

Hypothesis	Relationship	Beta	Std Error	p-value	Decision
H6	Relationship between financial risk and perceived risk.	0.435	0.053	0.000	Proved
H7	Relationship between legal risk and perceived risk.	0.164	0.051	0.002	Proved
H8	Relationship between security risk and perceived risk.	0.067	0.057	0.238	Not Proved
H9	Relationship between operational risk and perceived risk.	0.186	0.055	0.001	Proved

Table 18: Result of Path Coefficients and Hypotheses Testing for Perceived Risk Model

Based on the SPSS output, the following multiple regression equation was made:

Perceived Risk = 0.636 + 0.435 (Financial Risk) + 0.164 (Legal Risk) + 0.067 (Security Risk) + 0.186 (Operational Risk)

Based on the multiple linear equation above, four relationships between four independent variables is revealed in which consisting of financial risk, legal risk, security risk, and operational risk. The research explained that an increase of one value unit of Financial Risk, the Perceived Risk will rise by 0.435 units while other independent variables stay constant. Besides that, an increase of one value unit of Legal Risk, the Perceived Risk will rise by 0.164 units while other independent variables stay constant. In addition, an increase of one value unit of Security Risk, the Perceived Risk will increase by 0.067 units while other independent variables stay constant. Lastly, an increase of one value unit of Operational Risk, the Perceived Risk will increase by 0.186 units while other independent variables stay constant.

H6: Financial risk is positive relationship with perceived risk.

Based on the Table 18, the independent variable, financial risk (FR) is valued a p-value of 0.000, which is less than the 0.05 significance level. This resulted having a significant relationship with the perceived risk and the beta coefficient is positive, which is meeting the hypothesis established.

H7: Legal risk is positive relationship with perceived risk.

Based on the Table 18, the independent variable, legal risk (LR) is valued a p-value of 0.000, which is less than the 0.05 significance level. This resulted having a significant relationship with the perceived risk, and the beta coefficient is positive, which is meeting the hypothesis established.

H8: Security risk is positive relationship with perceived risk.

Based on the Table 18, the independent variable, security risk (SR) is valued a p-value of 0.238, which is greater than then 0.1 significance level. This resulted the SR does not have a significant relationship with the perceived risk, however, the beta coefficient is positive, hence, it does not meet the hypothesis established.

H9: Operational risk is positive relationship with perceived risk.

Based on the Table 18, the independent variable, operational risk (OR) is valued a p-value of 0.001, which is less than the 0.05 significance level. This resulted having a significant relationship with the perceived risk, and the beta coefficient is positive, which is meeting the hypothesis established.

Hypothesis	Relationship	Beta	Std Error	p-value	Decision
H1	Relationship between perceived benefit and intention to use Fintech.	0.575	0.047	0.000	Proved
H2	Relationship between perceived risk and intention to use Fintech.	0.184	0.042	0.000	Proved

Table 19: Result of Path Coefficients and Hypotheses Testing for Intention to use Fintech Model

Based on the SPSS output, the following multiple regression equation was made:

Intention to use Fintech = 0.932 + 0.575 (Perceived Benefit) + 0.184 (Perceived Risk)

From the last multiple linear equation above, this is the last model which explain the main objective of the research study. Only two optimistic relationships between two independent variables is revealed in which consisting of perceived benefit and perceived risk. This research explains that an increase of one value

unit of perceived benefit, the intention to use Fintech will rise by 0.575 units while other independent variables stay constant. Besides that, an increase of one value unit of perceived risk, the intention to use Fintech will rise by 0.184 units while other independent variables stay constant.

H1: Perceived benefit is positive relationship to the Fintech intention to use.

Based on the Table 19, the independent variable, perceived benefit (PB) is valued a p-value of 0.000, which is less than the 0.05 significance level. This resulted having a significant relationship with the perceived risk, and the beta coefficient is positive, which is meeting the hypothesis established.

H2: Perceived risk is negative relationship to the Fintech intention to use.

Based on the Table 19, the independent variable, perceived risk (PR) is valued a p-value of 0.000, which is less than the 0.05 significance level. This resulted having a significant relationship with the perceived risk; however, the beta coefficient is positive, hence, it does not meet the hypothesis established.

4.7 Conclusion

This chapter presents the detailed interpretation of all the quantitative analysis. For example, interpretation of the descriptive analysis, reliability test, multicollinearity analysis, pearson correlation, as well as the multiple linear regression analysis. These results findings will carried forward into the following Chapter 5 for future discussing.

CHAPTER 5

RECOMMENDATION AND CONCLUSION

5.1 Introduction

The summary of statistical analysis, main findings and the outcomes of hypothesis testing found in earlier chapters can be found in this chapter. It also can be known as discussion of major findings. It follows with reviewing the implication to this research study. Next, the limitation of the research study will be stated out and given some recommendations for future research. Finally, it leads to the construction of the conclusion of this research.

5.2 Discussion of Major Findings

The aim of these research studies is to study the perceived benefits and risks towards the intention to use Fintech. The perceived benefits which are included economic benefits, seamless transaction and convenience. In addition, the research applied financial risk, security risk, legal risk, and operational risk.

Recently, as the technology getting more advanced, there are many people actually already adopting Fintech in their daily life. Therefore, most of them did not take perceived risks into the account as they knew the Fintech can bring much more benefits than drawbacks to them. For example, the convenience of using Fintech is a huge attraction for them as they no need to go physically to the bank to do any bank transactions. What they need is only an electronic device and a stable internet connection and that's it. They can access into their banking account anytime and anywhere. In the overall, despite of everything, they will continue to use Fintech in their future.

5.2.1 Findings on the Hypothesis Three (H3)

H3: Economic benefit has significant positive relationship to perceived benefit.

Economic benefits is one of the major benefits that people consider when they using Fintech. This is because economic benefit explains that how much they can save (in term of cost reductions and financial gains) when they using Fintech when compared to traditional way. The research found out that economic benefit has a positive significant effect to the intention to use Fintech. This showed a similar result when compared to the past study as the reason why they use Fintech is because of the economic benefit (Chuen & Teo, 2015; Ryu, 2018; Lee & Lee, 2012; Gerber, Hui, & Kuo, 2012). They can save much money when they use Fintech to do any bank related services. The cost of transportation can be very crucial when the nearby bank is very far from their home. Besides, most of the traditional banking services required service charges therefore they can skip from paying extra when they start to use Fintech. They also can use many financial services in one time so that they can save more fees and charges.

5.2.2 Findings on the Hypothesis Four (H4)

H4: Seamless transaction has significant positive relationship to perceived benefit.

