Factors Influencing the Use of WeChat Wallet among the Pakistanis

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Abstract: The present study is the application and extension of the TAM i.e. Technology Acceptance Model to predict the acceptance levels of the WeChat wallet among Pakistani students in China. The concerned population already has experience with the transaction through different mobile service providers and the study tells what impact present on the adoption of WeChat wallet with TAM's

construct and with security privacy and trust. As currently there is no application like WeChat Wallet available in Pakistan, so ultimately the purpose of this study is that if a company launched an application like WeChat Wallet, so they will have already people's perspective intention and their point of view for such application, so they can develop application accordingly. The results suggested that PEOU, trust, and perceived usefulness show a significant impact or relationship with perceived usefulness, privacy, and intention to use wallet respectively while trust and privacy have insignificant relation with the intention to use the wallet. Therefore, we can propose that Pakistani may adopt the WeChat wallet services.

Keywords: TAM; Technology acceptance model; Intention to use; WeChat wallet; consumer behavior; Pakistani; mobile payment system

INTRODUCTION

In the 21st century with the result of the revolution of digital technology in every field, computing systems and applications have become the most important tools that ease day-to-day human life. Meanwhile, Understanding the meaning of presented information over computer systems especially in application derived into the stage with the main focused subject money exchange and data sharing, which attempts making systems more well-suited for people to enable people's and computer interaction with data sharing and money exchange or payment bill. The inception of the informational age has resulted in the initiation of the field of Human-Computer Interaction. Similarly, the increasing demand for and the multiplying stand-off between consumer goods and electronics has resulted in more companies working tirelessly in this area. When it comes to the developing countries; Pakistan in our case, there is little work that has been done in this area. Developing economies in South Asia are yet to provide enough platforms that can result in the ease of users/consumers or customers in general. Pakistan is the land of 221 million people but there is no platform for them to use for their ease through which they can manage their lives with ease. For instance, WeChat; the most popular online platform gives the Chinese nation an integrated dais where people can not only chat but also perform many actions like booking tickets for cinema movies, airplanes, railways, buses. On the utility side, online payment of utility bills is also possible besides numerous other features. Chinese Alipay is another widely famous app for such purposes. It will not be factually wrong to make a contention that such integrated e-platforms can perform any task of daily life in just a couple of clicks. Moreover, since such apps rely on smartphone availability, the trends of smartphone usage in Pakistan from 2014 to 2020, rises from 10% to stunning 51%.

On the other side, in China, WeChat is widely used as not only a medium of chatting but also for e-commerce whose services facilitate buying cinema tickets, airline and train tickets, payment of monthly

utility bills, and numerous other features. From Public services to entertainment, WeChat is undisputed, the most effective integrated user platform in the world. Since the Chinese government owns Tencent, the services of WeChat are predominantly limited within China. Its near substitute or imitation can certainly help other countries with localized platforms where credit card companies are unfairly controlling the masses by keeping them in debt.The aforementioned facts are a clear demonstration of the upcoming need that the Pakistani public could develop for e-facilities. Although the locals are taking some initiatives, they are flawed and failed to gain popularity due to the weak business model. A near-substitute of WeChat could be very beneficial for the public that can not only save their precious time but can also provide them a sense of security by a safe method of making transactions by mobile payments.

As Pakistan is a developing country people are less experience in online shopping, buying ticketing, and sending money. But the main thing is that currently Pakistani nations have experienced sending money through Mobile Payment Systems (MPS) to other people but don't buy anything from shops by bar code or by another online method. Some classes of Pakistan can have used debit/credit cards for specific malls or hotels but this is not commonly used in Pakistan. When someone talks about the online shopping experience, then three questions come to mind about that online application or system name as: How secure is this system? Could we trust this application? Is there any chance of damage to privacy? In our research, I will collect information and analyze the views of the public from Pakistan about their interest in a WeChat-Wallet that has already experience use MPS in Pakistan for sending money but this population currently living in China with mostly used WeChat Wallet for buying things. The main things to understand about behavioral intention to use of Wallet or MPS with corresponding to Security, Trust, and Privacy. The model that we shall be using in our research would be the Technology Acceptance Model thatis the combination of three main points; perceived ease to use, perceived usefulness, attention to use. Many types of research have employed TAM when they needed to get the feedback of nascent technology that people started to use.

The focus of this study revolves around how to carry out money exchange understandability requirements of the application with enabling the user's interaction requirements. Currently, the different cellular network provides their MPS to sending money from one person to another person but they do not facilitate online shopping. For example, Jazz network provides JazzCash, Telenor provides EasyPaisa, Ufone provides UPaisa and Zong provides PayMax as MPS, these all JazzCash, EasyPaisa, Upaisa, and Paymax are lying in microfinance banking. People are facilitating themselves by using this application for sending money to other people, submitting gas, electricity, telephonic, and water bills by MPS, sending money to different bank account and recharging the mobile credits. Different things come into mind about the use of MPS in Pakistan about security, privacy, and trust because different factors influencing the use of online Wallets like literacy rate, people adoption of MPS, and trust in

MPS.There are several aspects which lead to my work in e-commerce like as Pakistan is a developing country there is so many securities issue present now a day. If someone goes outside for their routine work, there are dangerous activities present in some specific areas in Pakistan. Therefore, this is an important and major reason as well to work on e-commerce because human life is the most valuable thing in the entire world. Another thing that motivates to choose this topic is Pakistan–China has very good relation since last fourdecades, as they become stronger as the initiative of China-Pakistan Economic Corridor (CPEC) but the fact is that still date e-commerce industry is fully untapped. Most of the Chinese are still working on the CPEC project in Pakistan, so improving the e-commerceindustry not only facilitates to Pakistanis but Chinese also who working in Pakistan. As in previous studies, there is no sufficient evidence present to working shopping or payments through any online applications in Pakistan, so this is the gap to find the behavioral intention of Pakistanis who have the experience of using the WeChat Wallet. Whereas WeChat is the right platform that has all the TAM applicable features like e-shopping, online learning, e-ticketing, e-banking, mobile payment and is used as a replication of instant messaging applications.

TAM is implementing on WeChat different prospective like in WeChat Gaming, acceptance of WeChat, perception of WeChat acceptance, adoption of WeChat Wallet, factor influencing the acceptance of WeChat and integrating with*guanxi* (contacts) in WeChat(Hiong, Huat, & Choo, 2016).So there is a gap present to identify the Pakistanis willingness to adopt the WeChat Wallet with correspondence to Security, Privacy, and Trust. To overcome this gap, we have to conduct the study by using the Technological Acceptance Model towards the behavioral intention between Pakistanis using WeChat who are living in China and they already have experience with MPS in Pakistan. In other words, which relationship hasa significant relationship with each other and which are having an insignificant relationship among Pakistanis about WeChat Wallet. In the systems where users need high interaction with the system according to their requirements, if developers do not give it and instead, they try to increase the system's understandability with the use of the mobile application, there might be a conflict, in this situation both user and the machine/system will suffer. Therefore, aligning both aspects such as the machine's understandability and data sharing of a product according to the user's needs is an important aspect of application usage.

LITERATURE REVIEW

Different adoption theoriesare used to check people's behavior about introducing new technology in the market, there are different assumptions about the theory people either accept orreject that technology. These models are called adoption mode while TAM is the immediate successor of theTRA while TRA is one of the main types of the Adoption Model, we can see the adoption model in Figure 2.1, which clearly shows the overview of adoption model (Taherdoost, 2018).

Technology Acceptance Model (TAM)

TAM consists of three factors that explain the motivation of the user such that PU, PEOU, and attitude towards use. Three factors contribute to determining favorableness and unfavorableness towards any system. By using TAM intrinsic motivation is not explained therefore TAM in customer context, where the acceptance and use of IT to attain the task also fulfills the emotional needs may be limited(Taherdoost, 2018).Figure 2.2shows the original TAM model.
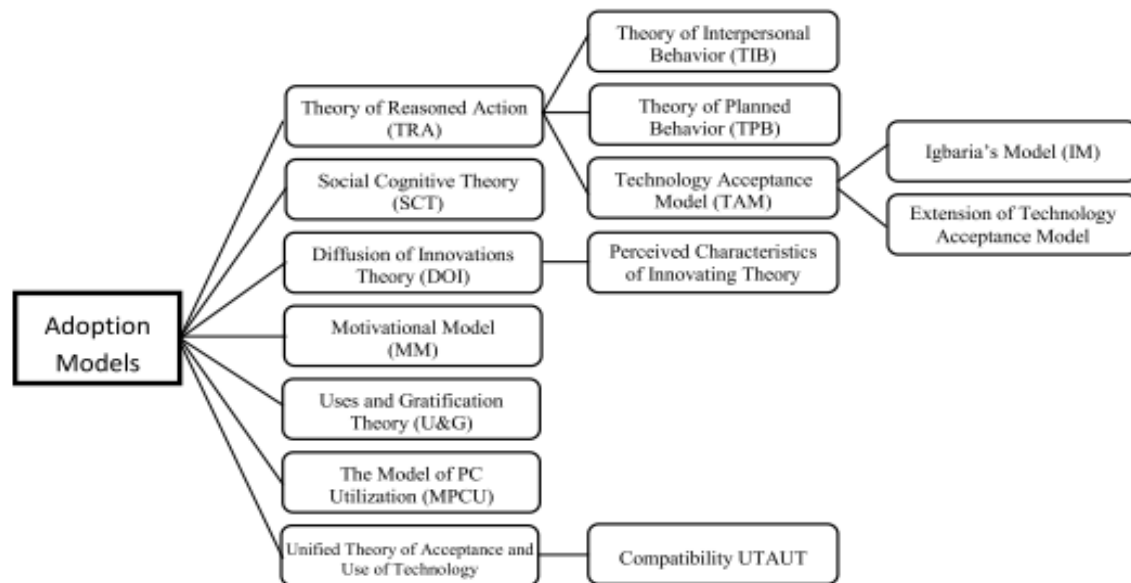

