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***Determinants Of Mobile Banking Adoption in Rawalpindi and Islamabad Pakistan; extending UTAUT2 With Self Efficacy and Status Gain***



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## **ABSTRACT**

The swift evolution of digital banking has altered the landscape of financial services; however, it is essential to comprehend the elements that impact individuals' transitions from first-time adoption to regular use of mobile banking, particularly in developing countries like Pakistan. This research examines the factors influencing mobile banking use by extending the Unified Theory of Acceptance and Use of Technology (UTAUT2) with additional elements, such as self-efficacy and status gain, to provide a clearer understanding of user frequencies and behaviors.

A quantitative research methodology was utilized, and primary data were gathered through a structured questionnaire employing a five-point Likert scale. The study focused on mobile banking users in Islamabad and Rawalpindi, Pakistan, using a non-probability convenience sampling method. The data collected were analyzed with the help of the Statistical Package for Social Sciences (SPSS). Reliability was evaluated using Cronbach's alpha, followed by descriptive statistics, correlation analysis, and multiple regression analysis to validate the proposed hypotheses. The results demonstrate that performance expectancy, hedonic expectancy, habit, self-efficacy, and status gain significantly positively influence the frequency to utilize mobile banking services, while other factors demonstrate varying degrees of impact. The findings highlight the significance of both functional and psychological aspects in determining frequent mobile banking usage. This research adds to the existing body of literature by offering empirical insights from Pakistan and by broadening the UTAUT2 model with context-specific variables.

The results provide actionable suggestions for banks, policymakers, and fintech developers, highlighting the necessity to boost user confidence, perceived usefulness, and experiential value to foster ongoing adoption of mobile banking. This study has specific limitations despite its contributions. The research utilizes a cross-sectional approach and a convenience sampling method, which may hinder the applicability of the results beyond the chosen areas of Islamabad and Rawalpindi. Future studies could overcome these limitations by adopting longitudinal methodologies, utilizing probability sampling methods, and involving larger sample sizes from a variety of geographic areas to strengthen the validity and applicability of the findings.

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# **CHAPTER 1:**

## **INTRODUCTION**

### **1.1 Background**

The high rate of the development of information and communication technologies has resulted in the development of the most basic changes in the delivery of banking services within the context of the international scope. Modern banking organizations are becoming increasingly reliant on electronic platforms in order to provide services previously limited to the physical presence of a branch of premises. Electronic banking (mobile banking) is a phenomenon that supports conducting the financial transactions through the systems and mobile apps on the internet, which increases convenience and efficiency on a daily banking processes (Yaseen and Qirem, 2018).

Digital transformation has increasingly been adopted in the banking sector in Pakistan due to the changing consumer demands and increased competition in the banking sector. The services of mobile banking and internet banking have become more visible and accessible, especially in urban areas like Islamabad or Rawalpindi. These modalities are time-saving, economical, and flexible to the traditional banking approaches (State Bank of Pakistan, 2022). However, just the presence of these digital services does not necessarily mean that they will be used on a certain or constant basis.

### **Mobile Banking:**

In this study, mobile banking is examined not only in terms of access but also in terms of users' intention to use it frequently. Mobile banking refers to the use of mobile devices, such

as smartphones or tablets, to access and conduct banking and financial transactions through bank-provided applications or mobile web platforms. It enables customers to perform a wide range of services, including balance inquiries, fund transfers, bill payments, and account management, anytime and anywhere without the need to visit a physical bank branch. Mobile banking is considered a key component of electronic banking, offering convenience, speed, and real-time access to financial services while relying on secure digital and wireless communication technologies.

The empirical literature indicates that despite a significant percentage of customers' initial adoption of mobile banking services, a significant drop in sustained adoption is often noted in the long run (Venkatesh et al., 2012). The consumers could install banking apps or even test online banking options but do not make them a part of their daily financial life. Limited technological confidence, not clearly set performance benefits, insecure enjoyment, and poor habit formation may also be factors that lead to infrequent use. Therefore, the understanding of these determinants is vital in banks that aim at enhancing the long-term involvement in their online platforms.

Despite the growing collection of digital banking offerings in Pakistan, financial institutions face the challenge of encouraging users to shift between initial usage to achieving consistent and regular usage. It might be that many people will download or trial m-banking applications, and they do not absorb them into their daily financial practices. It is thus urgent to know the factors that determine the willingness of users to switch to another level of usage that is habitual. This study examines this transition by making a relevant addition to the Unified Theory of Acceptance and Use of Technology (UTAUT2) with self-efficacy and

status gain construct having been added, and within the local context of Islamabad and Rawalpindi, Pakistan.

## **1.2 Research Gap**

Although the adoption of electronic banking services has been well studied in the past, much of what has been researched has been based on the initial adoption of digital banking services by the users. However, the focus has not put much emphasis on post-adoption behavior, most specifically the first-time to continuous and regular use of the mobile banking services. Digital preparedness, infrastructure, and user readiness differ notably in the developing nations, including Pakistan, which is the true subject of this lacuna.