Seamless transaction refers to the how much counterparty that needed be involved in any banking services. It is one of the major concerns of people in using Fintech as they sure want the things to become more simple and easy. In easy words, they treat it as one of the benefits of using Fintech as the Fintech may eliminates the participations of third party. The research found out that seamless transaction has a positive significant effect to the intention to use Fintech. This showed a similar result when compared to the past study as the reason why they use Fintech is because of the

seamless transaction (Chishti, 2016; Zavolokina, Dolata, & Schwabe, 2016; Ryu, 2018). When comes to peer-to-peer transaction, they can save costs when it involved middleman in order to facilitate the banking services. Furthermore, without middleman interference, they can take control on their own fund.

5.2.3 Findings on the Hypothesis Five (H5)

H5: Convenience has significant positive relationship to perceived benefit.

Convenience for sure, is one of the most concerned benefits after people using Fintech. In terms of convenience, people can think of time and difficulty of using Fintech. However, what convenience can gives to the people is the flexibility and efficiency of doing any banking services. Therefore, as long as Fintech gives convenience to the people who used it, then they basically will continue to use it in future. The research found out that convenience has a positive significant effect to the intention to use Fintech. This showed a similar result when compared to the past study as the reason why they use Fintech is because of the convenience that they can be enjoyed (Ryu, 2018; Forsythe et al., 2006; Terblanche & Taljaard, 2018; Chuen & Teo, 2015; Okazaki & Mendez, 2013). Banking services can be very fast when they using Fintech as all can be done via online. They also can do it anytime and anywhere as long as they have electronic devices that can be accessed to internet connection and also a stable internet connection. The most important point is the Fintech is easy to be used so that they so preferred to use it to carry on any banking services that available in Fintech.

5.2.4 Findings on the Hypothesis Six (H6)

H6: Financial risk has significant positive relationship with perceived risk.

The financial risk is one of the greatest significant risks among the perceived risk in using and adopting Fintech. In terms of the financial risk, people are facing risks of losing their money in the process of the usage of the Fintech. The loss is not included additional charges or transaction fees of the using Fintech but the available cash balance in their banking account. Apart from that, by looking on the other perspectives of some people, if we taking into account the additional charges or transaction fees that involved in Fintech, the possibility of using Fintech can be lowered as some banking services may charge a quite amount of service fees or transaction costs. For example, if went into the banks using the services provided by the counter then will be an additional transaction service fee be charge while if using Fintech technology such as mobile payments or online banking or ATM to do transaction then will eliminate the additional transaction fee because it is zero transaction fee. Thus, financial risk occupied a portion of the perceived risk in using financial risk. The research found out that the financial risk has a positive significant effect to the perceived risk. This showed a similar result when compared to the past study as the reason why they use Fintech (Ryu, 2018; McWaters, 2015; Zavolokina, Dolata, & Schwabe, 2016; Liu, Yang, & Li, 2012). This further proved that the financial risk is one of the risks that people will consider before they are trying to use Fintech to avoid possibility of breakdown of the financial operation system, financial scam, moral hazard, as well as additional transaction charges linked to the original adoption value.

5.2.5 Findings on the Hypothesis Seven (H7)

H7: Legal risk has significant positive relationship with perceived risk.

When comes to legal risk, it actually involves PDPA (Personal Data Protection Act) in which relates to customers' personal data and privacy. This is been a huge concern among the people who using Fintech as it may compromises the whole stability in financial system. As if the legal risks

occurred, it may arise tons of security issues and regulation problems in Fintech. In conclusion, when it relates to the risks that arise from using Fintech, legal risk is one of the risks that cannot be ignored by people. In the research, the legal risk has also positive relationship to the perceived risk. This showed a similar result when compared to the past study as the reason why they use Fintech (Jesse McWaters, 2015; Zavolokina, Dolata, & Schwabe, 2016; Ryu, 2018; Chu, & Tseng, 2013). Although, this statement seems inconsistent with the explanation above as people should worry about legal risk and stop using Fintech. Instead, they still continue to use Fintech is because there are implementations that had been done by regulators in Malaysia such as Bank Negara Malaysia in order to prevent any incident that relates to legal issues happens. As legal risk getting bigger, people more tend to use Fintech as in their point of view, when the problem getting serious, the relevant regulators and authority will do something to handle it. Thus, it will leads to higher usage of Fintech among people in Malaysia.

5.2.6 Findings on the Hypothesis Eight (H8)

H8: Security risk has significant positive relationship with perceived risk.

When security risk is mentioned, it actually is quite similar with legal risk as both relates to the breach of data protection and security problem. However, security risk is more on the possibility of violation of data privacy because of cyber security attack instead of rules and regulations that had been set by the regulators. In the other words, although we do have rules and regulations that protect our data privacy, our data privacy still can be compromised due to external issues such as hacking which involves cyber security attack. Consequently, security risk of course is one of the perceived risk that people concern when they adopting Fintech. Based on the research, the security risk has insignificant positive relationship to the perceived risk. This showed a similar result when compared to the past study as the reason why they use Fintech (Schierz,

Schilke, & Wirtz, 2010; Ryu 2018; Lee M. C., 2009); only the result is not significant. The occurrence of security risk leads to the leak of customers' private and financial information to any party who interested with it. Thus, it may get exposure of uncertainty of using Fintech. The insignificance of the result reflects that people are more concern about security risk when they using Fintech. In their point of views, those cyber security attacks are hardly to be prevented and solved as it comes with uncertainty. We won't know when it comes and how serious the attack will caused to the Fintech system. In conclusion, the security risk may give negative effect to the intention of using Fintech.

5.2.7 Findings on the Hypothesis Nine (H9)

H9: Operational risk has significant positive relationship with perceived risk.

Operational risk is the possible internal problem will happens when people using Fintech. For example, when people using Fintech to do bank transactions, they maybe will face the risk of transaction error due to system error, thus will not complete the transaction in due time. After that, people will looking on the effectiveness and efficiency of relevant financial services companies or banks who offer the Fintech facilities to tackle the problem and makes things back to the normal track. This is what people is concern about as once problems occur, the reasons are not always the concern but the solutions are the one. Therefore, operational risk is the risk the people may concern about when they are using Fintech. In the research, operational risk has positive significant relationship to the perceived risk. This showed a similar result when compared to the past study as the reason why they use Fintech (Barakat & Hussainey, 2013; Ryu, 2018). Operation risk can be avoid by improving the internal processes, employees and systems to overcome the lack of operational skills, the systems' break down, and insufficiency of internal processes

will lead to users' distrust and dissatisfaction which possible happens this in the organizational.

5.2.8 Findings on the Hypothesis One (H1)

H1: Perceived benefit has significant positive relationship to the Fintech intention to use.