Figure 0.1 An overview of Adoption Model

The technological acceptance model was developed by Fred D Davis in 1989 and its paper has the most cited paper. According to Davis (Davis, Bagozzi, & Warshaw, 1989), External variables influence such as social influence to determine the attitude and it is a very important factor. When these external variables places among the people, so people will have the attitude and attention to use the technology. External variables influence both PEOU and PU. These two perceptions of PEOU and PU are two key factors that influence the decision on any product or technology. The main and important determinates of user behavior are perceived ease of use (PEOU) and also perceived usefulness (PU) as well (Tsai, 2012). PU is influenced by PEOU. PU is a person who believes by using this technology he enhances his job, technology is useful to him and he can do what they need while PEOU is a believer of a person the
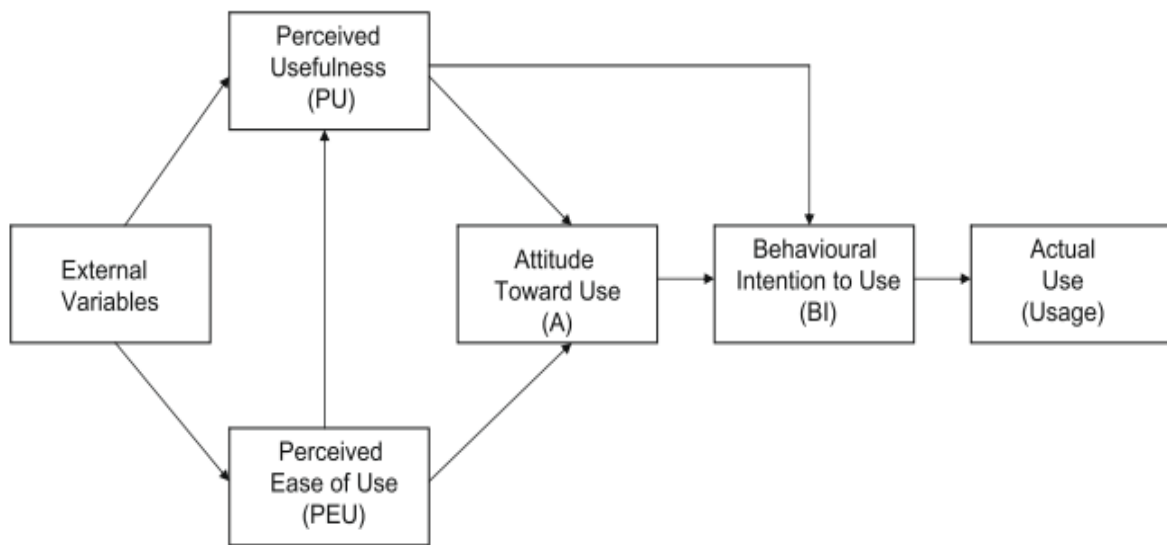

Figure 0.2 Original TAM

uses of technology are free from effort or look simple or people feel confident to use it. For explaining information systems, usage cognitive attitude is a very important variable. King et al, implementation of the TAM and four categories of modification are related to the usage then attitude. Prior factors influence PU and PEOU in TAM while contextual factors influence TAM. Factors suggested from other theories influence behavioral intention. Behavioral intention and consequent factors influence usage and attitude. In TAM boundaries, PEOU influences PU and BI. PU influences BI while BI influences usage and attitude(King & He, 2006). External variables (EV) will have direct effects on the usage behavior of the user and TAM is consistently better than thevolume of usage in terms of predicting frequency(Burton-Jones & Hubona, 2006). It was reported that examining the applicability and implication as well of the TAM Physicians are agreeing to accept the telemedicine of new technology in

the hospital or health care context of the TAM can give a sufficient depiction to use new field and technology. The usefulness of the system was found to be a very significant element of A and IU while PEOU was not significant(Hu, Chau, Liu Sheng, & Tam, 1999). A study used to TAM to understand the behavioral intention of the user by mearing user satisfaction, PU, and PEOU. He used task technology/skill fit, vividness, content richness and self-efficacy of YouTube these all have measured the PU, also have significant relation with PU while PEOU, not significate related to neither PU nor behavioral intention. According to his finding, perceived usefulness and user satisfaction both significantly influence or impact behavioral intention(Lee & Lehto, 2013).We used TAM to check the consumer acceptance of mobile payment services. Everyone knows that mobile technology uses increases nowadays and the payment method is shifting to a different application. Perceived compatibility (PC), perceived security, PU, individual mobility of the system, and subjective norm are strongly related to attitude towards use while PEOU does not significantly impact or relationship to attitude towards use (T) but is significantly related to PU. Perceived compatibility (PC) and individual mobility will not have a significant relation to attitude towards use and PU respectively (Schierz, Schilke, & Wirtz, 2010). The consumer perceived risk (PR) and trust (T) for online payment among the Chinese young generation was studied. A system-dependent risk that is part of perceived risk will have a significant positive relation to trust while the transaction risk will have a negative relationship. Also perceived total risk will have a negative relation to the trust (Yang, Pang, Liu, Yen, & Michael Tarn, 2015). In contrast, WeChat is the right application that has all these features which are applicable for TAM. Technology Acceptance Model applied to a different perspective of the use of WeChat. But the main thing is that in our research we are focusing on the main three things like security, privacy, and trust. Now we are discussing a different study on the WeChat application. Before explaining the relation between WeChat with the Technology Acceptance Model, we will discuss some facts and figure about the WeChat application, smartphones, internet services, and their impact or effect in Pakistan. Going into evaluating the adoption of tablet devices among the computer users in Pakistan Khuhro, Qureshi, Humayon, Tahir, & Khan (2016) also have found PU and PEOU as the factor that influences that aspect. The market for this technology is increasingly dominant for this technology; however, the users in Pakistan take perceived price as an important factor that tends to play a negative role in this regard. Results suggested the significant relation of customer's e-satisfaction to e-loyalty while accepting the technology and website service quality significant relation with both customer e-satisfaction and e-loyalty as well(Lin & Sun, 2009). As the latest technology near field communication (NFC) is using in the smartphone. This is a vast application of the mobile TAM.Mobile perceived compatibility significant influence both mobile usefulness like PUand mobile ease of use similar like PEOU while mobile perceived financial resources only influence mobile usefulness not influence mobile ease of use(Ooi & Tan, 2016).

MODEL AND HYPOTHESES FORMULATION

Following Figure 3.1showing the proposed research model is based on the TAM in which two factors or perceptions named: PEOU & PU are core elements of the TAM model. In the proposed research model privacy and PEOU influence the IU of the WeChat Wallet application while trust and security influence the privacy of the users and PEOU will influencing the PU. The hypothesis is derived from the below mention proposed research model and how they are derived isexplaining in the following way.
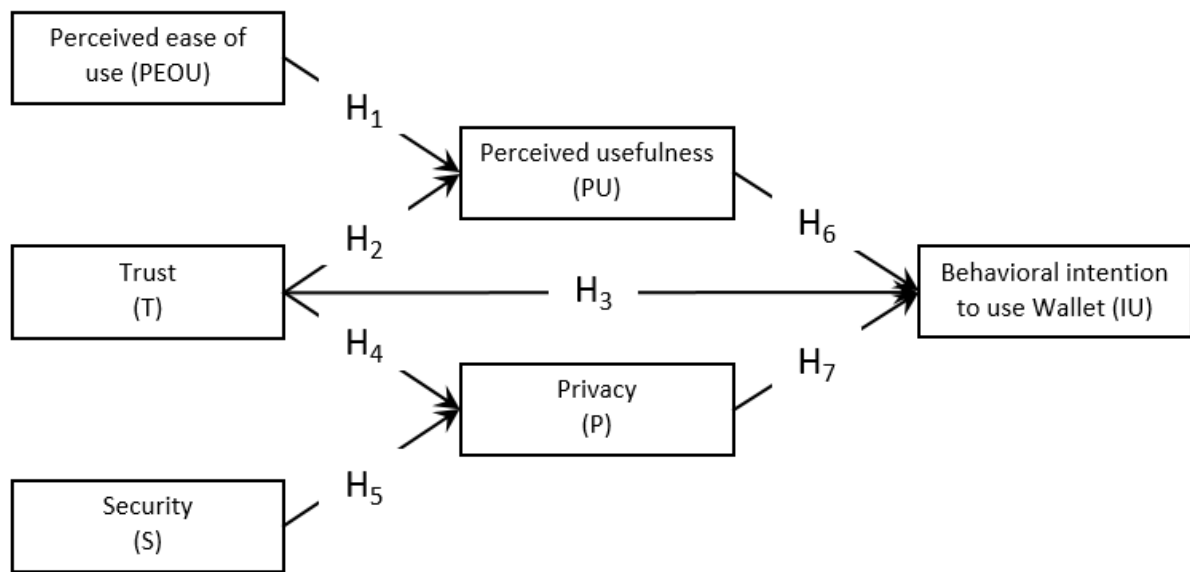

Figure 0.3 Proposed research model

Perceived Ease of use

Ease of use is another very important factor influencing the user acceptance of the technology. However, until now very little research has been conducted by the researcher to realize how these perception forms change over time. Control (internal and external), intrinsic motivation (playfulness of the computer), and emotion (anxiety of the computer) as anchors that define early insights about the PEOU of a new system that is significantly related (Venkatesh, 2000).

