Integration of UTAUT model in internet banking adoption context
The mediating role of performance expectancy and effort expectancy

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Abstract

Purpose – Technology acceptance, especially internet banking adoption, has become a vital issue in the business world today. The potential of this technology is enormous. The purpose of this study is to ascertain determinants of internet banking adoption using unified theory of acceptance and use of technology (UTAUT) and electronic service (e-service) quality, which accounts for changes in user's intention to adopt internet banking.

Design/methodology/approach – The authors collected data from customers of commercial banks using structured questionnaires. The data were collected in four weeks in the beginning of September 2017. A two-stage approach of confirmatory factor analysis (CFA) and structural equation modeling (SEM) were used for data analysis.

Findings – The results reveal that integrated UTAUT model had significant influence on user intention to adopt internet banking. Findings of the SEM indicated that approximately 80 per cent of the variance in user intention to adopt internet banking was accounted by predictors. The study schematized that assurance is the most influential factor among all other technology and service quality factors. Additionally, performance expectancy and effort expectancy were found to be positive and significant mediator variables among website design, customer service and customer's intention to adopt internet banking.

Practical implications – It is recommended that both website designers and managers should focus on technology and service quality factors to boost the confidence of internet banking users. Importance performance matrix analysis suggested that managers should provide assurance to internet banking users, so that they could maintain a long-term relationship with internet banking services. The study calls researchers to test the integrated UTAUT model in other electronic commerce (e-commerce) domains such as online booking or online shopping websites.

Originality/value – To the best of author's knowledge, this study is the first that extend the UTAUT model with four e-service quality dimensions, namely, website design, customer service, assurance and reliability to investigate user's intention to adopt internet banking in developing country context of Pakistan. More importantly, the mediating role of performance expectancy and effort expectancy is examined first time within integrated UTAUT model. Furthermore, the integration of UTAUT model contributes to the advancement of internet banking acceptance and offers useful insights to researchers and policy-makers on how to enhance internet banking acceptance among customers of commercial banks.

Keywords UTAUT, E-service quality, Integration, Mediation, Structural equation modelling (SEM), E-commerce, Electronic commerce, Information technology

Paper type Research paper

1. Introduction

The notion of the internet technology has made tremendous changes in the banking operations such as the usage of online banking services. Internet banking has transformed the banking industry worldwide (Aboobucker and Bao, 2018). Internet banking is a banking channel that allows customers to do a wide range of financial and non-financial activities through a bank website, for instance, paying electricity bills, transferring funds, printing statements and collecting information about account balance, exchange rates and interest rates (Aboobucker and Bao, 2018; Rahi and Abd. Ghani, 2018b). In recent years, internet banking has appeared as one of the most profitable electronic commerce (e-commerce) application (Wang *et al.*, 2017a, 2017b). Several banks had set up internet banking system in an attempt to reduce operational cost while improving customer services (Celik and Kocaman, 2017; Vohra and Bhardwaj, 2019). Internet banking has helped the banking sector to offer individualized services and, at the same time, improve service delivery (Boateng *et al.*, 2016). It offers 24 hours of services to customers and helps to retain existing customers which in turn improves bank's competitive position in sophisticated and dynamic banking industry.

In spite of being hailed as an emergent paradigm undergoing intense development, the adoption of internet banking is still a big challenge (Aboobucker and Bao, 2018; Samar and Mazuri, 2019). Regardless of the potential benefits of the internet banking services, customers are reluctant to adopt internet banking services (Martins *et al.*, 2014). The adoption of internet banking services will not only be beneficial for customers but also give an opportunity to banks to satisfy their customers from a distance (Rahi and Ghani, 2016a, 2016b). However, banks are finding difficulties to fully maximize their electronic operation and this attributes to customer's unwillingness to adopt internet banking services irrespective of the benefits (Rahi *et al.*, 2018b). A recent report issued by the State Bank of Pakistan revealed that there is a squeak growth in internet banking adoption which is only 3 per cent (State Bank of Pakistan, 2015). Therefore, it is crucial to investigate which factors influence customer intention to adopt internet banking.

In earlier studies, researchers have focused either on IT-related factors or service quality determinants to investigate internet banking adoption issues (Li and Lin, 2010; Sheng and Liu, 2010). Therefore, little research has been done on internet banking adoption with integration of unified theory of acceptance and use of technology (UTAUT) and electronic service (e-service) quality factors (Blut *et al.*, 2015). An integrated model reinforces the significance and predictability of the results (Oliveira *et al.*, 2016). The present study fills the research gap by developing an integrated technology adoption model that combines the key factors of UTAUT model, including performance expectancy, social influence, effort expectancy and facilitating condition, and e-service quality factors, namely, website design, customer service, reliability and assurance. We advance the body of knowledge on this subject and investigate mediating role of performance expectancy and effort expectancy among website design, customer service and user intention to adopt internet banking. Newly developed integrated technology model enlarges the scope of technology adoption decision and offers useful insights to researchers and policy-makers to understand internet user behavior toward the adoption of internet banking.

2. Literature review and research

2.1 Unified theory of acceptance and use of technology

UTAUT formulation is based on eight research models, namely, technology acceptance model, theory of reasoned action, hybrid model TAM–TPB, motivational model, theory of planned behavior, model of PC utilization, innovation diffusion theory and social cognitive

theory. Detailed analysis of these eight models revealed that performance expectancy, effort expectancy, social influence and facilitating condition had significant influence on user intention to adopt technology (Rahi and Abd. Ghani, 2018b; Venkatesh *et al.*, 2003b). According to Martins *et al.* (2014), performance expectancy in internet banking context *is the degree where an individual believes that using internet banking will help him/her to attain gains in performing banking tasks*. Similarly, Alalwan *et al.* (2014) postulated that performance expectancy is considered as a term of utility that is encountered during the use of internet banking. Several researchers have provided evidence of significant influence of performance expectancy on user behavioral intention to adopt internet banking (AbuShanab *et al.*, 2010; Foon and Fah, 2011; Khalil *et al.*, 2010; Martins *et al.*, 2014; Oliveira *et al.*, 2016). In the light of reported evidence, the following hypothesis is proposed:

H1. Performance expectancy will be positively related to user intention to adopt internet banking.

Effort expectancy relates to user expectation toward ease. Authors like Zhou *et al.* (2010) demonstrated that "when user feels that internet banking is easy to use and does not require much effort, they would have high chances to adopt internet banking." Chaouali *et al.* (2016) argued that if users believe that online banking is effortless, then there are more chances of adoption. Earlier studies had confirmed a significant relationship between effort expectancy and user intention to adopt internet banking (Chaouali *et al.*, 2016; Martins *et al.*, 2014; Rahi and Abd. Ghani, 2018a; Riffai *et al.*, 2012). Thus, effort expectancy is hypothesized as:

H2. Effort expectancy will be positively related to user intention to adopt internet banking.