Perceived benefit is the awareness advantages of using Fintech when compared to traditional banking services. As Fintech getting more common in financial services industry, the people start to use Fintech as it really brings many benefits such as convenience, seamless transaction and economic benefit. As above mentions, this further proved that people tends to use Fintech in their daily life and replacing traditional banking services. Therefore, based on the research, the perceived benefit has positive significant effect to the intention to use the Fintech. This is consistent with the result that's deal with respective benefits in the perceived benefit in which also showed significant positive relationship (Ryu, 2018; Abramova & Bohme, 2016; Benlian & Hess, 2011; Farivar & Yuan, 2014; Lee, Park, & Kim, 2013; Lee M.C., 2009; Lee, Chae, & Cho, 2013).

5.2.9 Findings on the Hypothesis Two (H2)

H2: Perceived risk has significant negative relationship to the Fintech intention to use.

Perceived risk is the awareness disadvantages of using Fintech when compared to traditional banking services. Although the usage of Fintech may occurs many unexpected risks that may causes losses, at the end they still prefer to use Fintech. There are two main reasons that we can concluded from the research. The first one is the benefits that people can enjoy when they using Fintech. They mostly believe that benefits that bring to them are far more beyond that the losses that they may bear of.

Second reason is the same explanation in the operation risk earlier. In their perspective, as long as the problems getting serious, the relevant parties only take it more serious and will take actions to solve it. As the risk getting serious and rises the attention to the public, they make assumption that the whole Fintech system will get improved if only the system found something wrong. Something that seems too perfect is not good though as we won't know when the thing will go to south once something bad happens. Therefore, based on the research, the perceived risk has positive significant effect to the intention to use the Fintech. This showed a dissimilar result when compared to the past study as the reason why they use Fintech which suppose is negative relationship (Ryu, 2018; Abramova & Bohme, 2016; Benlian & Hess, 2011; Lee, Chae, & Cho, 2013).

5.3 Implications to the research study

First of all, this research gives implication to the reader regarding the intention to use Fintech decision. This research study observes perceived benefit as well as risk towards the intention to use Fintech. This study also focuses on the specific benefit and risk factors that mutually affect the intention to use Fintech. This study discloses the formation of the intention to use Fintech which contributes by specific benefits and risks. Furthermore, this research study give better understanding of the benefit and risk factors which can lead to the decision choice making process, thus the intention to use Fintech becomes more transparent and traceable.

Besides that, practitioners can have better understanding on the benefit and risk awareness so that the customer intention to use of Fintech can be motivated by developing benefit-increasing and risk-reducing strategies. Practitioners can do more development on risk-reducing strategies that might help in stimulating higher confidence level in users to use Fintech. Besides that, this research study be able to give practitioners valuable suggestion on what factors they should focus on or prevent when promoting Fintech to customer. The findings discovered that the

four risk factors and three benefits give significant effect to the behavioral intention to use Fintech except the security risk is not significant.

Lastly, Fintech companies can know more on what factors should be put first or prevented when offering or introduce Fintech to their customers. It provides Fintech companies to construct a risk-free transaction environment and it benefits customers to construct long term strategies to develop Fintech businesses. The efficiency of financial transactions and economic benefits also can be provided at the same time with higher effort by those Fintech companies. Fintech companies also able to deliver services effectively by recognizing the characteristics of each Fintech user and, while customer expectations as well as demands can be matched, therefore the services can be enhanced. Lastly, this research will provide a huge help on Fintech companies to invest in the development of Fintech with an appropriate amount of money, time and effort.

5.4 Limitations and Future Research Recommendations

During the research process, several limitations have been discovered, and the limitations may serve as the opportunities for future researchers when they want to conduct research in this field. The first limitation is discovered when this study is conducted, which is this study is concentrating on specific sets of perceived benefits and risk that is reflected from past studies. Hence, it is recommended for future researchers to include other additional variables or specific variables to study the Fintech such as quality improvement and recreational benefits, since the perception of people is changing from time to time, there is no eternal answer for this area.

The second limitation is that this study only study on the intention of people to use Fintech, it does not include the actual behavior of people; the result may show that a person has the intention to use Fintech, and the study ceased at here, there is no further investigation and examination on whether the person really use the Fintech. Therefore, future researchers are recommended that further the study by examine the whether the respondents truly use the Fintech by enquiry the date of respondents committed to use the Fintech. For example, at the commitment date,

examine whether the respondent used the Fintech, if not used, researchers can seek for the reason from respondents.

The third limitation is this research study covering the all types of Fintech (Payments, Wallets, Crowdfunding, Remittance, Lending, Insurtech and so on), it does not specific which types of Fintech is studied; therefore, this study could only present an overall finding on the intention of people to use Fintech. Hence, for future study purpose, the researchers can specific what types of Fintech is targeted, so that a deep understanding and insight on the intention to use a specific Fintech will be acquired. Not every types of Fintech serving the same nature or function, hence, the perception on the benefits and risk for each should be different, and this will resulting a different intention on the use of Fintech.

Finally, the application for this study is limited, because this study is studying the perception of the respondents stay in Malaysia, which mean, this study only studies the behavior of the people staying in Malaysia, although foreigners stay in Malaysia are may be one of the respondents, their respond may be altered, since they are staying in Malaysia, their perception may be influenced by the lifestyle in Malaysia. Therefore, the social media has enhanced the interaction of the human population, people from all around the world are enabled to connect to each other through social media platform, future researchers are recommended to expand the sample size (try to exceed current 302 respondents), gather the perception of the people from other countries through social media, so that, an overall finding on the intention of the people in the world toward the use of Fintech. In a nut shell, the overall population size are big, in order to has the deep insight and understanding on the behavioral intention toward the use of Fintech of the human population, continuous study on this field is necessary, nevertheless, the Fintech will be evolved from time to time, the risk and benefits associated also will be different as well.

5.5 Conclusion

This research focuses on the perceived benefit and risk toward the intention to use Fintech. The major discussion of the findings determined that all the hypotheses were verified with previous researcher’s hypotheses except the hypothesis two

(Perceived Risk) which suppose show a negative relationship to the intention to use Fintech. Besides that, this chapter also provides the implications of the study to relevant parties involve such as (i) reader to understanding better what is Fintech, what is perceived benefit and risk factor which affect their decision to use Fintech, (ii) practitioners can have better understanding on the benefit and risk awareness so that the customer intention to use of Fintech can be motivated by developing benefit-increasing and risk-reducing strategies, (iii) Fintech companies able to know what factors should be put first or prevented when proposing Fintech to their customers. Lastly, this chapter ends up with the limitations of the study and gives suggestions to the future researcher when they intend to conducting this research topic. In the conclusion, the purpose of this research had been attained by figured out how perceived benefits (positive factors) and perceived risks (negative factors) mutually influence the intention of customer to use Fintech.