Different studies show the TAM application in different fields in e-commerce like MPS, online baking, tax pay, e-learning, and e-shopping. Researcher used TAM on the undergraduate perception of WeChat acceptance and conclude that PU, PEOU, perceived network value, perceived network scale, and perceived enjoyment have a significant impact on user behavioral attention (Hua, Qi, & Zhang, 2014). Preference of using a very useful factor even in propagate the knowledge for decision making of any subject (Chen & He, 2014). It helps creating a link with people which enhance their contribution of the

doing something for the society (Harwit, 2017). Gratification has a significant role in the sustained use of information technology. Technology gratification like media applications will have a significant effect on the IU of WeChat will following by perceived enjoyment and also utilitarian gratification (Gan & Li, 2018). Content, social, and hedonic gratification have different strengths and content related to both microblog and WeChat. Content and social gratification play an important role in microblog and WeChat respectively (Chunmei Gan, 2015). Jinnan worked on mobile payment by using WeChat in China and it's all, perceived risk influence negatively, PU, and positive emotion influence positively towards acceptance intention. (Lin & Liu, 2016). Higher value and level of the PEOU in application or service raise more customers or users of that application. As much as easier and effortless application ultimate result is to increase the users of that product (Davis et al., 1989). PEOU influence the PU of the application. The application will be more useful for customers if this is very easier to use for the customer. Another important finding of PEOU is complexity and compatibility have a significant strong relationship with the PEOU. Bandura et al, in his study the importance of the perception i.e. ease of use is emphasized (Bandura, 1982). So in TAM, PEOU influence PU and it will have direct or indirect impacts as well.So we from the previous study we can hypothesize that:

H₁: Perceived ease-of-use (PEOU) will have a positive impact on perceived usefulness (PU).

Trust

One of the major factors that influence the MPS is customer truth on that application or technology because it is a matter of money transfer. More the trust on MPS emphasize more transaction through the application, trust on the application could be a cognitive type or affective type (Johnson & Grayson, 2005). Liang et al, the customer will come again or continuously purchasing the things or products if they have trust in the retailer (Liang & Wang, 2008). It is simply the willingness of the users to adopting the product or service provider that emphasizes the reliability of that product/service provider. As MPS involvesa different types of e-transactions, there isthe probability of the different types of problems occurs during the transaction when the user provides their personal information over the online portal. So there is a need to define some set standards and monitor the security of the application about sensitive information to build the users' trust in specific products and technology. A prior study also finds the relationship between non-financial and financial performance with trust. Financial performance will positively influence cognitive trust (Pi, Liao, & Chen, 2012).

It is an important factor because people share their experience with any application or technology about trust which further influences the users' perception about the use of the specific application. As people have lower truth on a specific product so they have curious about their personal and private information, ultimately users have higher privacy concerns on that application. These are another

relation to discussing Trust related to Perceived usefulness. Like in this stage PEOU influencing PU means PU will behave like a latent variable. So like trust influencing privacy in the same we have to check trust influencing the perceived usefulness. Trust may have positive significant relation or negative significant relation with perceived usefulness or maybe trust has insignificant relation with perceived usefulness. So in this stage, we have createda doubtful relation between trust and perceived usefulness. Next stage after getting the result we will be sure about the actual relationship between trust and perceived usefulness. From the above finding, we have to formularize three hypotheses:

   H_2: Trust will have a significant (positive/negative) impact on the perceived usefulness (PU).

   H_3: Trust will have a positive impact on the behavioral intention to use WeChat Wallet.

   H_4:A higher level of trust in the application will have lowers the perceived privacy of that application.

Security:

Every organization is worried about security concerns especially those companies that provide online transactions systems or dealing with money or paper cash because there is the threat of fraudulent users. There is a possibility of theft of personal and sensitive information or losses of financial data. Security alone is nothing; it has a relation with privacy as if user concerns about a higher level of security its ultimately reduce the privacy concern. Security and privacy are involved in access personal data, assurance of privacy, and transfer of personal data (Flavián & Guinalíu, 2006). Privacy will not have viewedthe number of behavioral attitudes and guidelines it shows the reliability of IS. The mobile payment system givesa guarantee of the security system for transactions and efficient data transmissions will ultimately influence the number of users in MPS (Francis, Hancke, Mayes, & Markantonakis, 2010). So from the above finding hypothesis should be like

   H_5.Security will have a significant negative relation with privacy.

Perceived usefulness:

It is the users' believes about technology or product; they will get what they want. In other words, the user's perception ofthe application will be enhanced their performance. In our case, its equivalence to measure the relative advantage which means that the new MPS is better than the previous one. As in our case users already have experience withthe use of MPS for sending money, recharging mobile phones, and submitting different types of bills like electricity, water, and gas. What did they think about WeChat Wallet when they came to China whether they enhance their performance significantly or not. Perceived usefulness has significantly influenced the user adoption of MPS and mobile technology (Kim, Mirusmonov, & Lee, 2013). It has a positive or negative relation to user behavioral attitude

towards the use of any specific technology. Trust, PEOU, and securityare three factors that will be usually to compare main perceptions i.e. relative advantages or perceived usefulness among the customers or users (Karahanna, 2016). So the hypothesis should be like this:

H$_6$: Perceived usefulness (PU) will have a positive impact on behavioral intention to use

Privacy:

Like trust and security, privacy is also the main and important factor inthe use of application-related MPS. People have curious about what probability of leakage of their private information or is there any chance service providers intentionally or unintentionally collecting and disclosing sensitive and private information like personal phone numbers, passwords, and debit/credit card details to third parties. Increase the information value in decision-making is the kind of force that involves privacy concerns (Smith, Dinev, & Xu, 2017). For the aims to improve the perceived usefulness concerns and adoption of specific technology and application, ensure to reduce the privacy risk in the perception of the user's mind. Hackers interrupt the privacy of the users by access the sensitive data of the users (Y. Yang, 2015). From previous observation hypotheses related to privacy should be like:

H$_7$: Higher levels of perceived privacy will have lower behavioral intention to use WeChat Wallet.

Behavioral intention to use

In the proposed structure model from the technology acceptance model, there are five from six factors are independent variables named: PEOU, T, S, perceived usefulness (PU), privacy (P)
while behavioral intention to use WeChat Wallet (IU) is the dependent variable. Motivational factors influence the intention of users towards use. Simply intentions are the level of willingness to adopt the product. A higher level of adoption to MPS by people-to-people transactions will be possible if and only if provides low hurdles or provide more resources

METHODOLOGY

The methodology that we are going to opt for this research relies ona quantitative analysis of the material that shall be acquired after responses from the survey. The responding population would be Pakistani students who will be living in China and have experience with MPS in Pakistan. For a better result, we will focus on the Pakistani population who live in Beijing because Beijing is the Hub and the much better population living in this city. The ultimate purpose of this city is to find professionals and businessmen for interviews. This provides a better result forthe WeChat Wallet. The questionnaire will be adapted from the researches in a similar field of our interest and the scaling method to be used will be a 5-point Likert scale. In the proposed structure model from the technology acceptance model, there

are six factors named: PEOU, Trust (T), Security (S), PU, Privacy (P), and IU. PEOU, trust, security, PU, and privacy are independent variables while the behavioral intention to use acts as the dependent variable. These factors contribute to finding the users' attitudes towards the adoption of the WeChat Wallet among Pakistanis students. These constructs are measured by items adopted by the previous study related to TAM (Appendix). These 24 construct items are mainly adopted from the paper (Matemba & Li, 2018) but besides this, different authors also used these items to construct their questionnaire.

According to our proposed conceptual model different authors that used this construct in their model are: perceived ease of use (PEOU) is measured by (Matemba & Li, 2018), inhis study, trust (T) is measured by ((Matemba & Li, 2018)), security (S) is measured by (Matemba & Li, 2018), perceived usefulness (PU) is measured by (Saadé & Bahli, 2005), privacy (P) is measured by (Matemba & Li, 2018),and behavioral intention to use WeChat Wallet (IU) is also measured by (Saadé & Bahli, 2005).

In this study, for the quantitative approach data is collected by using a questionnaire. The initial draft of the questionnaire is adopted from the (Matemba & Li, 2018) and then it is reviewed from experts for their expert opinion. The main purpose of the review is that questions are should be clear and easy to understand for different groups of people. The main problem is to check whether this questionnaire is reliable and valid or not. For checking the reliability and validity of the questionnaire, a pilot run is done. In the pilot run, we ask randomly to 35 Pakistanis students of Tsinghua University to fill the questionnaire. According to the pilot run, it almost takes 5 minutes to complete the questionnaire. Our instrument i.e. questionnaire successfully passed the reliability and validity test as well from the data collected then this questionnaire is distributed among Pakistanis students living in China. This is our main population is to concern like respondents should be Pakistani students and living in China. All questions in the questionnairesare measured with 5-point Likert-scale ranges are:(strongly disagree = 1 and strongly agree = 5).