Besides, despite the broad application of the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) in research related to technology acceptance, little has been done to explain regular mobile banking usages. The ability of self-efficacy to interact with status gain in influencing the continued usage frequency has not been adequately investigated within the Pakistani banking context. Empirical evidence is therefore in short supply in clarifying determinants that are employed by some users to become regular mobile banking users and others abandon their use after the initial adoption. This gap is intended to be closed by the current research, which aims at examining the behavioral, functional, and social determinants of frequent mobile banking usage.

## **1.3 Problem Statement**

Although most Pakistani banks have made more investments in digital banking infrastructure, the banks still face the challenge of motivating customers to resort to mobile banking services

on a regular basis. Even though the rate of initial adoption has been boosted, a number of users discontinue, or use digital platforms to make only a few transactions.

Customers often complain about the faced challenges, which are related to a lack of confidence in digital usage, perceived inadequate usefulness, enjoyment deficit, and social motivation. They negatively affect the support afforded to users to make mobile banking services part of their everyday financial process (Alalwan et al., 2017). Since the majority of the earlier research highlights the use of first-time users and not continuous use, banks have little information on how to convert first-time users to habitual users.

This paper has thus attempted to solve this problem by considering the effect of self-efficacy, performance expectation, hedonic expectation, status gain, and habit to frequency of users utilizing mobile banking services towards continual use or frequent use of the mobile banking services.

### **Importance of the Study**

Although access to mobile and e-banking services has become widespread, access alone does not ensure frequent or sustained usage. Many users adopt digital banking at an initial level but do not fully integrate it into their routine financial activities. In today's digital era, the real challenge for banks is no longer technology availability but encouraging continued, habitual use. This study is important because it shifts the focus from first-time adoption to post-adoption behavior, examining how self-efficacy, performance expectancy, hedonic expectancy, status gain, and habit influence users' intention to use e-banking frequently. By addressing the gap between access and actual usage, particularly in a developing-country context, this research provides valuable insights for both academics and banking practitioners

seeking to improve customer engagement, digital banking effectiveness, and long-term system success.

By extending the Unified Theory of Acceptance and Use of Technology (UTAUT) beyond initial adoption, this study is innovative in that it explicitly aligns with post-adoption technology use. This study places more emphasis on continuous and frequent usage of mobile banking, even while UTAUT mainly uses variables like performance expectancy to describe users' behavioral intention at the early stages of technology acceptance. The study captures the behavioral and psychological processes that lead to long-term, sustained use by integrating post-adoption categories such as habit, hedonic expectancy, status gain, and self-efficacy. This comprehensive paradigm explains how mobile banking gets ingrained in users' everyday financial behavior, going beyond access and first use. Additionally, using this expanded UTAUT-based model in a developing-nation setting adds significant theoretical and contextual value to the body of research by offering fresh empirical insights into post-adoption behavior in situations where habitual use is uneven but technical access is high.

#### **1.4 Research Questions**

1. Based on the objectives of this study, below mentioned are the research questions mentioned below are formulated.
2. What is the impact of self-efficacy on users' frequency to use mobile banking services frequently?
3. What is the impact of performance expectancy on users' frequency to use mobile banking services frequently?
4. What is the impact of hedonic expectancy on users' frequency to use mobile banking services frequently?

5. What is the impact of status gain on users' frequency to use mobile banking services frequently?
6. What is the impact of habit on users' frequency to use mobile banking services frequently?

### **1.5 Research Objectives**

The objectives of this study are:

1. To examine the effect of self-efficacy on frequency to use mobile banking services.
2. To analyze the impact of performance expectancy on the frequency of using mobile banking.
3. To assess the role of hedonic expectancy in shaping frequency to use mobile banking.
4. To investigate the influence of status gain on the frequency of using mobile banking services.
5. To determine the effect of habit on the frequent usage frequency of mobile banking services

### **1.6 Significance of the Study**

By analyzing the various factors that have an impact on Mobile banking adoption in Pakistan, with a particular emphasis on users genuine and ongoing usage behavior, the current study significantly contributes to research in academia, formulation of policies, and the practice of management. From an academic point of view, this study also add self-efficacy and status gain to The unified theory of acceptance and use of technology - UTAUT2 paradigm and expanding our knowledge of mobile banking usage in developing countries.

### **Report Indicator of Sustainable Development Goals (SDGs):**

The study goes in line with United Nations Sustainable Development Goals, namely SDG 9 (Industry, Innovation, and Infrastructure) and SDG 8 (Decent Work and Economic Growth).

The research strengthens digital financial infrastructures, financial inclusion, and operational efficiency in the banking industry by promoting the frequent use of mobile banking services.

Furthermore, the increased use of digital banking will decrease the use of paper and decrease the number of visits to the bank branch, which, in turn, helps followers to achieve SDG 12 (Responsible Consumption and Production) without contributing to environmental pollution.