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APPENDICES

Questionnaire about Perceived Benefits And Risks Towards The Intention To Use Fintech

We would be grateful if you could spend few minutes of your precious time to fill out this questionnaire. Your answer will be part of a research project on Perceived Benefits And Risks Towards The Intention To Use Fintech. Fintech known as Financial Technology which help a business or individuals to provide financial services by making use of modern technology (Example: Boost, GrabPay, WeChatPay, SamsungPay, Alipay, Touch n Go, Peer to peer financing,Paypal). There is no right or wrong answer. You will not be required to reveal your identity in this research and all answers will be handled with confidentially.

* Required

1. **1. Gender** *
   Mark only one oval.
   - ◯ Female
   - ◯ Male

2. **2. Age** *
   Mark only one oval.
   - ◯ 18-24
   - ◯ 25-34
   - ◯ 35-44
   - ◯ Above 45

3. **3. Monthly income** *
   Mark only one oval.
   - ◯ Less than RM 2, 500
   - ◯ RM 2 , 501 - RM 3, 500
   - ◯ RM 3 , 501 - RM 4, 500
   - ◯ RM 4 , 501 - RM 5, 500
   - ◯ Above RM 5, 501

4. **4. Education level** *
   Mark only one oval.
   - ◯ Primary / secondary school
   - ◯ Undergraduates
   - ◯ Masters
   - ◯ PhD

Please choose to what extent, on a scale of 1 to 5, you do agree with the statement below.
(1: Extremely low , 2: Low, 3: Neutral, 4: High, 5: Extremely high)

Perceived Benefit

5. **1. Using Fintech has many advantages.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

6. **2. I can easily and quickly use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

7. **3. Using Fintech is useful for me.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

8. **4. Using Fintech yields a more superior outcome quality than traditional financial services.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

Economic Benefit

9. **1. Using Fintech is cheaper than using traditional financial services.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

10. **2. I can save money when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

11. **3. I can use various financial services with a low cost when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

Seamless Transaction

12. **1. I can control my money without the middleman when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

13. **2. I can use various financial services at the same time (e.g. one stop processing) when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

14. **3. I can have the peer-to-peer transactions between providers and users without middle man when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

Convenience

15. **1. I can use financial services very quickly when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

16. **2. I can use financial services anytime anywhere when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

17. **3. I can use financial services easily when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

Perceived Risk

18. **1. Using Fintech is associated with a high level of risk.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

19. **2. There is a high level of uncertainty (Example: financial loss, data loss) using Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

20. **3. Overall, I think that there is little benefit to use Fintech compared to traditional financial services.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

Financial Risk

21. **1. Financial losses are likely when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

22. **2. Financial fraud or payment frauds are likely when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

23. **3. Financial losses due to the lack of the ability to exchange and use information with other services are likely when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

Legal Risk

24. **1. My use of Fintech is uncertain due to many regulations.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

25. **2. It is not easy to use Fintech due to the government regulation.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

26. **3. There is a legal uncertainty for Fintech users.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

27. **4. It is difficult to use various Fintech applications due to the government regulation.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

Security Risk

28. **1. I worry about the abuse of my financial information (e.g. transaction and private information) when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

29. **2. My financial information is not secure when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

30. **3. I worry that someone can access my financial information when I use Fintech.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

Operational Risk

31. **1. Fintech companies are not willing to solve the issues when financial losses or financial information leakages occur.** *
Mark only one oval.

	1	2	3	4	5	
Extremely low	◯	◯	◯	◯	◯	Extremely high

32. 2. The organizational responses of Fintech companies are too slow when financial losses or financial information leakages occur. *
Mark only one oval.

	1	2	3	4	5	
Extremely low	⬭	⬭	⬭	⬭	⬭	Extremely high

33. 3. I worry about the way Fintech companies respond to financial losses or financial information leakages. *
Mark only one oval.

	1	2	3	4	5	
Extremely low	⬭	⬭	⬭	⬭	⬭	Extremely high

Intention to use Fintech

34. 1. I would positively consider Fintech in my choice set. *
Mark only one oval.

	1	2	3	4	5	
Extremely low	⬭	⬭	⬭	⬭	⬭	Extremely high

35. 2. I would prefer Fintech. *
Mark only one oval.

	1	2	3	4	5	
Extremely low	⬭	⬭	⬭	⬭	⬭	Extremely high

36. 3. I intend to continue to use Fintech. *
Mark only one oval.

	1	2	3	4	5	
Extremely low	⬭	⬭	⬭	⬭	⬭	Extremely high

37. 4. I not using Fintech but will use in the future. *
Mark only one oval.

	1	2	3	4	5	
Extremely low	⬭	⬭	⬭	⬭	⬭	Extremely high

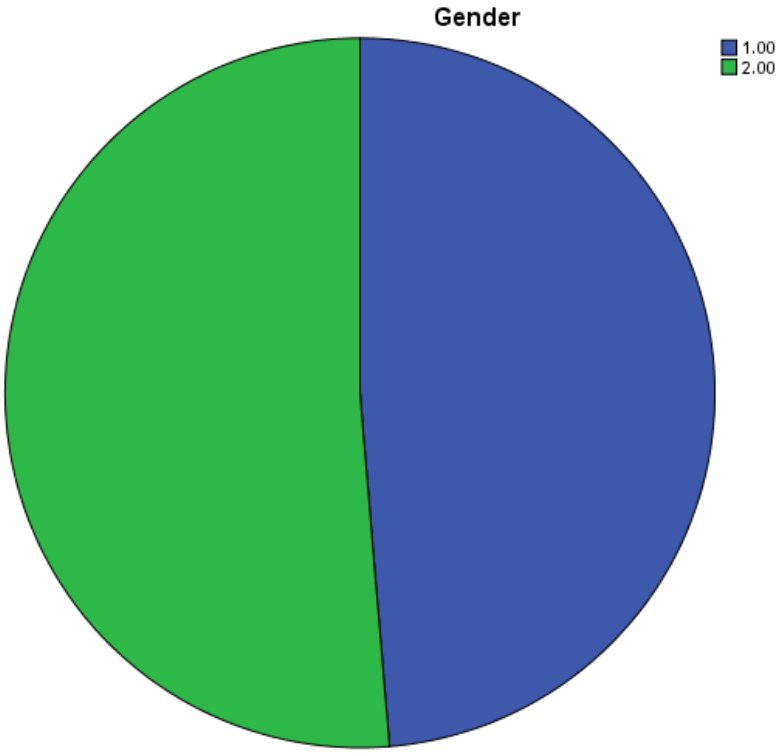
Statistics

		Gender	Age	Monthly income	Education level
N	Valid	302	302	302	302
	Missing	0	0	0	0
Mean		1.5132	2.2914	2.7450	1.9503
Median		2.0000	2.0000	3.0000	2.0000
Mode		2.00	2.00	1.00	2.00
Std. Deviation		.50065	1.06337	1.41112	.67773
Skewness		-.053	.314	.281	.447
Std. Error of Skewness		.140	.140	.140	.140
Kurtosis		-2.011	-1.125	-1.193	.459
Std. Error of Kurtosis		.280	.280	.280	.280