Effort expectancy of internet users will enhance performance expectancy of users toward the adoption of the technology (Chaouali *et al.*, 2016). This indicated that ease in technology use impacts user performance. Several other researchers showed significant influence of effort expectancy on performance expectancy of technology users (Al-Qeisi *et al.*, 2014; Oliveira *et al.*, 2016). Therefore, and based on existing literature (Al-Qeisi *et al.*, 2014; Chaouali *et al.*, 2016; Oliveira *et al.*, 2016), researchers assumed that effort expectancy of users will significantly influence the performance expectancy of internet banking users. Thus, effort expectancy is proposed as:

H3. Effort expectancy will be positively related to users' performance expectancy.

The relationship between social influence and behavioral intention is widely debated. Social influence is defined as the extent of social pressure exerted on individual to adopt new technology (Chaouali *et al.*, 2016; Kesharwani and Singh Bisht, 2012; Martins *et al.*, 2014). According to Martins *et al.* (2014), social influence will positively affect user intention to adopt internet banking services. Previous studies showed significant influence of social influence on internet banking users (Chaouali *et al.*, 2016; Kesharwani and Singh Bisht, 2012; Martins *et al.*, 2014). Following above arguments, social influence is hypothesized as:

H4. Social influence will be positively related to user intention to adopt internet banking.

Facilitating condition construct was drawn from perceived behavioral control and indicates that users require system availability at work place, including banks and markets. It is argued that the absence of technological infrastructure could demotivate users to adopt technology. According to Hong *et al.* (2008), "if users would not have necessary operational skills, they would have lower intention to adopt information technology." In line with

previous studies (Martins *et al.*, 2014; Oliveira *et al.*, 2016), researchers assumed that facilitating condition has a significant influence on users' intention to adopt internet banking. Following above arguments, facilitating condition is outlined as:

H5. Facilitating condition will be positively related to user intention to adopt internet banking.

2.2 Electronic service quality in banking

E-service qualities are identified as services that are offered online using internet or websites. Parasuraman *et al.* (2005) introduced e-service quality model and differentiated it from conventional SERVQUAL model. According to Parasuraman *et al.* (2005), e-service quality should cover the entire process of purchase from order to refund. Additionally, websites must contain appropriate information about product, online product search, online payment and pre- and post-purchase services to achieve customer satisfaction. This study has schematized four core dimensions of e-service quality, namely, assurance, reliability, customer service and website design, for internet banking service quality. These four e-service quality dimensions are in line with previous studies conducted by Al-Bakri and Katsioloudes (2015), Amin (2016), Blut (2016), Cristobal *et al.* (2007), Ho and Lin (2010), Parasuraman *et al.* (2005) and Wolfinbarger and Gilly (2003). E-service quality dimensions are exhibited in the research model as shown in Figure 1.

In online environment, assurance or guarantee is the main concern at customers' end. Earlier studies identified that customer wants to protect their personal information such as name, profession and place (Alghizzawi *et al.*, 2018; Holloway and Beatty, 2008). Researchers agreed upon customer assurance issue and have suggested that service providers should provide protection to customers. In case of theft or fraud during the use of internet banking, banks should be responsible to compensate. Following above arguments and in line with previous studies (Ben Mansour, 2016; Cristobal *et al.*, 2007; Devi Juwaheer *et al.*, 2012; Giovanis *et al.*, 2012; Holloway and Beatty, 2008; Liu and Arnett, 2000; Long and McMellon, 2004; Wolfinbarger and Gilly, 2003), researchers assumed that assurance enhances customer willingness to adopt internet banking. Thus, assurance is hypothesized as:
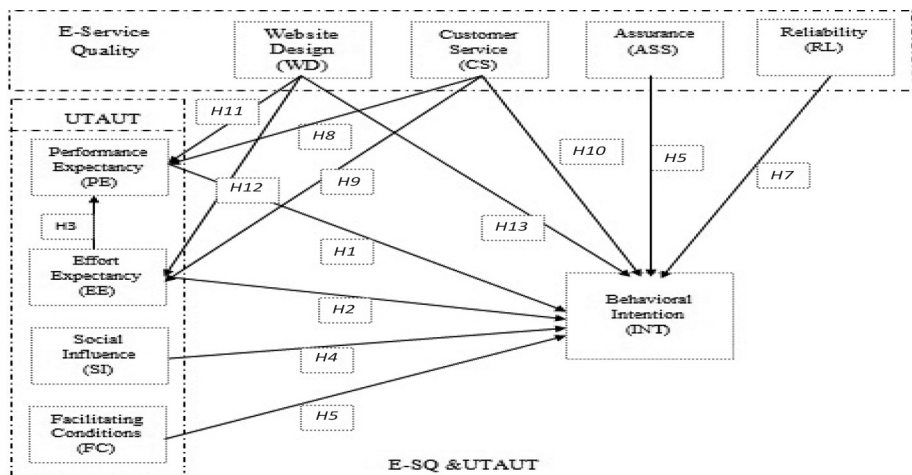

Figure 1.
The research model

H6. Assurance will be positively related to user intention to adopt internet banking.

In general, reliability is defined as the extent wherein "online website ability to ensure that customers receive what they thought they ordered" (Blut, 2016). Reliability also refers to the possibility of modifying or postponing the purchase process at any given moment with no obligation and obtaining information on product availability at the moment of purchase (Cristobal *et al.*, 2007; Rahi, 2016; Spake *et al.*, 2011). Reliability indicates that using online website, ordered product should be delivered at right place at the right price in a good condition. According to Blut (2016), customer expects that product description should be on the website and must be accurate. By following above arguments and based on existing literature (Blut, 2016; Cristobal *et al.*, 2007; Rahi, 2016; Spake *et al.*, 2011) reliability is hypothesized as:

H7. Reliability will be positively related to user intention to adopt internet banking.

Customer service refers to "online support prior to, during, or after the online order has been replaced" (Bauer *et al.*, 2006). In internet banking context, Ho and Lin (2010) stated that customer expects to be able to complete transactions correctly, receive personalized attention, receive the product on time and have their emails answered quickly. Customer service has a significant influence on user's intention to adopt internet banking (Blut, 2016; Cristobal *et al.*, 2007; Ho and Lin, 2010; Parasuraman *et al.*, 2005; Swaid and Wigand, 2007; Zeithaml, 2002). Customer service has proved to be a key element for achieving good website performance results in an online environment (Rahi *et al.*, 2017; Samar *et al.*, 2017). Additionally, customer service has a significant influence on user's effort expectancy toward the use of internet banking (Al-Qeisi *et al.*, 2014; Swaid and Wigand, 2007; Wang *et al.*, 2017a). By following above arguments, customer service is hypothesized as:

H8. Customer service will be positively related to user performance expectancy.