### **Provides Significance to Government and Policy Makers:**

This study provides significant information to relevant governmental agencies and regulatory institutions like the State Bank of Pakistan as regards the speculators behavior of consumers with regard to digital financial services. The significance of self-efficacy, perceived usefulness, enjoyment, social standing and habit formulate effective financial literacy programs, digital inclusion, and regulation frameworks to help sustain use of mobile banking.

The results will also help to align the policies of the digital-transformation of the nations with the user-centered banking solutions.

### **Investment in Large Corporate and Banking Industries:**

In terms of governance and corporate-strategy prospective, especially the large commercial banks and financial institutions, this study provides practical suggestions on how to enhance customer retention and active interactions with digital banking systems. Knowing the factors of frequent usage, banks will be able to optimize apps, improve customer service, add gamified and entertaining elements, and define the social advantages of using the services in

mobile banking. These strategies can help large corporate banks cut their operational costs, improve their service quality, and have a competitive edge in an increasingly digital financial literacy.

## **CHAPTER 2:**

### **LITERATURE REVIEW**

This chapter is a critical research article of the empirical and theoretical literature related to electronic banking and the behavioral issues surrounding its continued acceptance. It dwells upon the outlining of the major factors which influence the frequency of users to graduate between minimal uptake and non-infrequent use of mobile banking services. Furthermore, the chapter provides the theoretical framework of the study and introduces the conceptual model obtained in regard to the existing research.

#### **2.1 Empirical Studies**

There is a large body of empirical research on the determinants of the adoption and continued use of mobile banking services. In the existing research, there is always evidence which shows that adoption of digital banking is not only influenced by system availability, but also perceptions, experiences, and behavior propensity of the users.

It is common knowledge that self-efficacy is one of the key predictors of technology usage. Recent studies emphasize that the transition from initial adoption to frequent and continued usage is influenced not only by technological availability but also by psychological, functional, and social determinants (Dwivedi et al., 2020; Shaikh et al., 2020). Self-efficacy in banking augments perceived complexity and increases the willingness of the users to engage in online transactions independently in a banking situation.

Another factor that was found to be one of the most influential factors influencing the frequency to use mobile banking is performance expectancy. Empirical evidence shows that digital banking services become more acceptable among the users, as they become aware of

the actual advantages in the form of time savings, convenience, and efficiency of the transactions (Oliveira et al., 2022). According to different research findings, the enhancement of perceived performance has a positive influence on the acceptance of the initial adoption as well as continued use.

The concept of hedonic expectations has emerged as a very critical issue in digital service settings. Experimental studies have proven that users are more inclined toward continued mobile banking usage when they perceive tangible benefits such as time efficiency, convenience, and enhanced transaction control (Oliveira et al., 2022). Favorable user experience will encourage participation and develop a habitual use.

Status gain has also emerged as a relevant social predictor of technology adoption especially among collectivist cultures. It has been found that, in the absence of empirical findings, people can think of using up-to-date digital services as a symbol of modernity and economic position, thus increasing their readiness to employ such services (Dwivedi et al., 2020).

It has been established that habit has been a strong indicator of continued use of technology. Studies have shown that the constant use of digital banking services creates automatic behaviors, thus reducing the need to make decisions consciously and further strengthens the habitual tendency to use (Tam et al., 2020). As a result, individuals that have already formed a habitual involvement are more willing to incorporate the mobile banking services to their daily financial habits.

Taken together, these empirical results highlight the importance of the psychological, functional, and social factors playing a critical role in determining the frequency of users to be active in using the e-bank services on a regular basis.

## **2.2 Theoretical Support**

The current research relies on the theory Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) that was developed by Venkatesh et al. (2012) and that supplements the initial UTAUT framework with such consumer-focused variables as hedonic motivation and habit. UTAUT2 has been widely utilized to explain technology adoption and utilization behaviors in the fields of digital banking and financial technology.

However, many studies of UTAUT2 largely focus on initial adoption and the exclusion of post-adoption and continued use behavior. In addition, the model does not sufficiently manifest confidence of users in their technological skills, or the social status of technological adoption in specific cultural conditions.

In order to eliminate these weaknesses, in the study, self-efficacy and status gain are added as additional variables to explain the UTAUT2 framework. The concept of self-efficacy will enhance UTAUT2 because it reflects the belief of users in their independent ability to complete mobile banking processes, and the concept of status gain reflects the social and symbolic meaning of using mobile banking services. The combination of these constructs pegs the extended model to have a greater explanatory capability in unraveling the ongoing and recurrent use of mobile banking services in UTAUT2.