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	147	48.7	48.7	48.7
	2.00	155	51.3	51.3	100.0
	Total	302	100.0	100.0	

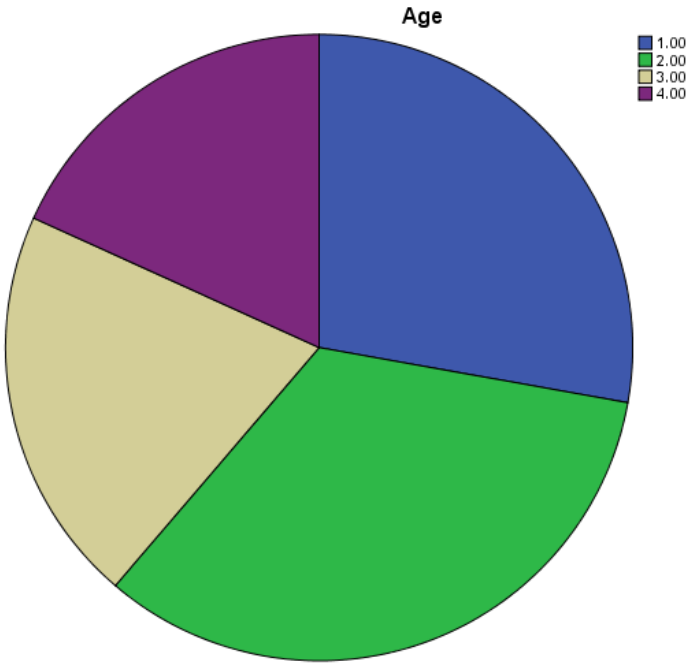
Female = 1
Male = 2



Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	84	27.8	27.8	27.8
	2.00	101	33.4	33.4	61.3
	3.00	62	20.5	20.5	81.8
	4.00	55	18.2	18.2	100.0
	Total	302	100.0	100.0	

18-24 = 1
25-34 = 2
35-44 = 3
Above 45 = 4



Monthlyincome

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	76	25.2	25.2	25.2
	2.00	69	22.8	22.8	48.0
	3.00	64	21.2	21.2	69.2
	4.00	42	13.9	13.9	83.1
	5.00	51	16.9	16.9	100.0
	Total	302	100.0	100.0	