H9. Customer service will be positively related to user effort expectancy.

H10. Customer service will be positively related to user intention to adopt internet banking.

The pervasiveness of the internet technology in all business domains demands efficient design of the website (Blut, 2016; Kesharwani and Singh Bisht, 2012; Samar and Mazuri, 2019). Quality information on website always motivates users to buy a product on internet (Samar *et al.*, 2017). Holloway and Beatty (2008) postulated that attributes related to websites bring easiness and would increase the performance expectancy of the customers during online buying process. Website design has a significant impact on performance expectancy (Al-Qeisi *et al.*, 2014; Bashir and Madhavaiah, 2015). By following above arguments, it is assumed that website design has a significant influence on the performance expectancy of the internet banking users. Thus, website design is hypothesized as:

H11. Website design will be positively related to user performance expectancy.

H12. Website design will be positively related to user effort expectancy.

H13. Website design will be positively related to user intention to adopt internet banking.

2.3 The mediating effect of performance expectancy and effort expectancy
Effort expectancy is the degree of ease associated with consumers' use of technology (Venkatesh *et al.*, 2012). Effort expectancy has a significant influence on performance expectancy (Al-Qeisi *et al.*, 2014; Oliveira *et al.*, 2016). Zhou *et al.* (2010) demonstrated that when users feel that internet banking is easy to use and does not require much effort, they would have high chances of performance expectancy toward the use of technology (Jose and Soares, 2011; Rahi and Ghani, 2016a, 2016b; Soscia *et al.*, 2011). A well-designed website brings ease in technology use (Bauer *et al.*, 2006; Blut, 2016). It is found that attributes related to effort expectancy brought ease in website usage (Al-Qeisi *et al.*, 2014; Holloway and Beatty, 2008; Udo *et al.*, 2010). In light of above arguments, it is assumed that effort expectancy will mediate the relationship between website design and user performance expectancy. Thus, following hypothesis is proposed:

> *H14.* The positive relationship between website design and performance expectancy will be mediated by effort expectancy.

Holloway and Beatty (2008) stated that reliable service support is an important determinant of user's effort expectancy. Customer service was found to have a significant influence on user's effort expectancy toward the use of internet banking (Al-Qeisi *et al.*, 2014; Chakraborty, 2019; Swaid and Wigand, 2007; Wang *et al.*, 2017a). Customer service has proved to be a key element for achieving good website performance results in an online environment (Al-Qeisi *et al.*, 2014; Cristobal *et al.*, 2007; Ho and Lin, 2010; Wang *et al.*, 2017a; Zeithaml, 2002). By following above arguments, it is assumed that effort expectancy will influence the performance expectancy of internet banking users. Hence, effort expectancy is hypothesized as:

> *H15.* The positive relationship between customer service and performance expectancy will be mediated by effort expectancy.

Alalwan *et al.* (2014) postulated that performance expectancy is considered as a term of utility that is encountered during the use of internet banking. Previously, researchers have confirmed that performance expectancy is the most influential factor in the adoption of internet banking (AbuShanab *et al.*, 2010; Alalwan *et al.*, 2014; Martins *et al.*, 2014; Riffai *et al.*, 2012). Miltgen *et al.* (2013) have stated that effort expectancy contributes to acquire desired performance expectancy. According to Venkatesh *et al.* (2003a), when users feel that technology is easy to use and does not require much effort, they have higher expectation toward acquiring the desired performance. In light of above arguments, it is assumed that performance expectancy mediates the relationship between effort expectancy and intention to adopt internet banking.

> *H16.* The positive relationship between effort expectancy and intention to adopt internet banking will be mediated by performance expectancy.

3. Research design
3.1 Scale development
The survey instrument was designed to include a two-part questionnaire, including demographic and latent constructs items. The first part of the questionnaire incorporated demographic questions comprising age, gender and occupation of the respondents. Therefore, the second part of the questionnaire includes nine latent constructs, namely, performance expectancy, effort expectancy, social influence, facilitating condition, website

design, customer service, assurance and reliability. All the measurement items were adopted from previous literature and then adapted into current research context. Four items each for social influence, performance expectancy, effort expectancy and facilitating condition were adapted from Venkatesh *et al.* (2003a). Customer service was measured with four items and adapted from Ho and Lin (2010). Internet banking website design was measured with four items adapted from Samar *et al.* (2017). Concerning assurance, three items were adapted from Ho and Lin (2010). Therefore, reliability was measured with three items adapted from Wolfinbarger and Gilly (2003). Finally, behavioral intention was measured with three items adapted from Rahi *et al.* (2018b). The first part of the questionnaire includes nominal and ordinal scale. Therefore, the second part of the questionnaire includes seven-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). The questionnaire was developed and administered in English language. Survey questionnaire can be seen in Appendix.

3.2 Data collection
Following positivist paradigm, this study used quantitative research method. For sample size, the researcher has followed the guidelines provided by Hair (2007). According to Hair (2007), a study that seeks factor analysis must obtain responses five times or ten times greater than the accumulated items. Accordingly, the present study requires 175 (35×5) minimum or 350 (35×10) maximum responses. For data collection, convenience sampling approach was used. Researchers like Hulland *et al.* (2017) argued that when the aim of the research is to test the veracity of the data, the use of convenience sampling approach is adequate. To confirm whether the instrument is reliable and free from errors, a pilot survey was conducted with 100 responses in August 2017. The reliability analysis revealed that all construct items had substantial composite reliability and alpha. Therefore, an important change was made in customer service construct, wherein the loading of CS5 was less than 0.5. According to Henseler *et al.* (2009), the lowest loading could be deleted if the AVE is not appropriate. Thus, customer service item CS5 was deleted from the main survey. A survey was administrated to the customers of commercial banks. Respondents were asked whether they were familiar with internet or not? According to Venkatesh *et al.* (2012), internet users easily recall technology and service quality factors during the usage of technology. Thus, customers having know-how about internet were potential respondents for inclusion. Using convenience sampling approach, a set of 650 questionnaires was distributed among customers of commercial banks in Pakistan. Among them, 395 were returned with a response rate of 60 per cent and further used for inferential analysis.

3.3 Sample profile
Findings of demographic analysis showed that majority of the respondents were female ($n = 233$, 58.5 per cent), while the remaining ($n = 165$, 41.5 per cent) were males. Concerning age, findings revealed that young banking customers are more inclined toward the adoption of internet banking services. Additionally, respondents with the age of 41-50 years were only 48, 12.1 per cent, following the respondents of age 51-60 years 44, 11.1 per cent. Descriptive analysis showed that majority of the participants had graduate-level qualification ($n = 198$, 49.7 per cent), followed by those who had master-level qualification ($n = 121$, 30.4 per cent). Respondents were asked about their occupation. Findings revealed that the maximum number of the respondents were employed ($n = 223$, 56 per cent), followed by unemployed respondents ($n = 71$, 17.8 per cent). Overall, a good mixture of respondents had participated in the internet banking adoption survey.