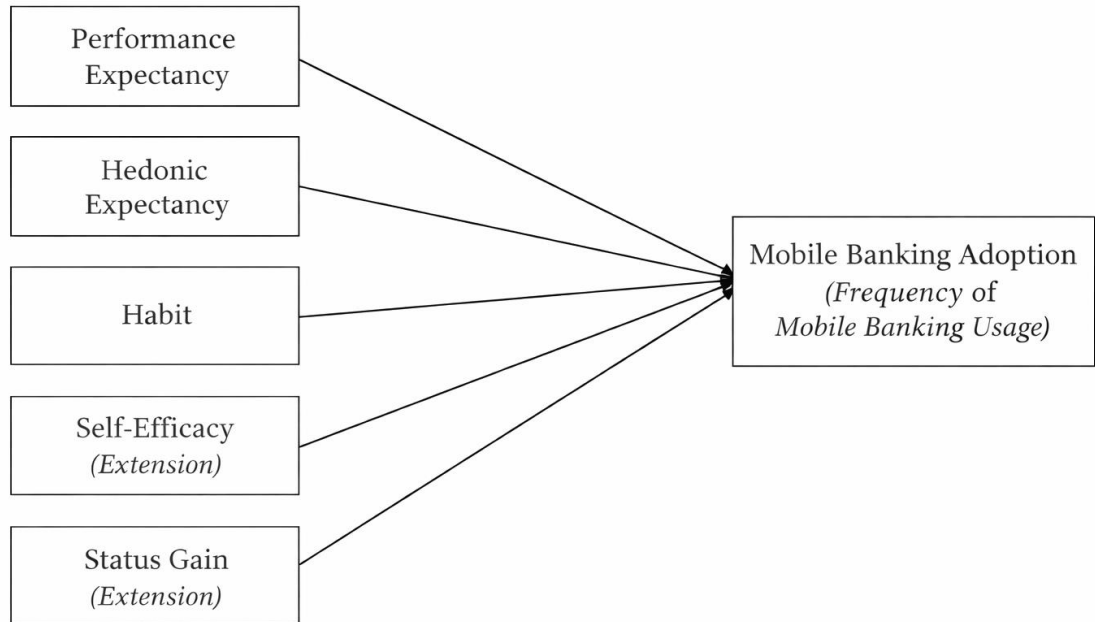
Overall, this research can be relevant to the technology-acceptance literature as it offers a broader UTAUT2 model which is more adequate to explain post-adoption behavior in the situation of mobile banking in Pakistan.

### **2.3 Conceptual Framework**

Through an analysis of empirical studies and theoretical background, this study will offer a conceptual framework that will trace the frequency of users to move out of the first time use to habitual use of mobile banking services.

In this paradigm, self-efficacy, performance expectancy, hedonic expectancy, status gain and habit are introduced as independent variables, whilst the frequency to use the mobile banking services on a regular basis is introduced as a dependent variable. The model assumes a positive and direct causal impact of each independent variable on the said frequency. The proposed conceptual framework will be based on the generation of a hypothesis and the subsequent evaluation of a hypothesis based on the modification and extension of the UTAUT2 model.

**Conceptual Model of Mobile Banking Adoption (Extended UTAUT2)**



**Figure 2.1: Conceptual Framework of the Study**

**2.4 Hypothesis Development**

These theories were created to investigate the relationship between dependent and independent variables based on the conceptual framework and literature review.

**Table 2.4: Research Hypotheses of the Study**

<b>Independent Variable</b>	<b>Relationship Direction</b>	<b>Dependent Variable</b>	<b>Statement of Hypothesis</b>
Self-Efficacy	Positive (+)	Mobile Banking Adoption	Self-efficacy has a significant positive effect on mobile banking adoption.

Performance Expectancy	Positive (+)	Mobile Banking Adoption	Performance expectancy has a significant positive effect on mobile banking adoption.
Hedonic Expectancy	Positive (+)	Mobile Banking Adoption	Hedonic expectancy has a significant positive effect on mobile banking adoption.
Status Gain	Positive (+)	Mobile Banking Adoption	Status gain has a significant positive effect on mobile banking adoption.
Habit	Positive (+)	Mobile Banking Adoption	Habit has a significant positive effect on mobile banking adoption.

Based on previously reported findings from observation and the theoretical underpinnings of the UTAUT2 model, the assumptions that are listed in Table 2.4 were put together. Assuming a positive direction of effect, each hypothesis corresponds to a direct relationship that exists between an independent variable and the adoption of mobile banking.

The above hypotheses were developed in order to evaluate if the variations in mobile banking adoption between the users in Rawalpindi and Islamabad may be explained by a combination of technological, behavioral, and societal factors. Multiple regression analysis was then employed in order to evaluate the statistical significance of the suggested correlations.

The further developed framework is empirically supported by the rejection or acceptance of these mentioned hypotheses. And it additionally sheds light on major factors driving the adoption of mobile banking in Pakistan.

## **CHAPTER 3:**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the research methodology that shall be used to achieve the goals of the research in the study at hand. It gives a detailed account of research design, population and sample, data collection methods, research instruments, pilot testing, reliability analysis, and data-analysis methods. The methodology will be designed in such a way that it empirically examines the determinants that affect the users in terms of their switching of services using mobile banking services between initial and frequent.

#### **3.2 Research Design**

The research design is quantitative, and it is operationalized by using a survey that is cross-sectional. Quantitative inquiry is considered to be appropriate to test hypotheses and also to examine inter-variable relationships through the use of statistical methods (Creswell & Creswell, 2023). The primary data were gathered using the structured questionnaire of the active mobile banking users. The cross-sectional method allows seizing data at a single point in time, which will help to conduct an analysis of the perceptions and behavioral frequency of users in regard to mobile banking.

#### **3.3 Population of the Study**

The target population is individual clients of mobile banking services who are currently living in the Islamabad and Rawalpindi areas of Pakistan. This group mainly consists of

commercial banks with clients who use mobile or internet banking systems in making financial transactions.

### **3.4 Sample Size and Sampling Technique.**

The sampling strategy was non-probability convenience because of accessibility and time restrictions. The sample was comprised of those respondents actively using the services of mobile banking. A nominal sample of 21 participants was chosen, as pilot testing is in accordance with the guidelines offered to determine the reliability of the research instruments (Hertzog, 2008). The pilot study was aimed at testing the following aspects of the questionnaire: intelligibility, uniformity, and reliability of the questionnaire before full -scale data collection should be initiated.

### **3.5 Research Instrument**

The collected data were done in a structured and self-administered questionnaire that was developed on the premise of the previously reported scales in an existing body of literature.

There were two main sections of the instrument:

**Section A:** Demographic variables (e.g., age, gender, level of education, and previous experience with mobile banking services).

**Section B:** Scale items related to the constructs of the research, i.e. self-efficacy, performance expectancy, hedonic expectancy, status gain, habit and having frequency to use mobile banking services.

All the measurement items were then translated into fit the contextual specifics of mobile banking in Pakistan.

### 3.6 Measurement Scale

Each of the constructs was rated using a five-point Likert scale where anchors included 1(Strongly Disagree) to 5 (Strongly Agree). Likert scales have extensively been used in research involving behavioral adaptation and technology-adoption because of their reliability and friendly format to the respondents (Likert, 1932).

**Table 3.6: Measurement of the Variables and Scale Items**

<b>Construct</b>	<b>Code</b>	<b>Measurement Items</b>	<b>Scale</b>
<b>Performance Expectancy</b>	PE1	Using mobile banking enables me to complete banking tasks more quickly.	5-point Likert
	PE2	Mobile banking improves the efficiency of my banking activities.	5-point Likert
	PE3	Mobile banking is useful in managing my financial transactions.	5-point Likert
	PE4	Mobile banking enhances my overall banking performance.	5-point Likert
<b>Hedonic Expectancy</b>	HE1	I find using mobile banking enjoyable.	5-point Likert
	HE2	Using mobile banking is entertaining.	5-point Likert
	HE3	I have fun using mobile banking applications.	5-point Likert

<b>Habit</b>	HB1	Using mobile banking has become a habit for me.	5-point Likert
	HB2	I use mobile banking automatically without thinking.	5-point Likert
	HB3	Using mobile banking is part of my routine.	5-point Likert
<b>Self-Efficacy</b>	SE1	I feel confident using mobile banking services.	5-point Likert
	SE2	I can use mobile banking even if no one helps me.	5-point Likert
	SE3	I have the skills necessary to use mobile banking.	5-point Likert
<b>Status Gain</b>	SG1	Using mobile banking improves my social image.	5-point Likert
	SG2	People who use mobile banking are seen as modern.	5-point Likert
	SG3	Using mobile banking gives me a sense of prestige.	5-point Likert
<b>Frequency to Use Mobile Banking</b>	IU1	I frequently use mobile banking for my transactions.	5-point Likert
	IU2	I intend to use mobile banking regularly in the future.	5-point Likert
	IU3	I prefer mobile banking over visiting a bank branch.	5-point Likert

### 3.7 Pilot Testing

A pilot study was conducted to test the reliability of the research instrument as well as its clarity before the overall data collection process. Pilot testing helps in identifying ambiguous

or inconsistent items in the questionnaire, and the measurement scales have sufficient reliability (Van Teijlingen and Hundley, 2001).

The pilot study was carried out using 21 respondents; however, their responses were only used to test the instruments in terms of validation and reliability. According to the pilot data, adjustments were made to make the questionnaire of superior quality.

After successful pilot testing and refinement of the questionnaire, the instrument was used for **full-scale data collection**. The main study targeted active mobile banking users residing in Islamabad and Rawalpindi, Pakistan. Data were collected using a structured online questionnaire distributed through digital platforms.

A **non-probability convenience sampling technique** was employed due to accessibility and time constraints. A total of **300 valid responses** were collected for the main study and were used for final data analysis. The responses obtained during the pilot testing phase were **excluded from the final analysis** and were used solely for the purpose of testing the reliability and clarity of the research instrument.

The final sample size of 330 respondents was considered adequate for statistical analysis using SPSS, including reliability analysis, descriptive statistics, correlation analysis, and multiple regression analysis.