Participant

There are two main ways to collect data from the respondents, one of them is through Google Form[1] and the second one is through wènjuànxīng[2] (问卷星). The problem is that peoples living in China prefer to give their respond through wènjuànxīng (问卷星) while people all over the world except China prefer to use Google Form. As we start collecting data from January 2020 to March 2020 and this

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[1]https://www.google.com/forms/about/

[2] www.wjx.cn

duration there was an epidemic situation of COVID19. Most of the Pakistanis students left China and go back to Pakistan, and they will prefer to respond through Google Form. While some Pakistanis are still living in China, so their priority givesa respond through WeChat mini program. To get a better response, good data accuracy, and a viewpoint of easiness, it will be better to get data from both of these websites. A QR code and questioner link for both wènjuànxīng (问卷星) and Google Form as well send to the participants and ask them to fill the questionnaire according to their response to the questions. There aretotal of 333 participant responses on the questionnaire and we get a total of 230 valid respondents after screening the data i.e. removing non-Pakistanis, removing Pakistanis never living in China, removing non-user of WeChat application, etc. The important thing is that questionnaire did not allow the respondent for incomplete or incorrect data, in other words, it will be an accepted filled form.

Data Analysis

When the data is collected then the problem is associated with whether this data is reliable and valid or not. Whether the measures can measure the latent variable or not. First, we appliedthe CFA tool to check which measures or constructs are significant and which are not significant to measure the latent variable. CFA is a very useful tool to measure the properties of the scales, to establish composite reliability (CR), convergent validity (CV), and discriminant validity.There are two types offit indicators are present for CFA, one of them is the Goodness of fit indicator and the second one is the Badness of fit indicator. The goodness of fit indicator is higher as better while the badness of fit is lower as better. But these two types of the indicator must pass their threshold level value. The goodness of fit indicators isa normed fit index (NFI) used by(Bentler & Bonett, 1980), comparative fit index (CFI) used by(Bentler, 1990) goodness of fit index (GFI), adjusted goodness of fit index (AGFI) while badness of fit indicators isthe root mean squared residual (RMR), and root mean square error of approximation (RMSEA)(Browne & Cudeck, 1992).

As recommended by E.T Matemba Chi-Squared test (χ^2/df), NFI, CFI, GFI, AGFI, RMR, and RMSEA were used as goodness-of-fit indices in his model (Matemba & Li, 2018). So, for our model absolute fit indices are χ^2/df, NFI, CFI, GFI, AGFI, RMR, and RMSEA. In general, the higher the value of NFI, CFI, GFI, AGFI and lower the value of χ^2/df, RMR, RMSEA give a better fit model. A model will be a good fit when it has $\chi^2/df \leq 3$, NFI $\geq$ 90%, CFI $\geq$ 90%, GFI $\geq$ 90%, AGFI $\geq$ 80%, RMR $\leq$ 0.05, and RMSEA $\leq$ 0.08.

Table 4.1 shows the different recommended values of fit, reliability, validity, and internal consistency. When CFA gives a better fit by deleting some construct it automatically gives the construct validity than the next step to find the composite reliability (CR), convergent validity (CV), and discriminant validity.

Convergent validity achieves only when latent factors have average variance extracted (AVE) of all the latent variablesgreater than or equal to 0.5. Discriminant validity tells how measures are different from one another empirically (Adolescents, Lee, & Baek, 2017). Discriminant validity could be achieved in two ways, one of them is discriminant validity achieves if the AVE of each latent variable is greater than both of them MSV and ASV (Maximum and Average share variance) that latent variable respectively. The second method to measure the discriminate validity is discriminant validity achieve if the square root of the AVE i.e. $\sqrt{AVE}$must be greater than each of the correspondings inter construct correlations. Composite reliability and Cronbach's alpha tell the internal consistency it should be greater than 0.7(Fornell & Larcker, 1981). After getting reliable and valid data, we will do Exploratory Factor Analyses (EFA) by using Harman's single-factor test will be used for confirming the Common Method Variance (CMV) and total variance should be less than 50%.

Name	Notation	Recommended value
	Model Fit Indices	
CMIN/DF	$\chi2/df$	≤ 3
Normed fit index	NFI(%)	≥ 90
Comparative fit index	CFI(%)	≥ 90
Goodness of fit index	GFI(%)	≥ 90
Adjusted goodness of fit index	AGFI(%)	≥ 80
Root mean squared residual	RMR	≤ 0.05
Root mean square error of approximation	RMSEA	≤ 0.08
	Reliability and Validity	
Construct reliability	CR	> 0.70
Convergent Validity	CV	AVE > 0.50
Discriminant validity		AVE $>$ MSV & AVE $>$ASV or $\sqrt{AVE}$ Inter-construct correlations

Internal Consistency	
Composite reliability	> 0.70
Cronbach's alpha	> 0.70
Exploratory Factor Analysis	
Common method variance test by using Harman's single factor test	% Variance < 50%

Table 0.1 Recommended values of fit, reliability, validity, and internal consistency.

Finally, SEM will be used to test the proposed hypotheses in our structural model by using the same criteria of fit i.e. $\chi^2/df \leq 3$, NFI $\geq$ 90%, CFI $\geq$ 90%, GFI $\geq$ 90%, AGFI $\geq$ 80%, RMR $\leq$ 0.05, and RMSEA $\leq$ 0.08. By using AMOS24 (analysis of moment structures) software analyses both CFA and SEM as well.

FINDINGS

Descriptive statistics:

Table 0.1clearly shows the demographic characteristics of the respondent It clearly shows 97.8 % of the responses having age below 40 years, 84.8% having experience using the WeChat application for more than two years. These refined data shows that the majority of the applicant was male (61.3%) so data are not equally distributed among gender. Most of them are a student and they have a Doctor of Philosophy degree (45.7%).

Moreover, students havingthe highest educational degree i.e. Ph.D. are engaged in current research, and therefore they will know the research significance. This expected Table 0.1also indicates the minor or insignificant number of the participant are from primary/middle school (1.0%), unemployed (4.8%), and using WeChat application less than 1 hour per week (0.4%) or from informal schools (4%). 59.9% of them have an average income of more than 50,000 PKR (312 USD). Most of them use WeChat regularly and at the maximum side like 53.9% of the participants use the WeChat application more than 8 hours per week. From the respondents, there are 88% of participantslive in China or living in China.

Table 0.1 Summary of demographic data (Frequencies and Percentages)

Measure	Value	Frequency	Percentage
Gender	Male	141	61.3%
	Female	89	38.7%
Marital status	Single	81	35.2%

Factors Influencing the Use of WeChat Wallet among the Pakistanis

	Married	149	64.8%
	Less than 20 years	4	1.7%
	21-25 years	45	19.6%
Age	26-30 years	93	40.4%
	31-35 years	54	23.5%
	36 to 40 years	29	12.6%
	Above 40 years	5	2.2%
	Primary school	0	0.0%
	Middle school	1	0.4%
	Some college	7	3.0%
Education	2- year community/ vocation/ technology school	2	0.9%
	Bachelor's degree	57	24.8%
	Master's degree	58	25.2%
	Doctor of philosophy (PhD)	105	45.7%
	Never gone to formal school	0	0.0%
	Less than 10,000 PKR (62 USD)	15	6.5%
	10,000 PKR – 20,000 PKR (62 USD – 125 USD)	7	3.0%
Income	20,000 PKR – 30,000 PKR (125 USD – 188 USD)	12	5.2%
	30,000 PKR – 40,000 PKR (188 USD – 250 USD)	21	9.1%
	40,000 PKR – 50,000 PKR (250 USD – 312 USD)	38	16.5%
	Above 50,000 PKR (312 USD)	137	59.6%
	Civil servant	27	8.1%
	The employee of a private company or NGO (non-government organization)	28	8.4%
Employment*	Self-employed	26	7.8%
	Student	236	70.9%
	Unemployed	16	4.8%
	Less than 1 year	17	7.4%
	1 to 2 years	18	7.8%
Experience	2 to 3 years	75	32.6%
	Above 3 years	120	52.2%
	Less than 1 hour	1	0.4%
Average hours use WeChat in a week*	1-3 hours	6	2.6%
	3-5 hours	27	11.7%
	5-7 hours	72	31.3%
	Above 8 hours	124	53.9%
Have you ever stayed in China?	No	40	12.0%
	Yes	293	88.0%

* These measures are based on sample size 333.

Table 0.2&Table 0.3 summarize the descriptive statistics related to mean and standard deviation of initial construct and measurement construct respectively. From Table 0.2Mean was highest for Perceived ease of use (4.53± 0.521) and lowest for Security (4.08 ± 0.689) for an initial model or pure model. While as compare in construct item average is highest in PEOU1 (4.68 ± 0.626) and lowest in both S1 (4.06 ± 0.815) & S2 (4.06 ± 0.812) respectively.Security has more dispersion from mean as compare to perceived ease of use. While among all the latent variables security have the highest dispersion (SD = 0.689) meanwhile perceived usefulness hasthe lowest dispersion (SD = 0.509).