3.4 Harman's single factor test

In quantitative research, studies that used single source for data collection may be affected because of common method variance bias (Rahi, 2017a, 2017b). Thus, testing CMV issue is important before inferential analysis. The present study incorporated Harman's single factor test for common method variance bias in line with Podsakoff *et al.* (2003). The criterion is that total explained variance should be less than 50 per cent. Results of Harman's single factor test revealed that the maximum co-variance explained by single factor solution was 29.62 per cent, indicating that this study is free from common method variance issue and adequate for inferential data analysis. Results of Harman's single factor test are depicted in Table I.

4. Data analysis

The present study confirms the significance of the causal relationships using structural equation modeling (SEM). There are two types of SEM approaches, namely, variance base SEM (PLS-SEM) and co-variance-based SEM (CB-SEM). Co-variance-based approach is suitable wherein the objective of the study is to test the theory instead of prediction. Therefore, variance-based approach focuses on theory development and prediction. The nature of this study is toward theory development and prediction; consequently, variance-based approach is more appropriate to be taken into consideration. SEM was estimated using a two-step approach including measurement model and structural model (Hair *et al.*, 2014; Rahi, 2017a, 2017b). For SEM, Smart PLS software 3.0 was used (Ringle *et al.*, 2015).

4.1 Measurement model

The first step of SEM was to assess the measurement model which includes the evaluation of construct reliability, indicator reliability, convergent validity and discriminant validity of the outlined constructs. Construct reliability was estimated with composite reliability and Cronbach's alpha. The criterion is that constructs' CR and α values should be greater than 0.7 which indicates adequate reliability of the construct (Hair *et al.*, 2016). Results of the measurement model as depicted in Table II showed that all constructs' CR and α values were greater than 0.70 confirming adequate reliability of the constructs. Indicator reliability was assessed with factor loading following the criterion that loading should be higher than 0.60 (Chin, 1998; Rahi, 2017a, 2017b). Results showed that loadings of all factors were acceptable. Convergent validity of the construct was assessed using average variance extracted (AVE). The criterion is that the values of AVE must be higher than 0.5 (Fornell and Larcker, 1981). Results revealed that all constructs had substantial AVE and confirmed the convergent validity of the constructs. The values of CR, α, indicator loadings and AVE are depicted in Table II.

The assessment of measurement model is included the evaluation of discriminant validity of the constructs. To assess the discriminant validity of the constructs, three types of methods are used, namely, Fornell and Larcker criterion, cross-loadings and Heterotrait–Monotrait ratio (HTMT). Initially discriminant validity of the construct was tested with

		Total variance explained				
Component		Initial eigenvalues			Extraction sums of squared loadings	
	Total	% of variance	Cumulative (%)	Total	% of variance	Cumulative (%)
1	10.367	29.62	29.62	10.367	29.62	29.62

Table I.
Harman's single factor solution

Variable	Factor loading	α	CR	AVE
Performance expectancy (PE)		0.899	0.929	0.767
PE1	0.903			
PE2	0.867			
PE3	0.874			
PE4	0.858			
Assurance (ASS)		0.969	0.979	0.941
ASS1	0.973			
ASS2	0.961			
ASS3	0.976			
Customer service (CS)		0.709	0.818	0.534
CS1	0.787			
CS3	0.847			
CS4	0.624			
CS6	0.639			
Effort expectancy (EE)		0.919	0.944	0.808
EE1	0.800			
EE2	0.957			
EE3	0.939			
EE4	0.891			
Facilitating condition (FC)		0.791	0.864	0.615
FC1	0.791			
FC2	0.776			
FC3	0.798			
FC4	0.771			
Intention to adopt (INT)		0.859	0.914	0.780
INT1	0.864			
INT2	0.891			
INT3	0.894			
Reliability (REL)		0.851	0.910	0.771
REL1	0.832			
REL2	0.894			
REL3	0.906			
Social influence (SI)		0.774	0.852	0.591
SI1	0.839			
SI2	0.786			
SI3	0.767			
SI4	0.674			
Website design (WD)		0.895	0.927	0.760
WD1	0.920			
WD2	0.834			
WD3	0.947			
WD4	0.776			

Table II.
Assessing
measurement model

Fornell and Larcker criterion (Fornell and Larcker, 1981). The criterion is that "the average variance shared between each construct and its measure should be greater than the variance shared between the constructs and other constructs" (Compeau *et al.*, 1999; Rahi, 2018). Results of PLS algorithm revealed that the square root of the AVE was higher than

corresponding row and column correlation values of the constructs which confirmed the discriminant validity of the constructs. Discriminant validity of the constructs can be seen in Table III.

Another method for the measurement of discriminant validity is to assess the cross-loadings of the indicators (Hair *et al.*, 2016). The cross-loading method suggests that the outer loading of the construct should be greater than the corresponding construct loading, indicating adequate discriminant validity of the construct (Rahi, 2017a, 2017b). The present study confirmed the discriminant validity of the constructs, as all construct loadings were higher than other constructs. Finally, discriminant validity was checked with HTMT ratio. This method estimates discriminant validity of the construct using multitrait and multimethod matrix also known as HTMT ratio. The results of the HTMT can be seen in Table IV, wherein all the values are lower than the required threshold values of 0.85 as suggested by Kline (2011) and 0.90 as suggested by Gold and Arvind Malhotra (2001), indicating adequate discriminant validity of the measure. In addition to that, the researcher has examined confidence interval (CI) values as suggested by Henseler *et al.* (2015). Confidence interval values as depicted in Table IV showed that neither lower nor upper confidence interval includes 1, indicating that the construct is discriminant and adequate for structural model assessment (Henseler *et al.*, 2015).

4.2 Structural model

Structural model examines causal relationship among exogenous and endogenous variables. The first step of structural model is to assess multicollinearity issues with variance inflation factor (VIF). The measurement model confirms vertical collinearity; therefore, it does not guarantee for lateral collinearity. Researchers like Kock and Lynn (2012) argued that lateral collinearity or predictor-criterion collineraity may misled findings interpretation. To achieve adequate lateral collineraity, the criterion is that the values of exogenous variables should be lower than 3.3 when comparing with endogenous variables (Diamantopoulos and Siguaw, 2006). Results revealed that multicollinearity is not a likely issue in this study, as the values of VIF were less than 3.3. Table V showed the results of VIF values.