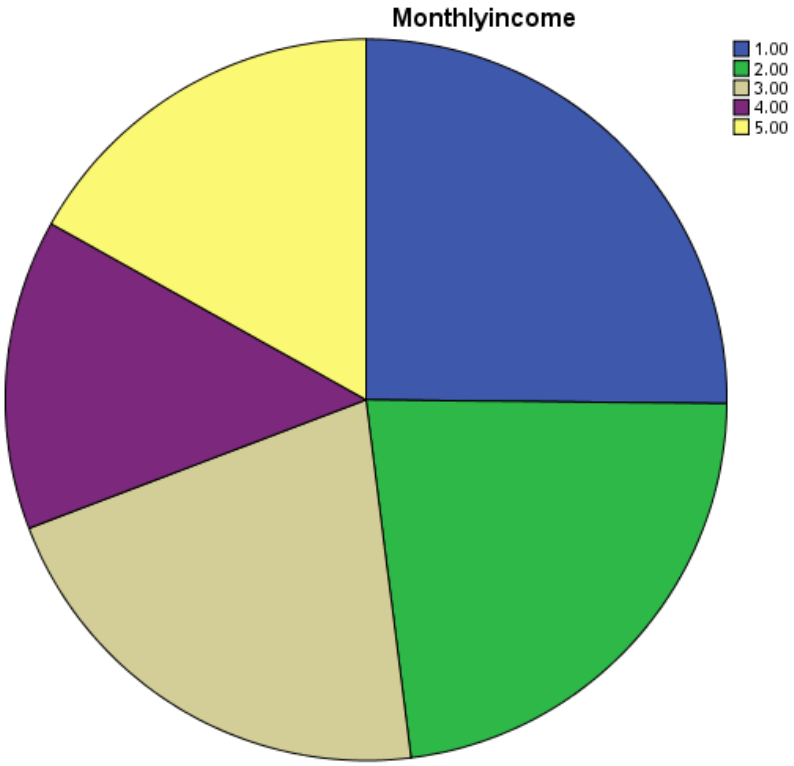
Less than RM 2, 500 = 1

RM 2 , 501 - RM 3, 500 = 2

RM 3 , 501 - RM 4, 500 = 3

RM 4 , 501 - RM 5, 500 = 4

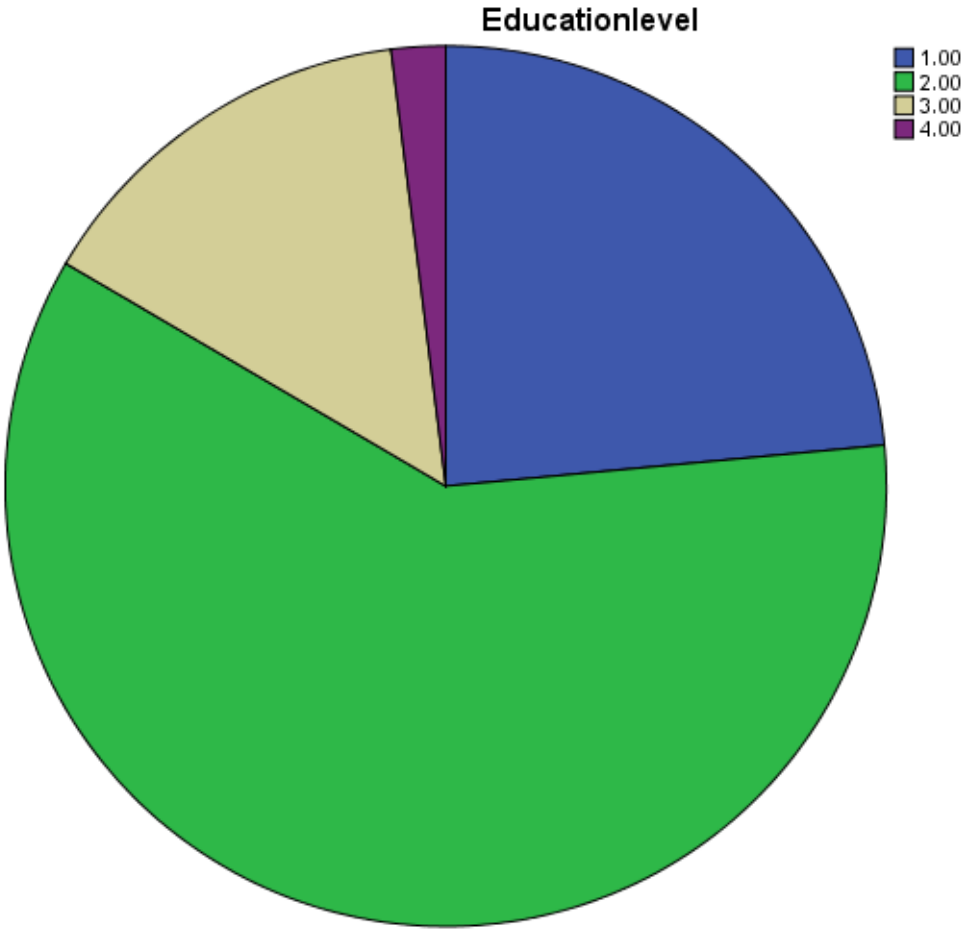
Above RM 5, 501 = 5



Educationlevel

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	71	23.5	23.5	23.5
	2.00	181	59.9	59.9	83.4
	3.00	44	14.6	14.6	98.0
	4.00	6	2.0	2.0	100.0
	Total	302	100.0	100.0	

Primary / secondary school = 1
Undergraduates = 2
Masters = 3
PhD = 4



Reliability Analysis

PB

Reliability Statistics

Cronbach's Alpha	N of Items
.891	4

EB

Reliability Statistics

Cronbach's Alpha	N of Items
.842	3

ST

Reliability Statistics

Cronbach's Alpha	N of Items
.837	3

CV

Reliability Statistics

Cronbach's Alpha	N of Items
.852	3

PR

Reliability Statistics

Cronbach's Alpha	N of Items
.806	3

FR

Reliability Statistics

Cronbach's Alpha	N of Items
.885	3

LR

Reliability Statistics

Cronbach's Alpha	N of Items
.897	4

SR

Reliability Statistics

Cronbach's Alpha	N of Items
.841	3

OR

Reliability Statistics

Cronbach's Alpha	N of Items
.881	3

IF

Reliability Statistics

Cronbach's Alpha	N of Items
.791	4

Pearson Correlation

Correlations

		PB	EB	ST	CV	PR	FR	LR	SR	O.R	IF
PB	Pearson Correlation	1	.694**	.620**	.675**	.451**	.411**	.343**	.371**	.375**	.666**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	302	302	302	302	302	302	302	302	302	302
EB	Pearson Correlation	.694**	1	.667**	.606**	.520**	.502**	.461**	.368**	.453**	.646**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	302	302	302	302	302	302	302	302	302	302
ST	Pearson Correlation	.620**	.667**	1	.586**	.422**	.385**	.378**	.285**	.357**	.625**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	302	302	302	302	302	302	302	302	302	302

CV	Pearson Correlation	.675**	.606**	.586**	1	.383**	.311**	.252**	.284**	.322**	.667**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	302	302	302	302	302	302	302	302	302	302
PR	Pearson Correlation	.451**	.520**	.422**	.383**	1	.765**	.688**	.613**	.662**	.463**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	302	302	302	302	302	302	302	302	302	302
FR	Pearson Correlation	.411**	.502**	.385**	.311**	.765**	1	.739**	.663**	.660**	.452**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	302	302	302	302	302	302	302	302	302	302
LR	Pearson Correlation	.343**	.461**	.378**	.252**	.688**	.739**	1	.597**	.680**	.448**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	302	302	302	302	302	302	302	302	302	302
SR	Pearson Correlation	.371**	.368**	.285**	.284**	.613**	.663**	.597**	1	.711**	.389**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	302	302	302	302	302	302	302	302	302	302
O.R	Pearson Correlation	.375**	.453**	.357**	.322**	.662**	.660**	.680**	.711**	1	.451**
	Sig. (2-	.000	.000	.000	.000	.000	.000	.000	.000		.000

	tailed)										
	N	302	302	302	302	302	302	302	302	302	302
IF	Pearson Correlation	.666**	.646**	.625**	.667**	.463**	.452**	.448**	.389**	.451**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	302	302	302	302	302	302	302	302	302	302
**. Correlation is significant at the 0.01 level (2-tailed).											

Correlations

		PB	PR	IF
PB	Pearson Correlation	1	.451**	.666**
	Sig. (2-tailed)		.000	.000
	N	302	302	302
PR	Pearson Correlation	.451**	1	.463**
	Sig. (2-tailed)	.000		.000
	N	302	302	302
IF	Pearson Correlation	.666**	.463**	1
	Sig. (2-tailed)	.000	.000	
	N	302	302	302

**. Correlation is significant at the 0.01 level (2-tailed).

Person Correlation Analysis

Correlations

		PB	EB	ST	CV
PB	Pearson Correlation	1	.694**	.620**	.675**
	Sig. (2-tailed)		.000	.000	.000
	N	302	302	302	302
EB	Pearson Correlation	.694**	1	.667**	.606**
	Sig. (2-tailed)	.000		.000	.000
	N	302	302	302	302
ST	Pearson Correlation	.620**	.667**	1	.586**
	Sig. (2-tailed)	.000	.000		.000
	N	302	302	302	302
CV	Pearson Correlation	.675**	.606**	.586**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	302	302	302	302

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		PR	FR	LR	SR	O.R
PR	Pearson Correlation	1	.765**	.688**	.613**	.662**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	302	302	302	302	302
FR	Pearson Correlation	.765**	1	.739**	.663**	.660**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	302	302	302	302	302
LR	Pearson Correlation	.688**	.739**	1	.597**	.680**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	302	302	302	302	302
SR	Pearson Correlation	.613**	.663**	.597**	1	.711**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	302	302	302	302	302
O.R	Pearson Correlation	.662**	.660**	.680**	.711**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	302	302	302	302	302

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple regression models

DV= PB, IV= EB,ST,CV

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.773[a]	.598	.594	.46220	.598	147.639	3	298	.000

a. Predictors: (Constant), CV, ST, EB

b. Dependent Variable: PB

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.622	3	31.541	147.639	.000[b]
	Residual	63.663	298	.214		
	Total	158.284	301			

a. Dependent Variable: PB

b. Predictors: (Constant), CV, ST, EB

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.497	.175		2.840	.005	.153	.841		
	EB	.353	.051	.368	6.962	.000	.253	.453	.484	2.065
	ST	.166	.052	.167	3.218	.001	.064	.267	.503	1.988
	CV	.363	.050	.355	7.310	.000	.265	.461	.573	1.745

a. Dependent Variable: PB

Collinearity Diagnostics[a]