Table 0.2 Descriptive Statistics (mean standard deviation) initial model

Construct	Item	Mean	Std. Deviation
	PEOU1	4.68	0.626
	PEOU2	4.41	0.729
Perceived ease of use	PEOU3	4.56	0.623
	PEOU4	4.48	0.611
	Average	4.53	0.521
	T1	4.13	0.700
	T2	4.22	0.770
Trust	T3	4.35	0.688
	T4	4.33	0.624
	Average	4.26	0.532
	S1	4.06	0.815
	S2	4.06	0.812
Security	S3	4.09	0.823
	S4	4.13	0.797
	Average	4.08	0.689
	PU1	4.20	0.579
	PU2	4.24	0.633
Perceived usefulness	PU3	4.17	0.684
	PU4	4.10	0.691
	Average	4.18	0.509
	P1	4.40	0.709
	P2	4.20	0.714
Privacy	P3	4.35	0.656
	P4	4.25	0.678
	Average	4.30	0.556

|			
	IU1	4.24	0.673
	IU2	4.07	0.692
Intention to use	IU3	4.07	0.690
	IU4	4.08	0.707
	Average	4.12	0.516

Table 0.3summarizes the descriptive statisticsrelated to the mean and standard deviation of constructor measures of the modified model. Mean was highest for Perceived ease of use (4.48 ±0.544) and lowest for both Security (4.08 ±0.702) and Intention to use WeChat wallet (4.08 ±0.630) as well. While as compare in construct item average is highest in PEOU3 (4.56 ± 0.623). The average of Security and Intention to use isthe same but security has more dispersion than the intention to use. On average responses for security (SD = 0.702) are far away distributed against their mean, while responses for Perceived usefulness (SD = 0.528) are closer to their mean.

Table 0.3 Descriptive Statistics (mean standard deviation) measurement item

Construct	Item	Mean	Std. Deviation
	PEOU2	4.41	0.729
	PEOU3	4.56	0.623
Perceived ease of use	PEOU4	4.48	0.611
	Average	4.48	0.544
	T2	4.22	0.770
	T3	4.35	0.688
Trust	T4	4.33	0.624
	Average	4.30	0.577
	S1	4.06	0.815
	S2	4.06	0.812
Security	S4	4.13	0.797
	Average	4.08	0.702
	PU1	4.20	0.579
Perceived usefulness	PU2	4.24	0.633
	PU4	4.10	0.691

	Average	4.18	0.528
	P2	4.20	0.714
	P3	4.35	0.656
Privacy	P4	4.25	0.678
	Average	4.27	0.576
	IU2	4.07	0.692
	IU4	4.08	0.707

Average hours use WeChat in a week
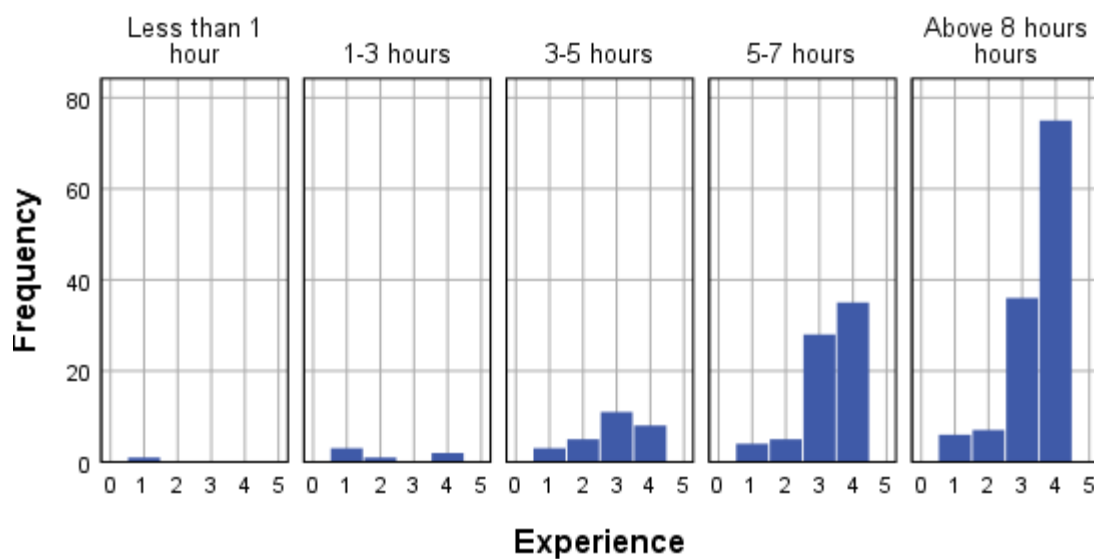
| Intention to use | Average | 4.08 | 0.630 |

Figure 0.1 clearly shows the direct relationship between experience to use WeChat application and average hours uses per week. As it compares to respondents use WeChat less than one hour is very few for the experience of use of WeChat less than one year while respondents use WeChat more than eight hours per week having experience use of WeChat above three years having more respondents. It is clearly shown that respondent has more experience use of WeChat have high usage of numbers of hours per week, so it means respondent have more experience lead to increase uses hours per week of the WeChat.

Figure 0.1 Relation between experience and uses of WeChat application

There is a relationship present between age and the uses of the WeChat application. From Figure 5.2 it is shown that the relationship between age and uses of the WeChat application is not a straight or direct relation. As age increases the uses of WeChat increase till at the age range of 26 – 29 years old but after this range the uses of the WeChat application decrease gradually. It meansthe age range 26 – 30 years
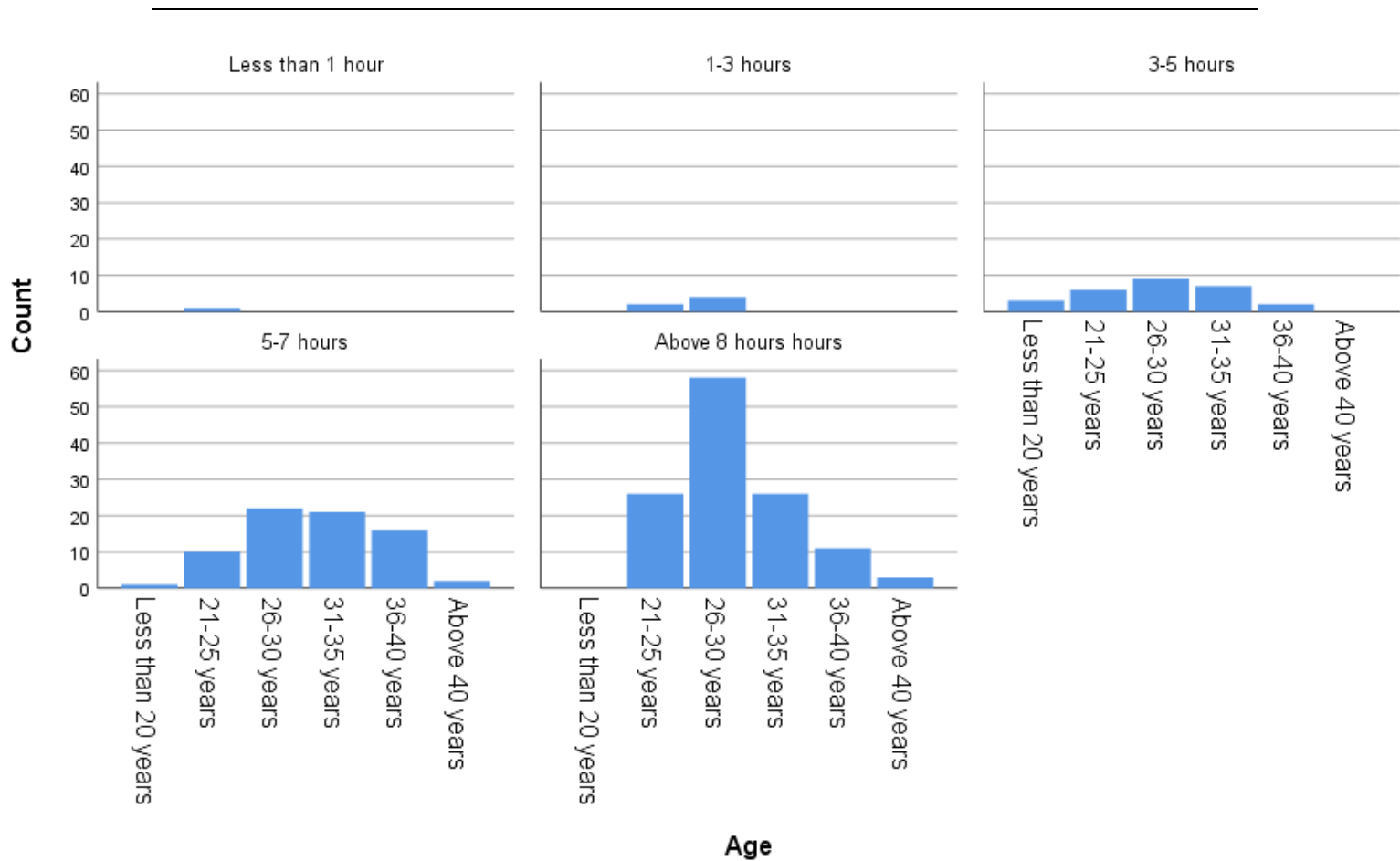
Figure 0.2 Relation between age and uses of WeChat

old act like a critical or threshold point, coming up to this point uses of WeChat increase while going away from this point uses of the WeChat application is decrease. The overall finding of this relationship between age and uses of WeChat applications is that younger people are frequently using WeChat applications as compare to teenage and older people.

Measurement model assessment

When initially model run by using CFA in AMOS then the result of the goodness of fit are χ^2/df=2.865, NFI =75.5%, CFI = 82.3%, GFI = 80.1%, AGFI = 74.9%, RMR = 0.042, and RMSEA = 0.09. This model is a poor fit model because these goodness of fit values are not according to the required fit as intable 4.1. Also, this initial model does not pass the convergent validity because AVE $_{Trust}$ = 0.465 and AVE $_{IU}$ = 0.442, these values should be greater than 0.5.Although convergent validity is not a concern in

this stage.Figure 5.3clearly shows the comparison between the initial model and conformity factor analysis model at standardized estimate given loading factors and covariance.

In other words, we are improving the model by reconfigurations, employing the recommendation and procedures given by (Anderson & Gerbing, 1988), to refine and improve the model's fitness: by inspection,the fit indices values present at the "model fit summary" in AMOS, their impacts to the model; will be refined by changing or deleting the fit indices to improvegoodness of fit indices, and finally run this model with new updated/latestvalues. Therefore, in this way, there are seven redundant items present in the constructed scale and the decision to run CFA after deleting this redundant item. These redundant construct items are PEOU1, T1, S3, PU3, P1, IU1, and IU3. This modified model have best goodness of fit values according to table 4.1, new modified models' fit are χ^2/df = 1.57, NFI = 90.2%, CFI = 96.1%, GFI = 92.8%, AGFI = 89.5%, RMR = 0.025, and RMSEA = 0.05. Table 5.4 shows the goodness of fit values comparison between the initial model and conformity factor analysis model with recommended values.

Table 0.4 Model fit measurements

| Fit Index	Notation	Recommended values	Initial measurement model	CFA modified model
CMIN/DF	$\chi 2/df$	≤ 3.00	2.865	1.570
Normed fit index	NFI(%)	≥ 90.0	75.5%	90.2%
Comparative fit index	CFI(%)	≥ 90.0	82.3%	96.1%
Goodness of fit index	GFI(%)	≥ 90.0	80.1%	92.8%
Adjusted goodness of fit index	AGFI(%)	≥ 80	74.9%	89.5%
Root mean squared residual	RMR	≤ 0.05	0.042	0.025
Root mean square error of approximation	RMSEA	≤ 0.08	0.09	0.05
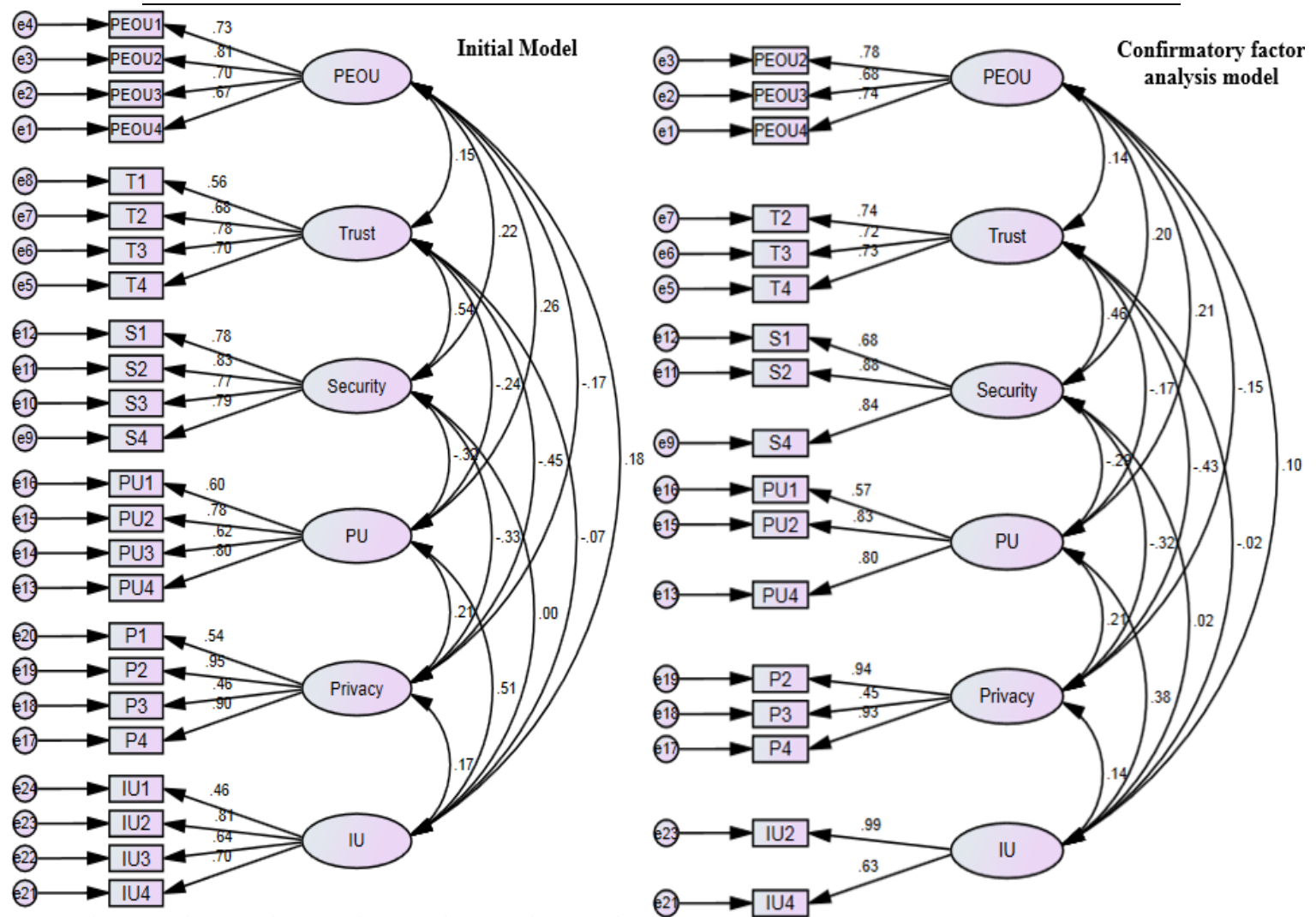
Figure 0.3 Initial model Vs Confirmatory factor analysis model

Reliability and validity

The ability and capability of any questionnaires instrumentor a tool to provide or generate stable and consistent resultsare called reliability. It means the main purpose of the reliability test is to see instruments or questionnaires to consistently measure the latent variable or measure those quantities it is designed to measure. While validity refers to designs and methodology that adopt for the research. It is the ability or capability of thequestionnaire, instrument, or tool to accurately or precisely measure the

research. According to differentscholars and researchers, instruments or toolsshould be reliable and valid as well.

These three quantities i.e. CR, CV, and discriminant validity are used to measure our instrument's reliability and validity as well. Convergent reliability achieves when factor loading of all latent factors have greater than its significant level i.e. 0.70. While convergent validity achieves only when each ofthe latent factors has AVE greater than 0.5. Table 4.1also shows the cut-off values for CR, CV, discriminant validity, and Cronbach's alpha.

From the Table 0.5, minimum construct reliability for Trust (CR $_{Trust}$ = 0.776) and maximum for Security (CR $_{Security}$ = 0.845). So CR for each latent variable is attained the recommended threshold level i.e. CR > 0.70, which means the instrument is reliable.Equation 0.1shows the formula of construct reliability.

$$CR = \frac{\left(\sum_{i=1}^{i} \lambda_i\right)^2}{\left(\sum_{i=1}^{i} \lambda_i\right)^2 + \sum_{i=1}^{i}(1 - \lambda_i^2)}$$
    Equation 0.1: Construct reliability

Here λ_i is the standardized regression weight or standardize loading of the ith construct.

Also, values of average variance extracted for each latent variable exceeds its minimum required value (AVE > 0.50) this shows the convergent validity of the instrument is attaining.Equation 0.2 shows the formula for AVE.

$$AVE = \frac{\left(\sum_{i=1}^{i} \lambda_i\right)^2}{n_j}$$
    Equation 0.2 Average variance extracted

Here λ_i is standardized regression weight of the ith construct while $n_j$is the number of the construct in jth latent variable.

Table 0.5 CFA results, composite reliability, convergent validity, and internal consistency

Construct	Item	Factor loading	Composite reliability (CR)	The average variance extracted (AVE)	Maximum shared variance (MSV)	Cronbach's alpha
Perceived ease of use	PEOU2	0.78	0.778	0.54	0.044	0.774
	PEOU3	0.68				
	PEOU4	0.74				
Trust	T2	0.74	0.776	0.536	0.215	0.77
	T3	0.72				
	T4	0.73				

	S1	0.68				
Security	S2	0.88	0.845	0.647	0.215	0.838
	S4	0.84				
	PU1	0.57				
Perceived usefulness	PU2	0.83	0.781	0.55	0.141	0.774
	PU4	0.80				
	P2	0.94				
Privacy	P3	0.45	0.833	0.645	0.189	0.797
	P4	0.93				
Intention to use	IU2	0.99	0.807	0.687	0.141	0.766
	IU4	0.63				

Discriminant validity tells how measures are different from one another empirically (Adolescents et al., 2017), and discriminant validity could be achieving in two different ways, first one is discriminant validity achieves if the AVE of each latent variable is greater than both of them MSV and ASV of that latent variable. The second method to measure the discriminate validity is it will achieve if the square root of AVE i.e. $\sqrt{AVE}$ greater than each of the corresponding inter construct correlations. Table 0.5 and Table 0.6 show that the construct also holds the discriminant validity because AVE is greater than both MSV and ASV (AVE > MSV & AVE >ASV). Furthermore, $\sqrt{AVE}$ is also greater than each of inter construct corresponding latent variables ($\sqrt{AVE}$ Inter-construct correlations). Diagonal's bold values in Table 0.6are $\sqrt{AVE}$ for the corresponding latent variable.Equation 0.3 is the formula for the SAVE.

$$SAVE = \sqrt{\frac{\left(\sum_{i=1}^{i} \lambda_i\right)^2}{n_j}}$$

Equation 0.3 Square root average variance extracted

Here λ_i is standardized regression weight of the ith construct while $n_j$is the number of the construct in jth latent variable.

Cronbach's alpha tells the internal consistency it must be greater than 0.70 for all latent variables (Fornell & Larcker, 1981). So our instrument holds internal consistency because CR and Cronbach's alpha is greater than its threshold level for each construct (CR > 0.70 and Cronbach's alpha > 0.70).

Table 0.6 Discriminant validity test

Discriminant Validity						
	PEOU	Trust	Security	PU	Privacy	IU

PEOU	**0.735**				
Trust	0.141	**0.732**			
Security	0.197*	0.463***	**0.804**		
PU	0.210*	-0.173*	-0.291***	**0.742**	
Privacy	-0.147†	-0.435***	-0.325***	0.206**	**0.803**
IU	0.102	-0.02	0.018	0.375**	0.140†	**0.829**

Significance of Correlations: † p < 0.100, * p < 0.050, ** p < 0.010, *** p < 0.001

Common method variance test by EFA

Common method variance(CMV) occurs when the different respondent submits their response on the same instrument to measure different multiple constructs, this responses leads to variations and this variation collectively called CMV. Hence to identify whether CMVoccurs in our data or not we will use Harman's test. Most of the authors used Harman's test to identifying variance in their data (Malhotra et als., 2016), (Dupuis, 2017).This test is part of the exploratory factor analysis (EFA) and threshold level present in table 4.1. Also, it is very easy to apply (Fuller, Simmering, Atinc, Atinc, & Babin, 2015). CMV is not present when there isapercentage of total variance less than 50%. Table 0.7shows the result of Harman's single-factor test and it is shown that the percentage variance explained bya single factor attains 20.4% of the total variance. So this percentage of the total variance is less than of it threshold level (% of total variance < 50%), which means Common method variance is not a problem in the current data set. The conclusion is that the measurement model has the required reliability and validity, and was suitable for the analysis of the structural equation model.

Table 0.7 Harman's single factor test result

		Initial Eigenvalues			Extraction Sums of Squared Loadings		
Construct	Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Perceived ease of use	PEOU2	4.2	24.5	24.5			
	PEOU3	2.6	15.4	39.8	3.5	20.4	20.4
	PEOU4	1.8	10.3	50.2			

Factors Influencing the Use of WeChat Wallet among the Pakistanis

	T2	1.6	9.4	59.6
Trust	T3	1.2	7.2	66.7
	T4	1.1	6.5	73.3
	S1	0.7	4.4	77.7
Security	S2	0.6	3.6	81.3
	S4	0.5	3.2	84.5
	PU1	0.5	3.0	87.5
Perceived usefulness	PU2	0.4	2.6	90.1
	PU4	0.4	2.3	92.5
	P2	0.4	2.1	94.6
Privacy	P3	0.3	1.9	96.5
	P4	0.3	1.6	98.1
Intention to use	IU2	0.2	1.3	99.3
	IU4	0.1	0.7	100.0

Structural model assessment

As previously we did the CFA test, reliability, and validity, Cronbach's alpha, and Hammer single factor analysis, so we have already establishedthe required fitness of our model. To confirm the validity of hypothesis results followed the procedure proposed by Koufteros in applying SEM and it is the most powerful tool for analyzing the empirical data (Matemba & Li, 2018). By using SEM, multi dependent variables are analyzed at the same time, find the correlation of variables, and also measure the analysis errors. Our model is ready for a structural model that ultimately gives the result ofthe proposed conceptual model and hypothesis. It is a modification in confirmatory factor analysis to the conceptual model, Error! Reference source not found.is the modified form of the CFA according to our proposed model Figure 3.1and it gives seven conceptual paths were inspected see inFigure 0. and Error! Reference source not found.. This SEM model have best goodness of fit values according to table 4.1 models' fit are χ^2/df = 2.617, NFI = 95.3%, CFI = 97%, GFI = 98.2%, AGFI = 92.4%, RMR = 0.011, and RMSEA = 0.08.Table 0.8shows the goodness of fit values of the SEM, while Table 0.9standardized the estimate and result of the conceptual proposed model. These all fit indices show that the proposed model represents very good feedback related to the hypothesis.

Table 0.8 SEM's model fit indices

Fit Index	Recommended values	SEM model value
χ^2/df	≤ 3	2.617
NFI(%)	≥ 90	95.3%
CFI(%)	≥ 90	97.0%
GFI(%)	≥ 90	98.2%
AGFI(%)	≥ 80	92.4%
RMR	≤ 0.05	0.011
RMSEA	≤ 0.08	0.08

Table 0.9 Standardized estimate and hypothesis result.

H#	Conceptualized path	Standardized estimate	p-Value	Remarks
1	PEOU → PU	0.294	< 0.001	Accepted

2	Trust → PU	-0.31	< 0.001	Accepted
3	Trust → IU	0.164	0.018	Rejected
4	Trust → Privacy	-0.452	< 0.001	Accepted
5	Security → Privacy	-0.103	0.131	Rejected
6	PU → IU	0.468	< 0.001	Accepted
7	Privacy → IU	0.151	0.026	Rejected

SEM result is present in**Error! Reference source not found.**, here the significant path of the hypothesis presents in a solid black line while the insignificant path is present with red dotted lines. Four hypotheses among seven hypotheses were supported or accepted. It was found the ease of use showed a positive effect on perceived usefulness ($\beta = 0.294$, $p < 0.001$), which supports H_1. Trust have significant effect on Perceived usefulness ($\beta = -0.31$, $p < 0.001$) and on privacy ($\beta = -0.452$, $p < 0.001$) while it has insignificant relation with intention to use ($\beta = 0.164$, $p = 0.018$). So it supports H_2 and H_4 and does not support H_3. Security have insignificant relation with privacy ($\beta = -0.103$, $p = 0.131$), and privacy also have insignificant relation with intention to use WeChat wallet ($\beta = 0.151$, $p < 0.026$) while perceived usefulness have significant positive relationship with intention to use wallet ($\beta = 0.468$, $p < 0.001$). It means H_6 is supported and H_5 and H_7 are not supported. **Error! Reference source not found.**shows thevariances explained in intention to use WeChat wallet.
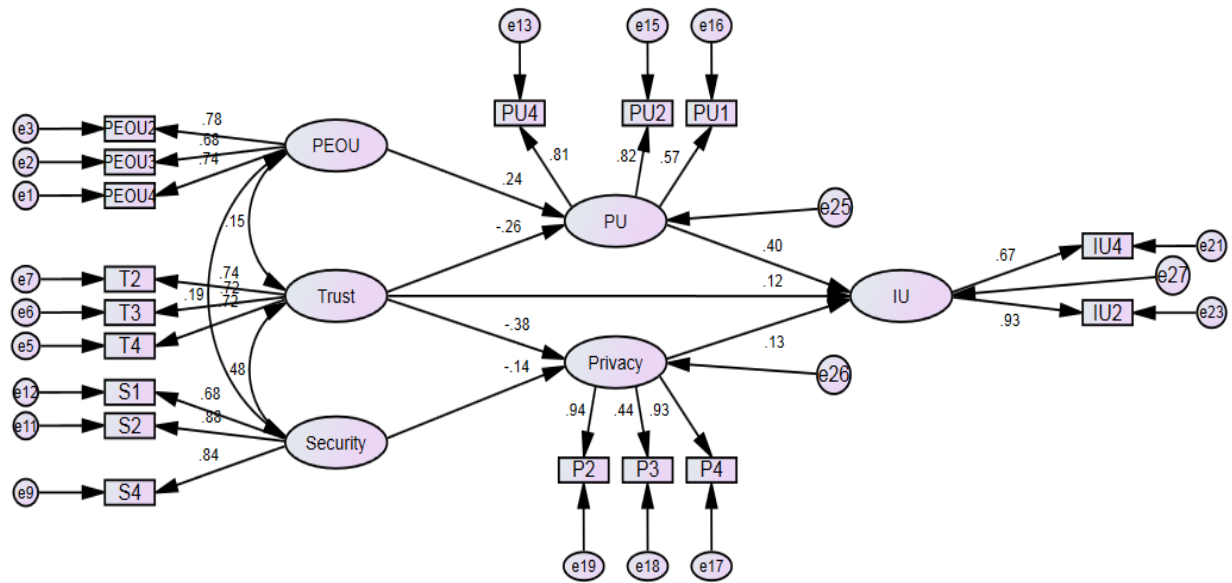
Figure 0.4 SEM model