4.2.1 Hypothesis testing. Structural model assessment includes testing of hypothesis. The significance and relevance of the path were tested using the bootstrapping procedure with a re-sample of 5,000 responses. The path estimates, *t*-statistics and confidence interval values were calculated for the hypothesized relationships. Table VI presents a comparison of UTAUT and integrated UTAUT model (UTAUT + E-SQ).

Variables	ASS	CS	EE	FC	INT	PE	RL	SI	WD
Assurance	*0.970*								
Customer service	0.460	*0.731*							
Effort expectancy	0.271	0.267	*0.899*						
Facilitating condition	0.363	0.312	0.140	*0.784*					
Intention	0.776	0.554	0.430	0.438	*0.883*				
Performance expectancy	0.521	0.438	0.369	0.296	0.657	*0.876*			
Reliability	0.506	0.458	0.317	0.279	0.692	0.548	*0.878*		
Social influence	0.042	0.083	0.119	0.102	0.168	0.091	0.089	*0.769*	
Website design	0.287	0.306	0.279	0.234	0.454	0.448	0.283	0.116	*0.872*

Note: Diagonal represents the square root of the AVE, while off-diagonal represents the correlations

Table III.
Discriminant validity using Fornell and Larcker's criterion

	ASS	CS	EE	FC	INT	PE	RL	SI	WD
ASS	—								
CS	0.576 CI.90 (0.474, 0.673)								
EE	0.289 CI.90 (0.187, 0.39)	0.306 CI.90 (0.215, 0.39)							
FC	0.415 CI.90 (0.327, 0.498)	0.411 CI.90 (0.314, 0.532)	0.164 CI.90 (0.08, 0.262)						
INT	0.835 CI.90 (0.791, 0.873)	0.703 CI.90 (0.594, 0.797)	0.484 CI.90 (0.389, 0.572)	0.532 CI.90 (0.447, 0.607)					
PE	0.569 CI.90 (0.484, 0.651)	0.527 CI.90 (0.424, 0.629)	0.402 CI.90 (0.311, 0.493)	0.346 CI.90 (0.264, 0.433)	0.742 CI.90 (0.654, 0.815)				
RL	0.561 CI.90 (0.47, 0.63)	0.579 CI.90 (0.469, 0.67)	0.358 CI.90 (0.269, 0.463)	0.339 CI.90 (0.248, 0.435)	0.81 CI.90 (0.724, 0.892)	0.623 CI.90 (0.521, 0.72)			
SI	0.051 CI.90 (0.018, 0.072)	0.107 CI.90 (0.049, 0.15)	0.138 CI.90 (0.065, 0.21)	0.125 CI.90 (0.065, 0.187)	0.198 CI.90 (0.119, 0.279)	0.109 CI.90 (0.057, 0.175)	0.11 CI.90 (0.057, 0.18)		
WD	0.294 CI.90 (0.203, 0.384)	0.340 CI.90 (0.244, 0.425)	0.298 CI.90 (0.203, 0.395)	0.269 CI.90 (0.181, 0.387)	0.505 CI.90 (0.409, 0.596)	0.474 CI.90 (0.388, 0.567)	0.308 CI.90 (0.185, 0.418)	0.133 CI.90 (0.068, 0.208)	—

Table IV.
Heterotrait–
Monotrait ratio
(HTMT)

Structural model results revealed that constructs underpinned UTAUT explained 53.9 per cent variance in user intention to adopt internet banking in Pakistan. Causal relationship between performance expectancy and intention to adopt internet banking was statistically significant (PE -> INT, β = 0.498, t-value = 9.286, significance = $p < 0.01$). Effort expectancy of internet banking users was found to be significant (EE -> INT, β = 0.204, t-value = 4.092, significance = $p < 0.01$). Similarly, effort expectancy had a significant influence on the performance expectancy and was statistically confirmed (EE -> PE, β = 0.369, t-value = 7.22, significance = $p < 0.01$). The relationship between social influence and intention to adopt internet banking was also found to be significant (SI -> INT, β = 0.075, t-value = 2.291, significance = $p < 0.01$). Finally, facilitating condition showed significant influence on users' intention to adopt internet banking and was statistically supported (FC -> INT, β = 0.255, t-value = 5.982, significance = $p < 0.01$).

The present study integrates unified theory of acceptance and use of technology (UTAUT + E-SQ). Structural model results showed that altogether performance expectancy, effort expectancy, social influence, facilitating condition, website design, customer service, reliability and assurance explained 80.2 per cent variance in users' intention to adopt internet banking in Pakistan. Performance expectancy had a significant

Variables	EE-VIF	INT-VIF	PE-VIF
Customer assurance (ASS)		1.67	
Customer service (CS)	1.103	1.478	1.148
Effort expectancy (EE)		1.219	1.128
Facilitating condition (FC)		1.217	
Intention (INT)		NA	
Performance expectancy (PE)		1.89	
Reliability (RL)		1.683	
Social influence (SI)		1.030	
Website design (WD)	1.103	1.312	1.157

Table V.
Lateral collinearity estimation

	Intention (INT) R^2 Hypothesis	UTAUT 0.539			UTAUT + E-SQ 0.802		
		β	SE	t-statistic	β	SE	t-statistic
H1	PE -> INT	0.498	0.054	9.286**	0.120	0.043	2.785**
H2	EE -> INT	0.204	0.05	4.092**	0.107	0.029	3.718**
H3	EE -> PE	0.369	0.051	7.22**	0.207	0.054	3.830**
H4	SI -> INT	0.075	0.033	2.291*	0.073	0.023	3.197**
H5	FC -> INT	0.255	0.043	5.982**	0.094	0.025	3.744**
H6	ASS -> INT				0.444	0.058	7.702**
H7	RL -> INT				0.268	0.048	5.557**
H8	CS -> PE				0.290	0.054	5.343**
H9	CS -> EE				0.200	0.052	3.844**
H10	CS -> INT				0.076	0.041	1.851*
H11	WD -> PE				0.302	0.049	6.218**
H12	WD -> EE				0.217	0.057	3.833**
H13	WD -> INT				0.114	0.030	3.761**

Table VI.
Hypothesis testing

Notes: *$p<0.05$; **$p>0.01$

influence on users' intention (PE -> INT, β = 0.120, t-value = 2.785, significance $p < 0.01$), confirming H1. The causal relationship between effort expectancy and user intention was significant and confirmed H2 (EE -> INT, β = 0.107, t-value = 3.718, significance = $p <$ 0.01). Effort expectancy had a significant influence on performance expectancy (EE -> PE, β = 0.207, t-value = 3.830, significance = $p < 0.01$), hence confirming H3. Social influence had a significant influence on users' intention to adopt internet banking (SI -> INT, β = 0.073, t-value = 3.197, significance = $p < 0.01$), supporting H4. Facilitating condition had a significant influence on users' intention to adopt internet banking (FC -> INT, β = 0.094, t-value = 3.744, significance = $p < 0.01$) and confirmed H5.