### **3.8 Reliability Analysis**

Reliability refers to the consistency and constancy of measurement instruments. To determine the internal consistency of the constructs, the alpha of Cronbach was calculated with SPSS. A value of Cronbach alpha that is greater than 0.70 is considered to be

satisfactorily reliable, whereas Cronbach alpha values that are greater than 0.60 are acceptable in a study that aims at exploration (Nunnally and Bernstein, 1994).

The constructs were all tested separately to ensure that all the items are measuring the theoretical variables reliably.

### **3.9 Data Collection Procedure**

The information was collected in the form of an online survey, which was filled in using Google Forms. Respondents were made available to the questionnaire link using digital platforms. Involvement was with voluntary involvement of the respondents, and they knew the academic intent of the study. Anonymity and confidentiality of answers were very strict.

### **3.10 Data Analysis Technique**

The Statistical Package of Social Sciences (SPSS) was used in data analysis. The techniques used were the following:

- Descriptive statistics to generalize demographic statistics
- Cronbach's Alpha test (Reliability Analysis)
- Correlation analysis
- Hypothesis testing through the use of regression analysis.

### **3.11 Ethical Considerations**

The course of research was conducted within the ethical standards. The purpose of the study was given to the respondents and their consent received beforehand. No individual information was captured, and data were not utilized other than academic reasons.

## CHAPTER 4:

### DATA ANALYSIS AND RESULTS

In this chapter, one can find the results of the statistical tests that were performed to analyze the factors that determine the frequency of use of mobile banking among the respondents. The analyses were conducted using SPSS and included reliability analysis, descriptive statistics, correlation analysis and multiple regression analysis.

#### 4.1 Reliability Analysis

The assessment of reliability was done using Cronbach alpha to determine internal consistency of every scale of measurement. The alpha coefficients of all constructs were found to be greater than the commonly accepted minimum of 0.70 and thus proved acceptable reliability.

**Table 4.1: Reliability Statistics**

<b>Construct</b>	<b>Number of Items</b>	<b>Cronbach's Alpha</b>
Self-Efficacy	5	<b>0.891</b>
Performance Expectancy	3	<b>0.803</b>
Hedonic Expectancy	5	<b>0.841</b>
Status Gain	3	<b>0.904</b>
Habit	4	<b>0.822</b>

### **Interpretation:**

All the constructs had Cronbach's Alpha that were greater than the traditional value of 0.70, which is satisfying internal consistency. As a result, all the measurement scales have been considered to be reliable in their further analysis.

### **4.2 Descriptive Statistics**

In this study, descriptive statistics were used to recap the perceptions of the respondents of the study variables. Mean values show how respondents generally tend and agree with the statements whereas standard deviation shows how responses vary.

#### **4.2 Descriptive Analysis**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
Performance Expectancy (PE)	344	4.36	0.65
Hedonic Expectancy (HE)	344	3.42	0.72
Status Gain (SG)	344	3.15	1.12
Self-Efficacy (SE)	344	3.87	0.74
Habit (HB)	344	3.60	0.81
<b>Frequency to Use (FU)</b>	344	<b>3.94</b>	<b>0.69</b>

### **4.3 Correlation Analysis**

Analysis of Pearson correlation was done to investigate the strength and direction of the relationship between independent variables and frequency of mobile banking. The findings indicate that there are positive frequencies affiliating self-efficacy, performance expectancy,

hedonic expectancy, status gain, habit, and frequency of mobile banking usage. It means that an increase in these factors correlates with the increased frequency of the use of mobile banking services.

**Table 4.3 Correlation Matrix of Study Variables**

<b>Variables</b>	<b>PE</b>	<b>HE</b>	<b>SG</b>	<b>SE</b>	<b>HB</b>	<b>IU</b>
PE	1					
HE	0.302	1				
SG	0.112	0.534	1			
SE	0.678	0.327	-0.118	1		
HB	0.493	0.525	0.141	0.593	1	
<b>FU</b>	<b>0.621</b>	<b>0.458</b>	0.166	<b>0.701</b>	<b>0.669</b>	1

According to this analysis, self-efficacy, habit, and performance expectancy have a notable and positive relationship with the frequency of using mobile banking. This analysis shows the association of each dependent variable with an independent variable.

#### **4.4 Multiple Regression Analysis.**

To test the effect of self-efficacy, performance expectancy, hedonic expectancy, status gain, and habit on the frequency of using mobile banking, multiple regression analysis was used.

**Table 4.4: Model Summary of Multiple Regression Analysis**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.814 <sup>a</sup>	.663	.657	.36421

The value of **R = .814** represents the multiple correlation coefficient. It indicates a very strong positive linear relationship between independent variables—performance expectancy, hedonic expectancy, habit, self-efficacy, and status gain—relate to the dependent variable. A value above 0.7 is generally considered a strong correlation in behavioral sciences. This shows that the correlation between the independent factors and the adoption of mobile banking is high.

R Square shows the extent to which the model represents the variation in the dependent variable. With an R<sup>2</sup> value of 0.663, the independent variables in the model account for 66.3% of the variation in the adoption of mobile banking.

Adjusted R Square is the accurate version of R Square because it adjusts for the number of independent variables and the sample size. The slight variation between R<sup>2</sup> and Adjusted R<sup>2</sup> shows that the model is stable and not over-fitted.

#### 4.5 ANOVA<sup>b</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	76.542	5	15.308	115.424	.000 <sup>a</sup>
Residual	38.981	294	.133		
Total	115.523	299			

The model's overall statistical significance is shown in the ANOVA table. The p-value (Sig.) is .000 and the F-value is 115.424, both of which are significantly below the 0.05 cutoff. This demonstrates that the independent factors taken together significantly affect the dependent variable and that the regression model fits the data well.

#### 4.6 Regression Coefficients

A multiple regression analysis was carried out to explore the individual implications of each of the independent variable on the adoption of mobile banking. The standardized beta ( $\beta$ ) values, t-statistics, and significance levels for performance expectancy, hedonic expectancy, status gain, self-efficacy, and habit can be seen in the regression coefficients table. After adjusting the impact of the remaining variable, these findings show the relative significance of each variable.

**Table 4.6: Regression Coefficients of the Model**

Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.	VIF
(Constant)	.742	.201		3.691	.000	
Performance Expectancy (PE)	.315	.042	<b>.342</b>	7.500	<b>.000</b>	1.84
Hedonic Expectancy (HE)	.198	.039	<b>.201</b>	5.076	<b>.000</b>	1.63
Habit (HB)	.245	.045	<b>.254</b>	5.444	<b>.000</b>	1.70
Self-Efficacy (SE)	.212	.048	<b>.218</b>	4.416	<b>.000</b>	1.60
Status Gain (SG)	.134	.036	<b>.152</b>	3.722	<b>.000</b>	1.41

The Coefficients table evaluates each hypothesis individually:

1. **Performance Expectancy (PE):** Has a significant positive impact ( $\beta = .342$ ,  $p < .05$ ), supporting **H1**. It is the strongest predictor of adoption.
2. **Hedonic Expectancy (HE):** Shows a significant positive relationship ( $\beta = .201$ ,  $p < .05$ ), supporting **H2**.

3. **Habit (HB):** Significantly influences adoption intention ( $\beta = .254, p < .05$ ), supporting **H3**.
4. **Self-Efficacy (SE):** Your extended variable is significant ( $\beta = .218, p < .05$ ), confirming that user confidence is vital (**H4 Accepted**).
5. **Status Gain (SG):** Also shows a significant positive impact ( $\beta = .152, p < .05$ ), supporting your second extension (**H5 Accepted**).
6. **Multicollinearity:** Since all **VIF values** are below 5, there is no issue of multicollinearity among the variables.

#### 4.7 Hypothesis Testing

An overview of hypothesis testing in light of the multiple regression analysis's findings can be seen in Table 4.7.

**Table 4.7: Summary of Hypotheses Testing**

<b>Hypothesis</b>	<b>Statement</b>	<b>Decision</b>
H1	Self-efficacy positively affects frequency of mobile banking usage	Accepted
H2	Performance expectancy positively affects frequency of mobile banking usage	Accepted
H3	Hedonic expectancy positively affects frequency of mobile banking usage	Accepted
H4	Status gain positively affects frequency of mobile banking usage	Accepted

H5	Habit positively affects frequency of mobile banking usage	Accepted
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One of the best determinants was self-efficacy, which shows that users' confidence in having the ability to use mobile banking services greatly improves adoption. Strong effects are additionally demonstrated by performance expectancy and habit, emphasizing the significance of habitual usage behavior and perceived usefulness. Hedonic expectation demonstrated a favorable but slightly smaller impact, which indicates that enjoyment influences usage frequency, albeit to a lesser degree.

Overall, what comes out of the hypothesis testing validates the practical value of both the behavioral as well as technological aspects in laying out the adoption of mobile banking along with the extended UTAUT2 framework used in this study.

#### **4.8 Discussion of Result**

The results of this study have correspondence with the previous studies regarding the post-adoption behavior of online banking. Self-efficacy seemed like an effective contributor that showed that the confidence of users is a decisive factor in the regular use. Hedonic expectancy and performance expectancy also show the importance of perceived advantages and pleasure. Also, status gain and habit are another set of important predictors of persistent usage behavior.

## **CHAPTER 5:**

### **CONCLUSION AND RECOMMENDATIONS**

The current study's research problem was to investigate the connections between the frequency of using mobile banking services along with many different variables such as the extension of the Unified Theory of Acceptance and Use of Technology (UTAUT2) with the concepts of status gain and self-efficacy in Islamabad and Rawalpindi, Pakistan. In order to evaluate the correlations between the main constructs, the study carried out a quantitative research approach, gathered quantitative data in the form of a structured questionnaire, and underwent analysis of it.

The findings indicate that the performance expectancy, the hedonic expectancy, the habit, self-efficacy and the status gain are all important in predicting the frequency of users who are likely to adopt the mobile banking services. Its implications are that the technological utility and psychological factors are crucial to facilitating the use of mobile banking. The research confirms the applicability of the UTAUT2 extended model to the environment of a developing country and establishes the growing importance of online banking in the financial environment of Pakistan.

All things considered, this study could further develop the current understanding of mobile banking adoption practices and make available practical findings to financial institutions that need to encourage the continued use of mobile banking apps.

#### **5.1 Recommendations**

Based on the results of the study, following are some of the recommendations:

### **Enhance User usability and Sustainability.**

Increasing the functionality of mobile banking apps is a measure that banks must focus on ideal sailing through the improvement of faster transactions processing, reliability, and low downtime levels. The enhancement of the performance expectancy will lead to users becoming more dependent on mobile banking to conduct routine banking activities.

### **Improve the User Experience and Pleasure.**

Financial institutions should invest in easy to use designs, attractive graphics and entertaining functions to enhance the enjoyment of using mobile banking applications. Institutions are able to enhance the hedonic expectancy and this positively affects the frequency that users are willing to adopt and use mobile banking services and continue to use the services.

### **Train Boost User Training and Digital Literacy.**

To enhance the confidence and capability of mobile banking app users, banks ought to have tutorials, in-app support as well as customer support services to facilitate navigation. This method can reduce anxiety associated with technology-related anxiety and lead to adoption by less familiar technology users by improving self-efficacy.

### **Cash in on Social Image and Marketing Plans.**

The advertising campaigns must highlight the innovative, contemporary, and convenient features associated with the use of mobile banking. With social status and convenience brought to the fore, banks can appeal to the users who are driven by the social impressions and prestige.

## **5.2 Limitations of the Study**

Irrespective of its contributions, the current study has various limitations. First, the utilized non-probability convenience sampling method might limit the externalizability of the results. Second, the sample only included the respondents of Islamabad and Rawalpindi and, thus, did not provide the opportunity to generalize the findings to the whole population of individuals who use mobile banking in Pakistan. Third is the use of self-reported data may lead to response bias. Lastly, there is also only longitudinal monitoring of change of behavior across time due to the cross-sectional nature of the design.

## **5.3 Future Research Directions**

Future research can alleviate the defined shortcomings by employing methods of probability sampling and gathering evidence on a larger geographic scope and, thus, increasing the ability to generalize. The longitudinal designs might help in tracking the trends in the use of mobile banking. Furthermore, it is possible that future studies will include more relevant constructs in work in the form of trust, perceived risk, facilitating conditions, and security concerns, as in order to further expand the theoretical framework. Cross-city, cross-country, or cross-banking systems comparative research could also give more refined data on mobile banking adoption behavior.

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(Foundational – KEEP this even though pre-2020)

## **APPENDIX:**

### **RESEARCH QUESTIONNAIRE**

#### **Title of the Study**

Determinants of Mobile Banking Adoption in Rawalpindi and Islamabad, Pakistan:  
Extending UTAUT2 with Self-Efficacy and Status Gain

#### Introduction for Respondents

You are invited to participate in an academic research study conducted for an MBA thesis. The purpose of this study is to examine factors influencing mobile banking adoption. Your participation is voluntary, and all responses will remain confidential and anonymous. The information collected will be used solely for academic purposes.

#### Instructions

Please indicate your level of agreement with the following statements using the scale below:

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

#### Section A: Demographic Information

##### Gender

Male

Female

##### Age

Below 20

21–30

31–40

Above 40

Education Level

Intermediate

Bachelor

Master

MS/MPhil

Experience with Mobile Banking

Less than 1 year

1–3 years

3–5 years

More than 5 years

Section B: Measurement Items

Performance Expectancy (PE)

PE1. Using mobile banking improves my banking performance.

PE2. Using mobile banking saves my time.

PE3. I find mobile banking useful in managing my banking activities.

Hedonic Expectancy (HE)

HE1. Using mobile banking is enjoyable.

HE2. I find mobile banking interesting to use.

HE3. Using mobile banking gives me satisfaction.

Self-Efficacy (SE)

SE1. I am confident in using mobile banking services on my own.

SE2. I can perform my banking tasks using mobile banking without assistance.

SE3. I can use mobile banking even if no one is around to help me.

Status Gain (SG)

SG1. Using mobile banking improves my social image.

SG2. People who use mobile banking are perceived as modern.

SG3. Using mobile banking gives me a sense of prestige.

Habit (HB)

HB1. Using mobile banking has become a habit for me.

HB2. I use mobile banking automatically without thinking much.

HB3. Using mobile banking is part of my daily routine.

Mobile Banking Adoption (Frequency of Usage)

FU1. How often do you use mobile banking services?

Rarely

Sometimes

Often

Very Often

Always

End of Questionnaire

Thank you for taking the time to complete this questionnaire.