CONCLUSION

This study reveals the intentions to use of WeChat wallet (IU) among Pakistani people. The result of the research indicates that the constructs in Technology Acceptance Model are a kind of future predictor for the public to adopt the wallet service and application where users can fulfill their needs easily. During this study, some additional factors including data security, privacy, and trust that encourage the public to choose IU technologies. By using data analysis tool SEM and present data are gathered from a set of 230 Pakistani were used in SEM. Experiential results reveal that the proposed model can explain 26.8%, 15%, and 22.2% of the variances in the privacy (P), perceived usefulness, and intention to use WeChat wallet respectively. These results can be employed for future studies. Mobile payments in Pakistan are the center of our study, this work provides a guideline to scholars and executives. Further, the result of the research signifies that the choice of using WeChat wallet by the people of Pakistan may be successful when software engineer follows to the proposed model.

Theoretical contributions, implications, and suggestions

The discovery of the current study indicates that traditional TAM may engage every single action s of people to choose IU technology. Moreover, our theory of such technology's contributions and aim to the firm in the suggest build up TAM to fill the lack component or components. As trust plays a pivotal role in IU adoption because it is significantly relatedto perceived usefulness and privacy. Therefore, the mobile application developer may need to put more emphasis and focus on creating an environment for the public to accept, use, and appreciate and confidence their invention.

The model of the current study indirectly highlights the security that encourages people to choose IU applications. But the model does not include a straight relationship between the security of the application and IU, we consider that people trust in systems that are more reliable and secure(Sukkar, 2005). Thus, the research wants to have another serious look on the reversion of systems in the bank, that is used by the people for the sensitive transactions and money transfer. The public may believe that if there is no money lose in mobile payment transactions then IT applications provide very secure and safe systems. Agencies or organization that enforces laws should come into existence that makes security attributes for banks. We also suggest strong policies that will protect customer's data from cyber hackers that may occur during an online transaction.

Based on my personal experience about using WeChat application is that application prevailsin most of the countries in Asia, mainly in China. This is to come to know that the applied force to the user to use it for the online payment method, which is highlighted, by the informal surveys and interviews.

According to the research, we have come to know that some Pakistanis now have started to use the application WeChat to enjoy several features of WeChat. We have shown the main factors that describe why the Pakistani public should choose IU-based technologies.

Limitations and future work

This research mainly focused on one of the main features of technology, the WeChat Wallet. The selection of this feature was ideal because this application is not that old in Pakistan (maximum 4 years) but it has received so much attention from the people of Pakistan. Researchers may try to test and validate our proposed model by comparing our proposed model and the mobile payment technologies that are available in the country. When validating our proposed construct model the direct or indirect relationship between the Privacy of the user and IU, and also between the Trust of the user in the application and the Privacy of the user should be taken care of and well treated by the developer. Apart from this, the model can also be examined for the broader purpose by the other neighboring countries of Pakistan as well because the technology, environments, and cultural practices are similar to Pakistan in many south Asian countries. Perhaps choosing this model may have the same result.

Respondents from Pakistan were involved in our survey living in Beijing, and the number 230 might not well represent to the population of Pakistan. Secondly, many people were unaware of the academic surveys as a result people found it irresponsible to respond to the survey. This problem can eliminate through the proper education channel and training to bring awareness in people on the need for academic research. Third, the research also includes the personal financial state of the individual that naturally many of us feel hesitant to externalize. Fourth, cybercrimes could increase trust issues.

The use of payment using mobile systems in Pakistan is at the embryonic stages. Most of the people in Pakistan use physical services based on banks, cards, or cash services. An example can be taken from Easy-Paisa (a medium to send and receive money using a mobile phone) in Pakistan that has shown unbeatable development up to now. The proposed construct does not include the habits of the people as the main construct for people to choose IU-based technologies. Researchersshortlymay revise our proposed model for evaluation and improve the quality of the construct according to their external factors like cultural values.

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Questionnaire for demographic data collection.

Gender	(1)	Female (2) Male	(Hung, Chang, & Yu,
Marital status	(1)	Single (2) Married	2006), (Matemba & Li,
Age	(1)	Less than 20 years (2) 21-25 years (3) 26-30	2018)

APPENDIX A

	years (4) 31-35 years (5) 36 to 40 years (6) Above 40 years
Education	(1) Primary school (2) Middle school (3) Some college (4) 2- year community/ vocation/ technology school (5) Bachelor's degree (6) Master's degree (7) Doctor of philosophy (PhD) (8) Never gone to formal school
Income	(1) Less than 10,000 PKR (62 USD) (2) 10,000 PKR – 20,000 PKR (62 USD – 125 USD) (3) 20,000 PKR – 30,000 PKR (125 USD – 188 USD) (4) 30,000 PKR – 40,000 PKR (188 USD – 250 USD) (5) 40,000 PKR – 50,000 PKR (250 USD – 312 USD) (6) Above 50,000 PKR (312 USD)
Employment	(1) Civil servant (2) Employee of a private company or NGO (non-government organization) (3) Self-employed (4) Student (5) Unemployed
Experience	(1) Less than 1 year (2) 1 to 2 years (3) 2 to 3 years (4) Above 3 years
Average hours use WeChat in a week	(1) Less than 1 hour (2) 1-3 hours (3) 3-5 hours (4) 5-7 hours (5) Above 8 hours
Have you ever stayed in China?	(1) No (2) Yes

APPENDIX B

Questionnaire for testing and validation of TAM

Factors	Not.	Measure Item	Scale used	Ref.
Perceived ease of use	PEOU 1	The application is simple.	Type of scale 5-point Likert, 1 = Totally disagree, 5 = Totally agree	(Matemba & Li, 2018)(Saadé & Bahli, 2005)(H. D. Yang & Yoo, 2004)(Venkatesh, 2000)(Tsai, 2012)(Lai & Li, 2005)(Burton-Jones & Hubona, 2006)(Holden & Karsh, 2010)(Journal, Support, & Park, 2009)
	PEOU 2	The application is flexible.		
	PEOU 3	The application is easier to interact with.		
	PEOU 4	The application is easier to learn.		
Trust	T1	I trust the application.	Type of scale 5-point Likert, 1 = Totally disagree, 5 = Totally agree	(Matemba & Li, 2018)
	T2	I think the application always provide accurate financial services.		
	T3	I think the application interests my mind.		
	T4	I think the application always provides secure financial services.		
Security	S1	The application offers a safe environment to send sensitive information through.	Type of scale 5-point Likert, 1 = Totally disagree, 5 = Totally agree	(Matemba & Li, 2018)(Pikkarainen, Pikkarainen, Karjaluoto, & Pahnila, 2004)(Vijayasarathy, 2004)
	S2	I believe the application has security measure to send sensitive information.		
	S3	I believe the transaction details in the application is protected.		
	S4	I would feel totally safe to provide my bank card to purchase products through the application.		
Perceived usefulness	PU1	The service is convenient.	Type of scale 5-point Likert, 1 =	(Saadé & Bahli, 2005)(H. D. Yang & Yoo, 2004)(Venkatesh, 2000)(Tsai, 2012)(Lai &
	PU2	The service is efficient.		
	PU3	The service helps me to save time.		

539

	PU4	The service is effective.	Totally disagree, 5 = Totally agree	Li, 2005)(Burton-Jones & Hubona, 2006)(Holden & Karsh, 2010)(Vijayasarathy, 2004)(Journal et al., 2009)
Privacy	P1	User's privacy information in application could be misused, inappropriately shared, or sold.	Type of scale 5-point Likert, 1 = Totally disagree, 5 = Totally agree	(Matemba & Li, 2018)(Pikkarainen et al., 2004)(Vijayasarathy, 2004)
	P2	Users' personal information in the application could be intercepted or accessed.		
	P3	User's privacy information could be exposed when using the application.		
	P4	User's privacy information in the application could be collected tracked and analyzed.		
Intention to use	IU1	I am likely to use the service.	Type of scale 5-point Likert, 1 = Totally disagree, 5 = Totally agree	(Saadé & Bahli, 2005)(Schierz et al., 2010)(Lai & Li, 2005)
	1U2	I intend to use the service in the future.		
	1U3	I will always try to use the service in my daily life.		
	IU4	I plan to use the service soon.		

Below mention table is the summary of questionnaire ask for TAM.

Sr. No.	Factor Name	Notation	Number of measuring questions	Scale used to measure
1	**Perceived usefulness**	PU	4	Type of scale 5-point Likert, 1 = Totally disagree, 5 = Totally agree
2	**Perceived ease of use**	PEOU	4	
3	**Security**	S	4	
4	**Trust**	T	4	
5	**Privacy**	P	4	
6	**Intention to use**	IU	4	
Total questions			24	