Concerning e-service quality constructs, results revealed that assurance had a significant influence on internet banking users' intention (ASS -> INT, β = 0.444, t-value = 7.702, significance = $p < 0.01$) and supported H6. Reliability had a significant influence on users' intention to adopt internet banking (RL -> INT, β = 0.268, t-value = 5.557, significance = $p < 0.01$) and confirmed H7. Customer service had a significant influence on performance expectancy, effort expectancy and users' intention to adopt internet banking (CS -> PE, β = 0.290, t-value = 5.343, significance = $p < 0.01$; CS -> EE, β = 0.200, t-value = 3.844, significance = $p < 0.01$; CS -> INT, β = 0.076, t-value = 1.851, significance = $p < 0.01$) and confirmed H8, H9 and H10. Finally, website design had a significant influence on performance expectancy, effort expectancy and users' intention to adopt internet banking (WD -> PE, β = 0.302, t-value = 6.218, significance = $p < 0.01$; WD -> EE, β = 0.217, t-value = 3.833, significance = $p < 0.01$; WD -> INT, β = 0.114, t-value = 3.761, significance = $p < 0.01$), hence confirming H11, H12 and H13.

4.2.2 Effect sizes (f^2) analysis. The results of the SEM showed accumulated variance of 80.2 per cent in users' intention to adopt internet banking. Therefore, effect size of each construct at an individual level is yet to be calculated. Thus, help was taken from effect size (f^2) analysis. Effect size (f^2) was calculated following the criterion suggested by Cohen (1988). The criterion is that effect size (f^2) values accounted substantial (0.35), medium (0.15) and small effect sizes (0.02) (Cohen, 1988). The results of effect size analysis can be seen in Table VII.

Table VII depicts three endogenous variables, namely, users' intention to adopt internet banking, performance expectancy of internet banking users and effort expectancy of internet banking users. Looking at users' intention to adopt internet banking, customer assurance was the most important factor and had substantial effect size. Therefore, customer reliability is the second most important factor and had medium level of effect size. Concerning performance expectancy and effort expectancy of internet banking users, findings revealed that all exogenous variables had small effect sizes.

4.2.3 Predictive relevance Q^2. Although integrated UTAUT model showed substantial variance in users' intention to adopt internet banking. Therefore, the present study goes a step forward and examines predictive relevance of the model using the blindfolding procedure. According to Hair *et al.* (2016), the blindfolding procedure shows how constructs' values are well-observed by reconstructing parameters' estimates. In addition to that, the blindfolding procedure can be applied only on endogenous constructs having reflective indicators. Predictive relevance of the model is calculated collectively with Q^2 including all factors and at individual level (single factor) (q^2). Table VIII presents the results of predictive relevance Q^2 and (q^2).

Results of the blindfolding procedure revealed that predictive relevance of the model was substantial at 57.8 per cent and confirmed the integration of UTAUT model with e-service quality in internet banking adoption context. Concerning other endogenous variables predictive relevance, findings showed that performance expectancy had medium predictive

Variables	R^2	f^2	Effect size
User intention to adopt internet banking			
User intention	80.2%		
Customer assurance		0.595	Substantial
Customer service		0.020	Small
Effort expectancy		0.047	Small
Facilitating condition		0.036	Small
Performance expectancy		0.039	Small
Reliability		0.215	Medium
Social influence		0.026	Small
Website design		0.050	Small
Performance expectancy of internet banking user			
Performance expectancy	33.9%		
Website design		0.119	Small
Customer service		0.111	Small
Effort expectancy		0.058	Small
Effort expectancy of internet banking user			
Effort expectancy	11.4%		
Customer service		0.041	Small
Website design		0.048	Small

Table VII.
Effect size analysis

Variable	R^2	Q^2	(q^2)	Decision
User intention to adopt internet banking				
User intention	0.802	0.578		
Customer assurance			0.180	Medium
Customer service			0.005	Small
Performance expectancy			0.012	Small
Reliability			0.073	Small
Effort expectancy			0.016	Small
Facilitating condition			0.009	Small
Website design			0.019	Small
Social influence			0.007	Small
Performance expectancy of internet banking user				
Performance expectancy	0.339	0.235		
Customer service			0.066	Small
Effort expectancy			0.033	Small
Website design			0.069	Small
Effort expectancy of internet banking user				
Effort expectancy	0.114	0.085		
Customer service			0.029	Small
Website design			0.034	Small

Table VIII.
Predictive relevance
Q^2 and (q^2) analysis

relevance; therefore, effort expectancy had small predictive relevance. The values of Q^2 indicate collective view of predictive relevance; therefore, small predictive relevance (q^2) shows actual predictive relevance size. Results of small predictive relevance (q^2) revealed that assurance had a medium level of predictive relevance with users' intention to adopt

internet banking. Therefore, all other exogenous variables had a small level of predictive relevance with their respective endogenous variables.

4.2.4 Importance performance matrix analysis (IPMA). This study extends the SEM and applied a post-hoc analysis importance performance matrix analysis (IPMA). Earlier studies have highlighted the importance of IPMA analysis (Ghani *et al.*, 2017; Rahi and Abd. Ghani, 2019). According to Rahi and Abd. Ghani (2019), IPMA helps managers to understand the importance and performance of the factors separately. In IPMA, the importance and performance values can be calculated by rescaling original data from 0 to 100. IPMA output generates two types of values, namely, total effects (Importance values) and performance index values of the constructs. The criterion is that outcome variable should identify before estimation. Therefore, the present study outlined users' intention to adopt internet banking as an outcome variable. Results of IPMA analysis can be seen in Table IX.

The index values and total effects scores shown in Table IX depict that customer assurance has the highest importance value in IPMA and was considered as an important factor for managerial attention. Reliability is the second most important factor to understand users' intention to adopt internet banking. Contrary to our expectations, social influence was the least important factor and had lowest importance values among other constructs. Although social influence had highest performance index, for managerial implication, it is not an important factor to be taken into consideration. Other constructs like customer service and website design stand at the intermediate level in terms of importance. Therefore, the importance of performance expectancy and effort expectancy lagged behind customer assurance. The index values and total effects of the constructs are shown in IPMA map (Figure 2).