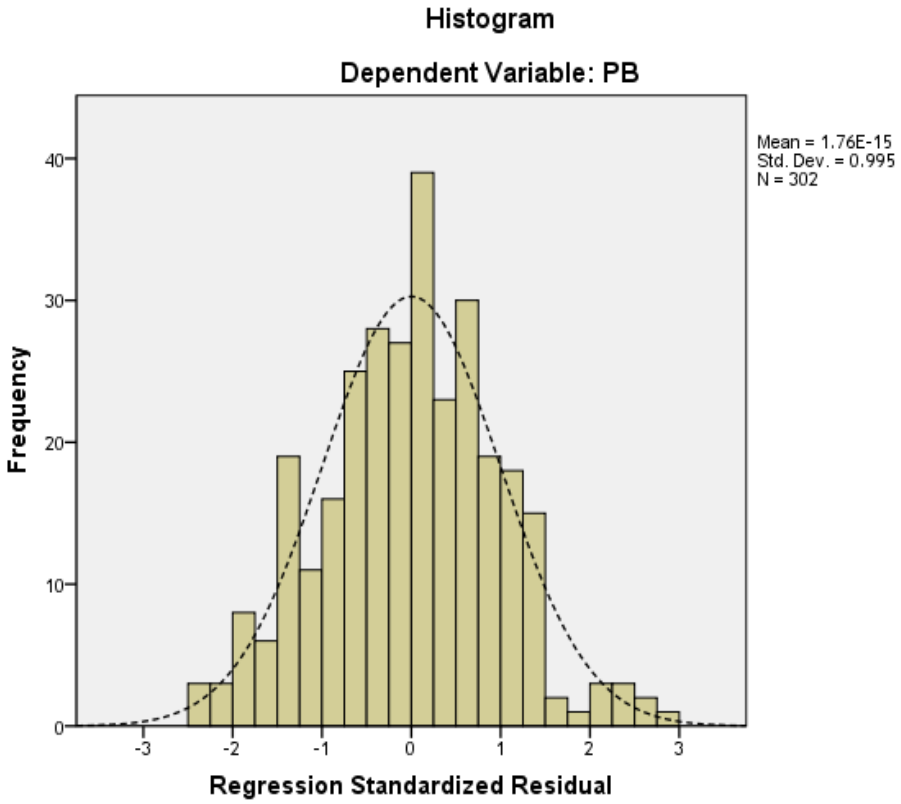
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	EB	ST	CV
1	1	3.958	1.000	.00	.00	.00	.00
	2	.019	14.612	.83	.20	.10	.00
	3	.012	17.967	.13	.03	.25	.95
	4	.011	19.115	.04	.77	.65	.05

a. Dependent Variable: PB

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.2607	4.9067	4.0820	.56068	302
Std. Predicted Value	-3.248	1.471	.000	1.000	302
Standard Error of Predicted Value	.027	.165	.050	.018	302
Adjusted Predicted Value	2.2508	4.9165	4.0805	.56248	302
Residual	-1.15250	1.37830	.00000	.45990	302
Std. Residual	-2.493	2.982	.000	.995	302
Stud. Residual	-2.521	3.192	.002	1.006	302
Deleted Residual	-1.17853	1.57907	.00148	.47015	302
Stud. Deleted Residual	-2.545	3.242	.002	1.009	302
Mahal. Distance	.062	37.275	2.990	3.777	302
Cook's Distance	.000	.371	.006	.024	302
Centered Leverage Value	.000	.124	.010	.013	302

a. Dependent Variable: PB



DV=PR, IV= OR, FR, SR, LR

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.802[a]	.643	.638	.48709	.643	133.858	4	297	.000

a. Predictors: (Constant), O.R, FR, SR, LR

b. Dependent Variable: PR

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	127.037	4	31.759	133.858	.000[b]
	Residual	70.466	297	.237		
	Total	197.503	301			

a. Dependent Variable: PR

b. Predictors: (Constant), O.R, FR, SR, LR

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.636	.162		3.930	.000	.317	.954		
	FR	.435	.053	.469	8.241	.000	.331	.539	.371	2.698
	LR	.164	.051	.177	3.182	.002	.062	.265	.388	2.577
	SR	.067	.057	.063	1.181	.238	-.045	.180	.427	2.340
	O.R	.186	.055	.187	3.355	.001	.077	.294	.386	2.593

a. Dependent Variable: PR

Collinearity Diagnostics[a]

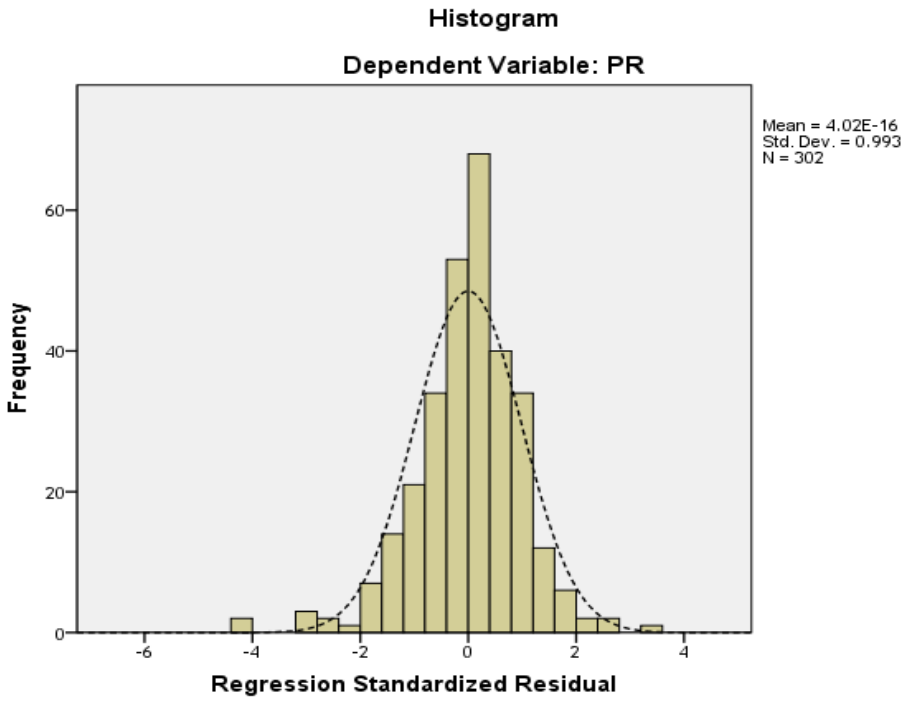
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	FR	LR	SR	O.R
1	1	4.932	1.000	.00	.00	.00	.00	.00
	2	.029	13.140	.67	.08	.13	.01	.01
	3	.016	17.329	.25	.07	.24	.20	.34
	4	.013	19.190	.01	.61	.39	.10	.19
	5	.009	23.003	.06	.24	.24	.70	.47