4.2.5 The mediating analysis. To test the mediating relationship, this study followed guidelines provided by Preacher and Hayes (2004, 2008). According to Preacher and Hayes (2008), the criterion indirect effect should be calculated at 95 per cent boot confidence interval with lower and upper value (CI: LL-UL). In addition to that, "0" does not straddle between variables, indicating adequate mediation. For mediation estimation, bootstrapping method and indirect effect were used. Bootstrap results show that the indirect effect (WD -> EE -> PE, $\beta = 0.217 \times 0.207 = 0.045$, *t*-values of 2.727) was significant at $p < 0.01$. Extending to this indirect effect 0.045, 95 per cent boot CI (LL = 0.019, UL = 0.085) does not straddle a 0 in between. These findings confirmed *H14*, which indicates that effort expectancy mediates the relationship between website design and performance expectancy.

The mediating relationship of effort expectancy between customer service and performance expectancy was calculated with bootstrap procedure. The indirect effect shows that effort expectancy mediates the relationship between customer service and performance expectancy (CS -> EE -> PE, $\beta = 0.200 \times 0.207 = 0.041$, *t*-value of 2.716 at $p < 0.01$) and

Underpinned variables	Importance values/Total effects	Performance index values
User intention to adopt internet banking		
Customer assurance	0.404	71.338
Website design	0.170	61.391
Customer service	0.159	59.661
Reliability	0.271	66.190
Effort expectancy	0.125	60.355
Facilitating condition	0.097	70.482
Performance expectancy	0.121	59.706
Social influence	0.045	77.712

Table IX.
Importance
performance matrix
analyses

confirmed *H15*. Following guidelines provided by Preacher and Hayes (2004, 2008), the researcher confirmed that the indirect effect [0.041, 95 per cent boot CI: (LL = 0.017, UL = 0.077)] does not straddle a 0 in between, which indicates significance of the mediating relationship. Performance expectancy was considered as a mediating variable between effort expectancy and users' intention to adopt internet banking. The mediating relationship of performance expectancy was tested with indirect effect. Results of the indirect effect revealed that performance expectancy mediates the relationship between effort expectancy of internet banking users and intention to adopt internet banking (EE -> PE -> INT, β = $0.207 \times 0.120 = 0.025$, *t*-value of 2.079, at $p < 0.05$), hence confirming *H16*. Significance of the meditating relationship was also tested with confidence interval values [0.025, 95 per cent boot CI: (LL = 0.007, UL= 0.056)] indicate "0" does not straddle in between, confirming the significant mediating role of performance expectancy.

5. Discussion

Findings of SEM revealed several insightful outcomes. First, this study confirmed that the extension of UTAUT model with e-service quality (UTAUT+E-SQ) was theoretically and statistically valid. Results showed that altogether website design, customer service, reliability, assurance, performance expectancy, effort expectancy, social influence and facilitating condition explained R^2 of 80.2 per cent variance in internet user's intention to adopt internet banking. These findings indicate that explanatory power was substantial in determining user intention. The second part of the research model explained that constructs including customer service, website design and effort expectancy explained R^2 of 33.9 per cent variance in performance expectancy. This showed that website design, customer service and effort expectancy are important factors to boost internet user performance expectancy. Within the integrated model, the third part of the research model showed that effort expectancy was measured with customer service, and website design explained R^2 of 11.4 per cent variance in user effort expectancy.

Concerning with causal relationship among outlined variables, results revealed that the relationship between performance expectancy and intention to adopt internet banking was found to be significant and the finding was in line with that of Tam and Oliveira (2016). Effort expectancy had a significant influence on performance expectancy and the finding was in line with that of Morosan and DeFranco (2016). The relationship between social influence and intention to adopt internet banking was also found to be significant and the finding was in line with that of Rahi *et al.* (2018b) and Venkatesh *et al.* (2012). Facilitating
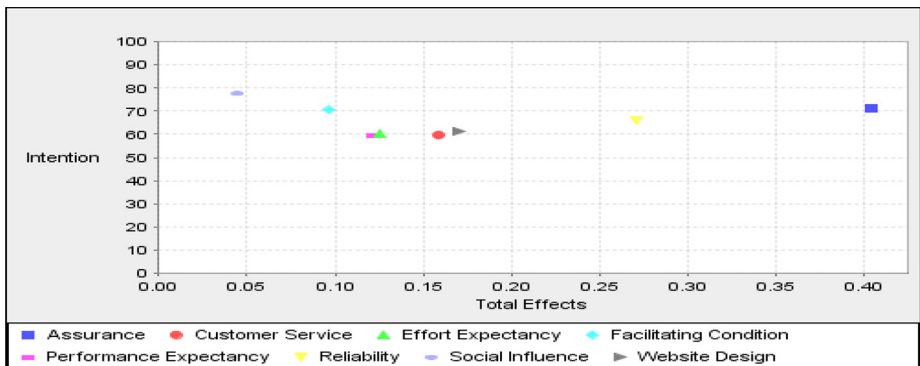

Figure 2.
Importance performance map

condition had a significant influence on user intention to adopt internet banking and the finding was in line with that of Rahi *et al.* (2018a). Extending this to e-service quality constructs, results revealed that assurance had a significant influence on internet banking user intention and the finding was in line with that of Cristobal *et al.* (2007). Similarly, other e-service quality constructs such as reliability, website design and customer service had a significant influence on user intention to adopt internet banking and the finding was in line with that of Cristobal *et al.* (2007), Parasuraman *et al.* (2005); Wolfinbarger and Gilly (2003).

Aside of direct causal relationships, cross-comparison was made between integrated unified theory of acceptance and use of technology (UTAUT + E-SQ) and UTAUT. Findings of cross-comparison revealed that factors underpinned UTAUT model explained R^2 of 53.9 per cent variance in internet user's intention, as compared to the integrated (UTAUT + E-SQ) model that explained R^2 of 80.2 per cent variance in user intention to adopt internet banking. These findings confirmed the validity of the model as the values of coefficient of determination R^2 were significantly increased (0.539 versus 0.802). Moving toward mediating variables, findings revealed that effort expectancy mediates the relationship between website design and performance expectancy and the finding was in line with that of Kant and Jaiswal (2017). The mediating relationship of effort expectancy between customer service and performance expectancy was also found to be significant and the finding was in line with that of Ahmad and Al-Zu'bi (2011). Findings also revealed that performance expectancy mediates the relationship between effort expectancy of internet banking users and intention to adopt internet banking and the finding was in line with that of Ahmad and Al-Zu'bi (2011) and Wang *et al.* (2017b). Thus, the current study confirmed the mediating effect of performance expectancy and effort expectancy among website design, customer service and user intention to adopt internet banking.

6. Implications

6.1 Theoretical implications

Theoretically, this study has several contributions to theory and practice. This study is the first in its nature that integrates UTAUT model with e-service quality. Integration of UTAUT model with e-service quality contributes to the UTAUT theory. In addition to that, this study combines technological factors and social psychological factors and investigates users' intention toward the adoption of internet banking. Integrated UTAUT model showed substantial coefficient of determination which confirmed the validity of the research model. Concerning e-service quality, this study first schematized four dimension of e-service quality and then investigated these dimensions in the internet banking adoption context. Results of the SEM confirmed that website design, customer service, assurance and reliability had a significant influence on users' intention to adopt internet banking. Thus, the present study contributes to e-service quality literature and enriches e-service quality literature in internet banking adoption context. Earlier studies identified performance expectancy and effort expectancy as core determinants of website design and customer service. Therefore, the present study goes a step further and investigates the mediating role of performance expectancy and effort expectancy among website design, customer service and users' intention to adopt internet banking. Hence, examining the mediating role of performance expectancy and effort expectancy as mediating variables contributes to information system and e-service quality literature.

6.2 Managerial implications

The present study contributes to practice and provides unique directions to managers and policy-makers to enhance the internet banking adoption trend in Pakistan. First, the

integrated model showed that customer assurance is the most important variable among all other technological and service quality variables. This indicates that internet banking users are more concerned about assurance and guarantee. Therefore, for managers and policy-makers, it is suggested that they should reveal fair policy of money refund in case of internet scam. In addition to that, internet banking website must contain ample information that guarantees customers that financial transaction is secure and safe while using internet banking. Reliability was found to be the second most important factor that impacts users' intention to adopt internet banking. Thus, managers and policy-makers should introduce reliable internet banking services. Findings of the IPMA showed that social influence has the least importance; therefore, customer assurance and reliability were considered the most important factors to determine users' intention to adopt internet banking. The role of website design and customer service was also significant to predict user intention. Overall, this study revealed that factors underpinned UTAUT theory and e-service quality were important and need to be taken into consideration. Thus, managers and policy-makers should ensure that internet banking website is technically sound and fulfill customer requirements, including assurance and reliability. Similarly, appropriate website design and adequate customer service can boost customer confidence toward the adoption of internet banking.

7. Conclusion

This study concludes that the extension of UTAUT model with e-service quality was theoretically and statistically valid and had significant impact on users' intention to adopt internet banking. Findings of the SEM revealed that altogether website design, customer service, reliability, assurance, performance expectancy, effort expectancy, social influence and facilitating condition explained R^2 of 80.2 per cent variance in internet user's intention to adopt internet banking. On the flip side, performance expectancy was predicted by customer service, website design and effort expectancy and explained R^2 of 33.9 per cent in user performance expectancy. Similarly, effort expectancy was measured with customer service and website design and explained R^2 of 11.4 per cent variance in user effort expectancy. Aside the direct causal relationships, cross-comparison was made between UTAUT + E-SQ and original UTAUT. Findings of cross-comparison revealed that factors underpinned UTAUT model explained R^2 of 53.9 per cent variance in internet user's intention, as compared to the integrated (UTAUT + E-SQ) model that explained R^2 of 80.2 per cent variance in users' intention to adopt internet banking. These findings confirmed the validity of the model as the values of coefficient of determination R^2 were significantly increased (0.539 versus 0.802). Additionally, this study outlined performance expectancy and effort expectancy as the mediating variables among customer service, website design and users' intention to adopt internet banking. Mediating analysis showed that performance expectancy mediates the relationship between customer service and user intention to adopt internet banking. Therefore, effort expectancy mediates the relationship between website design and performance expectancy. Investigating the mediating role of performance expectancy and effort expectancy among website design, customer service and users' intention to adopt internet banking enriches the study findings. Theoretically, this study contributes to information system and e-service quality literature. For managerial implications, help was taken from IPMA. IPMA analysis showed that mangers and policy-makers should focus on customer assurance and reliability to enhance the internet banking adoption trend among customers of commercial banks in Pakistan.

7.1 Limitations and future research directions
Beside the contributions to services marketing and information system literature, it is important to highlight study limitations which emanate future research directions. First, this study had outlined user intention to adopt internet banking as an outcome variable; therefore, integrating actual usage of internet banking as endogenous variable could reveal interesting findings. Second, data were collected from metropolitan cities of Pakistan; adding respondents from countryside may enhance the veracity of the data. This study is cross-sectional and had examined internet banking adoption problem at one point of time. Future researchers may analyze this study in longitudinal mode. Finally, the integration of unified theory of acceptance and use of technology with e-service quality was in the internet banking adoption context. Therefore, the investigation of this research model in other online domains would be interesting, such as online shopping website or small and medium financial websites. Finally, the newly developed integrated technology model (UTAUT + E-SQ) was established in south Asian region. Therefore, examining the role of integrated UTAUT model in other emerging countries may enhance the generalization of the model.

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Appendix

Questionnaire/Items	Source
Effort expectancy (*EE*) It is easy for me to become skillful by using internet banking services I believe that learning to operate internet banking services is easy for me As internet user my interaction with internet banking is clear and understandable I find internet banking easy to use for daily financial operations	Venkatesh *et al.* (2003b, 2011)
Performance expectancy (*PE*) Internet banking will increase my productivity I believe that using internet banking will improve my performance I think that internet banking is useful to carry out my daily tasks Use of internet banking will enable me to conduct financial tasks more quickly	Ghani *et al.* (2017), Venkatesh *et al.* (2003b)
Assurance (*ASS*) Internet banking transactions using website are reliable As internet user, I feel relieved to transact through internet banking I believe that transaction data are protected by internet banking website	Ho and Lin (2010)
Customer service (*CS*) Internet banking website guides me to solve technical problems Internet banking website page loaded quickly Internet banking website performs service correctly Overall online transaction process is accurate	Ho and Lin (2010)
Intention to adopt (*INT*) I intend to adopt internet banking in next months I predict I will use internet banking in next month I have a plan to adopt internet banking in next three months	Venkatesh *et al.* (2003b)
Reliability (*REL*) In internet banking website you get what you order Financial transaction that is done using internet banking website processed accurately Financial transaction is done by the time promised by the internet banking website	Wolfinbarger and Gilly (2003)
Social influence (*SI*) In my social circle people who influences on my behavior think that I should use internet banking services In my social circle people who are important to me think that I should use internet banking services In my social circle internet banking services is considered important for financial transactions In my social circle people whose opinions that I value prefer that I use internet banking services	Venkatesh *et al.* (2003b)

Table AI.
Survey questionnaire

(*continued*)

Questionnaire/Items	Source
Website design (WD) Internet banking website design helps me to complete online transactions easily Internet banking website design provides smooth flow for sign up Internet banking website design is easy to understand Internet banking website design enables me to proceed with one click	Samar *et al.* (2017)
Facilitating condition (FC) For internet banking user a specific person is always available for assistance For me, internet banking usage is compatible comparing with other technologies For internet banking I have necessary technical resources For internet banking I have necessary knowledge to use the internet banking services	Ghani *et al.* (2017), Venkatesh *et al.* (2003b)

Table AI.

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