a. Dependent Variable: PR

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.4879	4.8964	3.9868	.64965	302
Std. Predicted Value	-3.846	1.400	.000	1.000	302
Standard Error of Predicted Value	.029	.139	.059	.020	302
Adjusted Predicted Value	1.5210	4.8988	3.9860	.65129	302
Residual	-2.11164	1.67290	.00000	.48385	302
Std. Residual	-4.335	3.434	.000	.993	302
Stud. Residual	-4.366	3.541	.001	1.004	302
Deleted Residual	-2.14406	1.77853	.00080	.49439	302
Stud. Deleted Residual	-4.506	3.612	.000	1.012	302
Mahal. Distance	.086	23.464	3.987	3.868	302
Cook's Distance	.000	.158	.004	.014	302
Centered Leverage Value	.000	.078	.013	.013	302

a. Dependent Variable: PR



DV= IF IV= PB,PR

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.690[a]	.477	.473	.52768	.477	136.164	2	299	.000

a. Predictors: (Constant), PR, PB

b. Dependent Variable: IF

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.829	2	37.914	136.164	.000[b]
	Residual	83.256	299	.278		
	Total	159.084	301			

a. Dependent Variable: IF

b. Predictors: (Constant), PR, PB

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.932	.192		4.859	.000	.555	1.310		
	PB	.575	.047	.573	12.234	.000	.482	.667	.797	1.255
	PR	.184	.042	.205	4.367	.000	.101	.266	.797	1.255

a. Dependent Variable: IF

Collinearity Diagnostics[a]

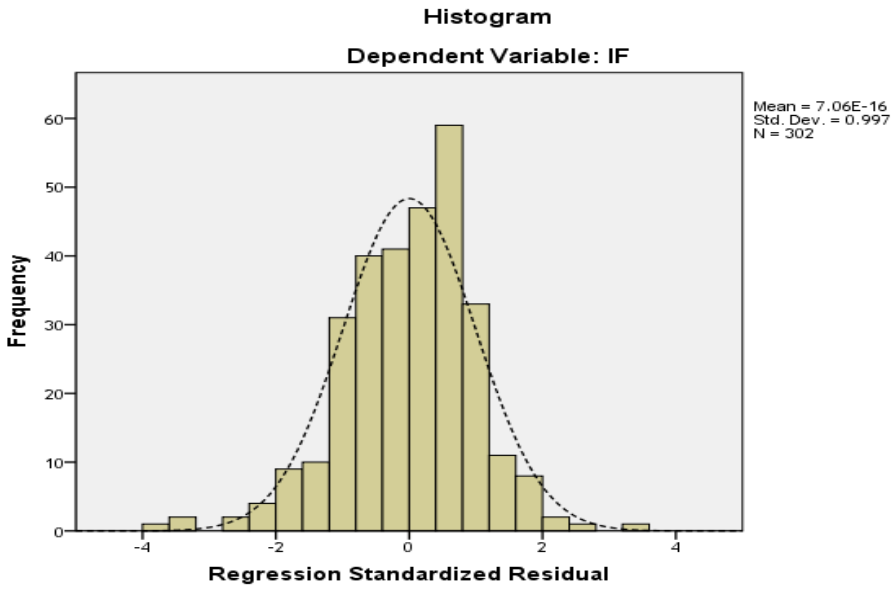
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	PB	PR
1	1	2.964	1.000	.00	.00	.00
	2	.021	11.848	.24	.15	.99
	3	.015	13.897	.76	.84	.00

a. Dependent Variable: IF

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.4284	4.7255	4.0116	.50192	302
Std. Predicted Value	-3.154	1.422	.000	1.000	302
Standard Error of Predicted Value	.031	.153	.050	.016	302
Adjusted Predicted Value	2.4158	4.7466	4.0113	.50168	302
Residual	-1.97554	1.73049	.00000	.52592	302
Std. Residual	-3.744	3.279	.000	.997	302
Stud. Residual	-3.764	3.297	.000	1.003	302
Deleted Residual	-1.99663	1.74935	.00034	.53271	302
Stud. Deleted Residual	-3.850	3.353	.000	1.008	302
Mahal. Distance	.018	24.365	1.993	2.526	302
Cook's Distance	.000	.123	.004	.012	302
Centered Leverage Value	.000	.081	.007	.008	302

a. Dependent Variable: IF



Multicolinearity

DV=EB, IV= CV, ST

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.718[a]	.516	.512	.52729

a. Predictors: (Constant), CV, ST

DV=ST, IV= CV, EB

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.705[a]	.497	.494	.51821

a. Predictors: (Constant), CV, EB

DV=CV, IV= ST, EB

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.653[a]	.427	.423	.53811

a. Predictors: (Constant), ST, EB

Multicollinearity for 1st multiple regression model:

	Tolerance	VIF
EB	0.484	2.0661
ST	0.503	1.9881
CV	0.573	1.7452

DV=FR, IV= LR, SR, OR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793[a]	.629	.626	.53407

a. Predictors: (Constant), O.R, LR, SR

DV=LR, IV= FR, SR, OR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782[a]	.612	.608	.54830

a. Predictors: (Constant), O.R, FR, SR

DV=SR, IV= FR, LR, OR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.757[a]	.573	.568	.49467

a. Predictors: (Constant), O.R, FR, LR

DV=OR, IV= FR, LR, SR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.784[a]	.614	.610	.51010

a. Predictors: (Constant), SR, LR, FR

Multicollinearity for 2nd multiple regression model:

	Tolerance	VIF
FR	0.371	2.6954
LR	0.388	2.5773
SR	0.427	2.3419
OR	0.386	2.5906

DV=PB, IV= PR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.451[a]	.203	.201	.64830

a. Predictors: (Constant), PR

Multicollinearity for 3th multiple regression model:

	Tolerance	VIF
PB	0.797	1.2547

PERSONAL DATA PROTECTION STATEMENT

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Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:-
   - For assessment of any application to UTAR
   - For processing any benefits and services
   - For communication purposes
   - For advertorial and news
   - For general administration and record purposes
   - For enhancing the value of education
   - For educational and related purposes consequential to UTAR
   - For the purpose of our corporate governance
   - For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at _____.

Acknowledgment of Notice

[ ] I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.

[ ] I disagree, my personal data will not be processed.

.....
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Date: