Factors Affecting Customer Intention to Use Digital Banking services: A Case Study of the Commercial Bank of Ethiopia

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Abstract

This study aimed to investigate the factors influencing customers' intention to use digital banking services. The analysis involved examining the relationships between various independent variables, such as perceived usefulness, trust and perceived risk, rewards and incentives, perceived ease of use, and perceived convenience, with customers' intention to use digital banking services as the dependent variable. The data was collected through surveys and analyzed using statistical methods. The findings revealed significant relationships between the independent variables and customers' intention to use digital banking services. Perceived usefulness, trust and perceived risk, rewards and incentives, perceived ease of use, and perceived convenience were identified as influential factors in shaping customers' intention to use digital banking services. Based on the conclusions drawn from the analysis, it was recommended that banks and financial institutions focus on enhancing perceived usefulness, building trust, providing attractive rewards and incentives, ensuring ease of use, and optimizing convenience to encourage customers to adopt digital banking services. However, it is important to acknowledge the limitations of this study, such as the reliance on self-reported data and the specific sample used. To address these limitations, future research should consider replication with larger and more diverse samples, utilize longitudinal research designs, incorporate qualitative methods, conduct comparative analysis across different cultural contexts, and explore additional variables.

Keywords: Customer intention, digital banking system, perceived usefulness, perceived risk, rewards and incentives, perceived ease of use, perceived convenience.

1. Introduction

1.1. Study Background

The era of information, communication, and technology, as well as the internet, which has led to the innovation of electronic payment systems and their adoption by banks and other financial institutions and their customers, have transformed several world markets from traditional cash-based selling and buying systems to digital banking-based payment systems. It is through this mechanism that the world's economy and finance have transformed in terms of operational costs and institutional performance. This is evident from the fact that the financial transition has now moved from cash-based to digital based forms. [1]. Furthermore, the introduction of electronic payment systems has transformed the world's payment system into a cashless monetary system that provides more convenient, secure, and quick means of exchange and other financial transactions between business partners [2].

The term "digital banking" refers to a system of electronic banking in which customers may access their money through a variety of digital channels. All of these features may be accessed via digital banking, which provides them through various digital mediums including the internet. As e-commerce grows, so does the need for online banking. Digital Mode's services are essential to the smooth operation of all forms of e-commerce, including Online Shopping, Electronic Marketing, etc. Simply put, digital banking (also known as electronic banking) is the delivery of financial services to end users through digital or electronic means [3].

Digital banks are able to provide solutions to customers who have limited time to visit physical branch offices. Activities that can be carried out using a digital bank only require a smartphone and an internet connection. Customers can register, open accounts, deposit, withdraw, send money, pay bills, participate in financial programs, invest, exchange foreign exchange, manage finances, and apply for credit using digital banks [4]. During the 1970s, electronic-based banking services evolved and began in the world. Following that, banks began to use the new system and drastically replaced traditional banking functions. As technology advances, the financial sector adopts a variety of e-banking methods. [5]. Digitalization of the banking industry world-wide has resulted in the shift from traditional banking to the use of alternate banking channels like merchant services, internet banking, agency services, automated teller machines (ATMs), and mobile banking, also referred to as "m-banking." [6].

Banks in our country, Ethiopia, have adopted digital based banking and payment system and have been putting effort into increasing their customers' usage of this service. It is evident that with the rapid expansion of electronic payment systems throughout the developed and developing world, Ethiopia's financial system cannot remain exceptional in expanding the use of this system [7]. According to the World Payment Report, for example, the global annual gross domestic product (GDP) has increased to $ 296 billion as a result of increased use of electronic payment in the business market. In addition to this, the Moody's economist report showed that electronic payment adoption is significantly increasing in almost 70 countries that were studied on this matter between 2011 and 2013 [8].

To compete in this dynamically changing world of payment systems in the business market, banks must not only adopt electronic payment but also require their customers to adopt these new methods of payment; otherwise, it appears very difficult to stabilize the economy of a society or country where businesses prefer electronic payment to known tangible cash. According to a recent study report, electronic payments are becoming a daring means of payment in today's business world. This is due to its efficiency, convenience, and timeliness

[9]. The Ethiopian banking industry is entering into this ICT-based service to customers in order to bring efficiency to operations by minimizing operating costs, thereby increasing customer satisfaction and profitability. E-banking offers the convenience of conducting most of the banking transactions at a time that suits the customer. The customer can access funds and transfer funds between accounts, Pay bills and make purchases 24 hours a day, 7 days a week [10].

Despite the commercial banks of Ethiopia have adopted digital banking system and payment to overcome this potential obstacle to our country's economy and have been putting effort and budget into building and expanding this new way of payment, its adoption and usage in the business market are much more limited than expected. There is still a poor cashless payment mechanism in Ethiopia, especially among people in rural areas and young people without a bank account. In 2017, for example, 99 percent of total utility bills paid by Ethiopian customers were paid in cash only [11]. Therefore, the question is why a large number of bank customers are not adopting it. To answer this question, this research was conducted to identify factors affecting customer intention to use digital banking systems of the Commercial Bank of Ethiopia in the Babile City Administration.

1.2. Statements of the problem

The existence of empirical studies measuring combined effect of banks specific determinant variables (like bank size, card production period, distribution period, replacement period, fair distribution of e-payment materials / infrastructures, cost of human capital, intensity of branches) and four e-payment systems like Automated teller machine (ATM), Internet banking, point of sales (POS) and mobile banking on customers service delivery is major issues in the Babile City context as at the time of this study. However, a bank that performs electronic banking must develop different methods of conducting business, methods which may discourage the target consumer of the bank. To compete in a dynamically changing world of business markets in which potential sellers, buyers, and business partners prefer electronic payment over traditional cash-based business systems, it is difficult to stabilize one's country's economy at both the individual and societal levels. To address this and other potential economic challenges, our country implemented an electronic payment system, the services of which are now available in Ethiopian commercial banks. However, customers' usage of electronic payment is very limited, and they have not fully benefited from this technology. Evidence from the CBE performance review showed that out of 31.4 million customers, only 5.7 million were registered for mobile banking, with the majority using it for notification alarms [12].

The banking sector has evolved over time with the introduction of modern information technology, which has led to digitalization in the sector. This was done in order to keep up with growing social trends, shifting customer needs, market trends, and competition [9]. The growth of mobile commerce depends on widely accepted mobile payment systems. However, this trend is not well experienced in developing countries like Ethiopia. Even though merchants have somehow benefited from the rapid growth in electronics commerce and the use of mobile devices in e-commerce, they still hesitate to effectively employ these technologies in their day-to-day transactions. Little research has been conducted to examine and explain the merchants' views on the new payment technology [11]. Most of the studies have not been conducted specifically on electronic banking adoption and the extent to which various factors affecting customer intention to use digital banking systems, So, there is little information regarding digital banking system by customers of CBE, which creates a knowledge gap.

Though there have been few studies on electronic banking in Ethiopia, it is a useful topic to study how to make it applicable using available information communication technology infrastructures in conjunction with existing financial and legal frameworks in order to improve the quality of services in the Ethiopian banking sector in the future. Moreover, Internet banking has been widely studied in developed countries and also, to some extent, in developing countries, but not in Ethiopia [10]. The modern business environment is dynamic and complex, throwing a wider range of challenges to customers of different institutions. This has forced the hand of businesses in innovation and invention, causing a scenario where a business is never resting on its laurels due to fear of being overtaken by competitors. E-Payment utilization is growing substantially faster hence becoming increasingly important as a source of business in the world economy. Banks have realized immense efficiency and effectiveness in disbursement of funds either to other banks or to individual client's accounts using ICT. Unfortunately, traditional e-payment systems such as Money Gram and Western Union are noted to have many limitations which inhibit consumers from adopting them. Some of these factors relate to lack of trust, security, usability, high transaction costs, lack of perceived advantage and potentially high perceived risk. Without merchants adopting mobile payment systems, there will not be consumers using mobile payment services or mobile payment systems [11]. To assist banks in increasing customer adoption of e-banking services, it is necessary to investigate the barriers to adoption [13]. Hence commercial banks in Ethiopia offer electronic banking services to enable them and to gain competitive advantage in the banking industry. Electronic banking in Ethiopia has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost, replacing paper based and labor-intensive methods with new automated process. This leads to higher productivity and profitability for banks. All Ethiopian commercial banks aggressively expand their channel to provide good service and increase profitability [5]

Despite digital banking services being available in Babile city administration and offered by commercial banks to their retail clients in an effort to transition from traditional banking to offering digital financial services, potential users are still not adopting electronic payment and using these services. This has negatively affected these potential users because using digital banking services makes performing financial transactions and accessing financial information faster, more convenient, and cheaper than traditional banking. To know what hinders customers from adopting digital banking and to put forward a suggestive solution that will benefit both commercial banks and customers, this study was carried out to investigate factors affecting customer intention to use digital banking systems the case of the Ethiopian Commercial Bank, Babile City Administration

1.3. Objectives of the study

The main objective of this study is to investigate the factors that influence customer intention to use digital banking systems of the Commercial Bank of Ethiopia in babile city administration, and to determine how these factors interact with each other to shape customers' attitudes and behavior towards the use of such systems. Specifically, the study wanted to address the following objectives:

1) To determine the level of awareness, usage and familiarity of customers in Babile City Administration towards digital banking systems of the Commercial Bank of Ethiopia.
2) To assess the key benefits of digital banking systems to the customers the Commercial Bank of Ethiopia in Babile City Administration.
3) To investigate the impact of perceived usefulness and ease of use, Rewards and incentives, Perceived Convenience (PC) and trust and perceived risk of digital banking

systems on customer intention to use them in the Commercial Bank of Ethiopia in Babile City Administration.

1.4. Research hypotheses

To achieve the research objectives, the researcher formulated five hypotheses.
Hypothesis 1: Perceived usefulness of digital banking systems has a positive impact on customer intention to utilize these systems.
Hypothesis 2: Perceived ease of use of digital banking systems has a significant positive impact on customer intention to use these systems.
Hypothesis 3: Customers' levels of trust and perceived risk towards digital banking systems significantly influence their intention to use these systems.
Hypothesis 4: Providing incentives and rewards can significantly impact customer intention to utilize digital banking systems.
Hypothesis 5– Perceived Convenience (PC) of digital banking systems has a positive impact on customer intention to utilize these systems.

2. Literature Review

The adoption of digital banking systems is influenced by perceived attributes, user experience, and external factors. Customers are more likely to use digital banking if they find it useful for financial management and easy to navigate [14], [15]. User experience plays a crucial role, as confidence in using technology (self-efficacy) and trust in the security of banking platforms significantly impact adoption [16], [17] . Additionally, social influence, including peer recommendations and societal trends, along with awareness campaigns, can encourage usage [15], [18]. However, resistance to change and negative past experiences can hinder adoption, requiring banks to address these concerns proactively to enhance customer trust and engagement.

The intention to use digital banking systems is influenced by factors such as perceived usefulness, perceived ease of use, self-efficacy, security concerns, social influence, and awareness. Perceived usefulness and ease of use are significant determinants of user acceptance [19]. Self-efficacy and security concerns also significantly affect customers' intentions to adopt digital banking services. External influences like social influence and awareness about digital banking services further impact customer adoption [20]. Understanding these factors is crucial for banks aiming to enhance customer adoption of digital banking services.

Digital banking has significantly improved the financial sector by enhancing operational efficiency and customer convenience. Automation of processes reduces operational costs and increases service delivery speed, while the availability of 24/7 banking services allows customers to access their accounts and conduct transactions anytime, improving user experience [21]. Additionally, integrating advanced technologies such as AI and blockchain enables banks to offer personalized services, make data-driven decisions, and enhance financial inclusion, particularly for underserved populations [22].

Despite its advantages, digital banking introduces several challenges. One of the most pressing concerns is cybersecurity threats, as online transactions increase the risk of cyberattacks, requiring banks to adopt robust security measures. Regulatory compliance is another major challenge, as financial institutions must continuously adapt to evolving legal and industry standards [23]. Furthermore, employee resistance to digital transformation can hinder the

adoption of new banking methods, necessitating adequate training and organizational adaptation [24]. Trust issues also emerge, as reduced face-to-face interactions may lead to concerns about service quality and digital platform security[25].

Customer intention to use digital banking is influenced by several key factors. Perceived Ease of Use (PEOU) determines how effortlessly users interact with digital banking services, affecting their willingness to adopt the technology. Perceived Usefulness (PU) plays a crucial role, as users are more inclined to adopt digital banking if they believe it enhances efficiency and convenience[26]. Trust and Perceived Risk also significantly impact adoption; users with higher trust levels are more likely to engage with digital banking, while concerns about fraud, unauthorized access, and transaction failures deter adoption [27]. Additionally, Customer Awareness about digital banking features and security measures influences usage, as lack of knowledge often leads to hesitation [28]. Rewards and Incentives, such as cashback and discounts, serve as effective marketing tools to encourage adoption, while Perceived Convenience—including accessibility, remote banking options, and a wide range of financial services—further enhances digital banking engagement. Balancing innovation, security, regulatory compliance, and customer trust remains essential for the long-term success of digital banking. As financial institutions continue adapting to technological advancements, addressing these factors will be critical in increasing digital banking adoption and ensuring a seamless transition for users.

3. Material and Methods

This study used a descriptive survey and causal (explanatory) research design to investigate the factors influencing customers' intention to use digital banking services at the Commercial Bank of Ethiopia in Babile City Administration. The descriptive survey design helped gather data on customer behavior and attitudes towards digital banking, focusing on awareness, usage, and perceived benefits. The causal research design aimed to explore the relationships between independent variables—such as perceived usefulness, perceived ease of use, trust, perceived risk, rewards and incentives, and perceived convenience—and the dependent variable, customer intention to use digital banking services. Structured questionnaires were used for data collection, and multiple linear regression analysis was performed to assess the significance of these relationships. The target population consisted of 23,400 customers from two branches of the Commercial Bank of Ethiopia in Babile City: Babile Main Branch (20,000 customers) and Al-Haramain Branch (3,400 customers). Due to resource constraints, a complete census was not possible, so a sample size of 393 respondents was determined using Yamane's sample size formula, with a 95% confidence level and a 5% margin of error. A proportional sampling technique was used to allocate 328 respondents from Babile Main Branch and 56 respondents from Al-Haramain Branch. Simple random sampling was employed to ensure an unbiased representation of the customer population.

For data collection, a structured questionnaire consisting of closed-ended and Likert-scale questions was used to gather information on demographics, digital banking awareness, and adoption factors. The questionnaire was adapted from existing literature and pilot-tested for reliability. Data was collected face-to-face from customers at both branches to ensure accuracy and a high response rate. Descriptive and inferential statistical methods, including frequencies, percentages, mean values, Pearson correlation, and multiple linear regression, were used to analyze the data. SPSS version 26 was utilized for data analysis to ensure accurate and reliable statistical computations. The linear multiple regression equation was used as follows:

$$IU = \beta0 + \beta1(PU) + \beta2(PEOU) + \beta3(TPR) + \beta4(RI) + \beta5(PC) + \varepsilon - - - - - - (1)$$

Where:

-IU is the intention to use digital banking services

- β_0 is the intercept or constant.

- β_1, β_2, β_3 β_4, and β_5 are the regression coefficients or slopes for each independent variable.

- PU is the perceived usefulness of the digital banking service.

- PEOU is the perceived ease of use of the digital banking service.

- TPR is the trust and perceived risk associated with the digital banking service.

- RI is the rewards and incentives offered by the digital banking service.

- PC is Perceived Convenience

- ε is the error term or residual variance.

4. Findings and Discussions

4. 1. Awareness about digital banking

Table 1 shows the frequency and percentage of respondents who have heard of digital banking systems, assuming a sample size of 357. The majority of respondents, 285 out of 357 or 79.83%, indicated that they have heard of digital banking systems. The remaining 72 respondents, or 20.17%, indicated that they have not heard of digital banking systems.

Table 1 Awareness about digital banking

Awareness	Frequency	Percentage
Aware	285	79.83%
Not aware	72	20.17%
Total	357	100%

4. 2. Usage Of Digital Banking

In the table 2 below, it is assumed that the sample size is 357, and the majority of the respondents, 250 out of 357 or 70.03%, answered "yes" to the question of whether they have used digital banking services of Commercial Bank of Ethiopia. The remaining 107 respondents, or 29.97%, answered "no."

Table 2 Usage of digital banking

Digital banking	Frequency	Percentage
Using	250	70.03%
Not using	107	29.97%
Total	357	100%

4. 3. Frequency of digital banking usage

Table 2 indicates that the majority of respondents in the study, comprising 67 and 64 individuals respectively, fall into the "rarely" and "sometimes" categories, accounting for 26.63% and 25.6% of the total respondents. The next most frequent response is "often (once a week)" with

46 respondents, representing 18.40% of the total. Surprisingly, only a small proportion of respondents, specifically 32 individuals or 12.8% of the total, reported using digital banking services very often (several times a week). The pattern of responses suggests that many individuals in the sample use digital banking services on an occasional basis, rather than as a daily or frequent practice.

Table 2 Frequency of digital banking usage

Usage Frequency	Frequency	Percentage
Often (once a week)	46	18.40%
Sometimes (a few times a month)	64	25.60%
Very often (several times a week)	32	12.80%
Rarely (once a month or less)	67	26.80%
Daily	18	7.20%
Never	23	9.20%
Total	250	100%

4. 4. Types of Digital Banking used.

Table 3 illustrates that customers in the study have the option to utilize multiple digital banking services. As a result, the percentages provided represent the proportion of customers who use each specific service out of the total number of customers utilizing any digital banking service. Notably, 75% of the customers in the study make use of Mobile Banking, 85% use Online Banking, and 90% utilize ATMs. It is important to note that these percentages are not mutually exclusive and exceed 100% due to customers using multiple digital banking services concurrently.

Table 3 Types of Digital Banking used

Digital Banking Item	Percentage of Customers Who Use This Service
Mobile Banking	75%
Online Banking	85%
Automated Teller Machines (ATMs)	90%
Chatbots	30%
Point of Sale (POS) Systems	60%

4. 5. Key Benefits of Digital Banking Systems

Table 4 highlights the key benefits of using digital banking systems according to the responses received. The most frequently cited benefit is the ability to transfer money online, selected by 190 respondents, which accounts for 63.54% of the total. Following closely are the benefits of speedy transactions, chosen by 179 respondents (59.87%), and the convenience of banking from home, indicated by 168 respondents (56.25%). The availability of round-the-clock service is another significant benefit, mentioned by 142 respondents (47.48%). Additionally, 151 respondents (50.50%) appreciate the user-friendly application interface and design. Conversely, the least commonly selected benefit is the availability of reward programs or incentives for using digital banking services, chosen by 85 respondents (28.43%). It should be

noted that respondents were allowed to select multiple benefits, hence the percentages are not mutually exclusive and collectively surpass 100%. These findings emphasize the significance of online money transfers, speedy transactions, convenience, 24/7 availability, and user-friendly interfaces as the primary benefits perceived by customers when utilizing digital banking systems.

Table 4 Key Benefits of Digital Banking Systems

Key Benefits of Digital Banking Systems	Frequency	Percentage
Convenience of banking from home	168	56.25%
Ability to transfer money online	190	63.54%
Availability of 24/7 service	142	47.48%
Speed of transactions	179	59.87%
Security of transactions	118	39.46%
User-friendly application interface and design	151	50.50%
Availability of a mobile application	133	44.51%
Possibility of opening deposit account online	92	30.76%
Availability of a variety of products online e-payment, utility bill payment)	117	39.13%
Reward programs or incentives for using digital banking services	85	28.43%

4.6. Reliability

In analyzing the overall reliability of the questionnaire, it was found that the Cronbach's Alpha value obtained for all the scale items was 0.957, surpassing the minimum recommended and acceptable threshold of 0.70. This indicates a strong internal consistency reliability among all the questionnaire items within the given sample. The high Cronbach's Alpha value of 0.957 suggests that the measurements taken from the scale items are highly consistent and reliable. Table 5 shows that all variables' alpha (α) values are greater than the threshold value. Therefore, the result indicates that the questionnaire is more reliable.

Table 5. Reliability test

Sr. No.	Variables	Number of Items	/Cronbach's Alpha/	Decision
1	Perceived Usefulness	4	.928	Reliable
2	Perceived Ease of Use	4	.928	Reliable
3	Trust & Perceived Risk	4	.928	Reliable
4	Rewards and Incentives	10	.980	Reliable
5	Perceived Convenience (PC)	4	.928	Reliable
6	Intention to Use	6	.844	Reliable
	All Scale items	32	.957	Reliable

4.7. Regression Assumptions Test

The study checked that data conforms to the Classical Linear Regression assumptions before carrying out regression analysis, and they are discussed in this section

4.7.1. Test of Normality

Shapiro-Wilk test is a non-graphical test whereby if the test results are insignificant (above 0.05), it implies that the data being used follows a normal distribution. However, when the p-value for the variables is less or equal to 0.05 (significant), it implies that the data is not good for OLS analysis. Regarding the normality test of this subsection, the study adopted the statistical measures for the normality test, which is hypothesized as follows.

Ho: Normally distributed errors
Ha: Non-Normal Distribution error

Table 6. Tests of Normality

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
	Statistic	Df	Sig.	Statistic	df	Sig.
Studentized Residual	.044	357	.089	.993	357	.123
a. Lilliefors Significance Correction						

The results obtained from the Shapiro-Wilk test in Table 6 indicate that all the variables had a p-value greater than (0.05); therefore, it can be concluded that the residual value is normally distributed so that the regression analysis procedures have been fulfilled.

4.7.2. Test for Multicollinearity

According to [29], explanatory variables should not exhibit a high correlation with each other because that may cause unrealistic results during regression. The Variance Inflation Factor (VIF) and Tolerance were utilized in this study to see if there was a multicollinearity effect between the variables.

Ho: There is a multicollinearity problem
Ha: There is no multicollinearity problem

As indicated in Table 7, all the VIF column values are less than ten, and Tolerance values are greater than ten, respectively, indicating no multi-co linearity between the explanatory variables. As a result, we failed to reject the null hypotheses.

Table 7. Collinearity Statistics

| Model | Collinearity Statistics | |
	Tolerance	VIF
Perceived Usefulness (PU)	.972	1.029
Trust and Perceived Risk (TPR)	.850	1.176
Rewards and incentives (RI)	.916	1.092
Perceived Ease of Use (PEOU)	.961	1.040
Perceived Convenience (PC),	.934	1.071
a. Dependent Variable: Intention to Use (IU)		

4.7.3. Test for Heteroscedasticity

The pattern of errors should remain constant throughout the observations, and violation of this assumption renders the Ordinary Least Square (OLS) results biased [29].

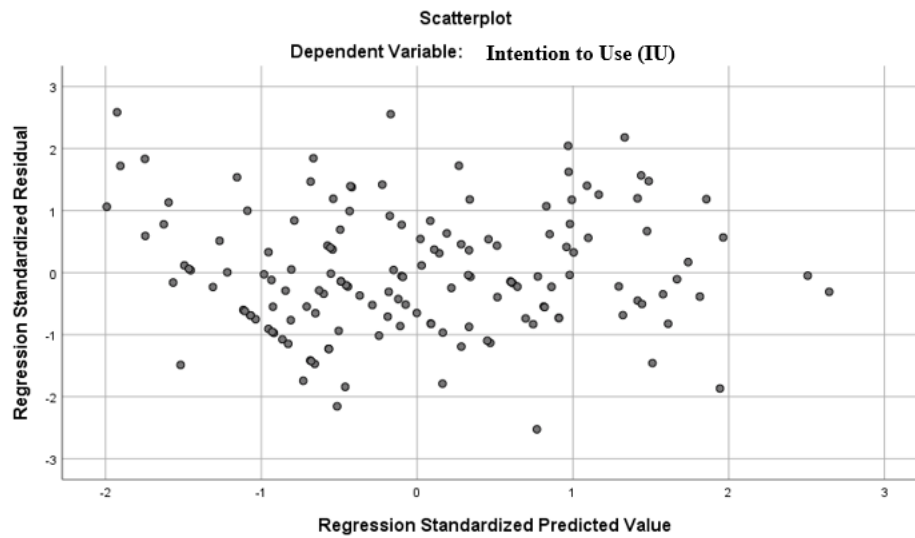Ho: There is no heteroskedasticity problem
Ha: There is heteroskedasticity

Figure 1. Test for Heteroscedasticity

Figure 1 shows a scatterplot with diffused spots, indicating that the regression model does not have heteroskedasticity.

4.7.4. Outliers Test

The extreme values pull the regression line towards them, therefore significantly impacting the model's coefficients. Outliers are observations where the observed dependent value does not follow the general trend given the independent value.
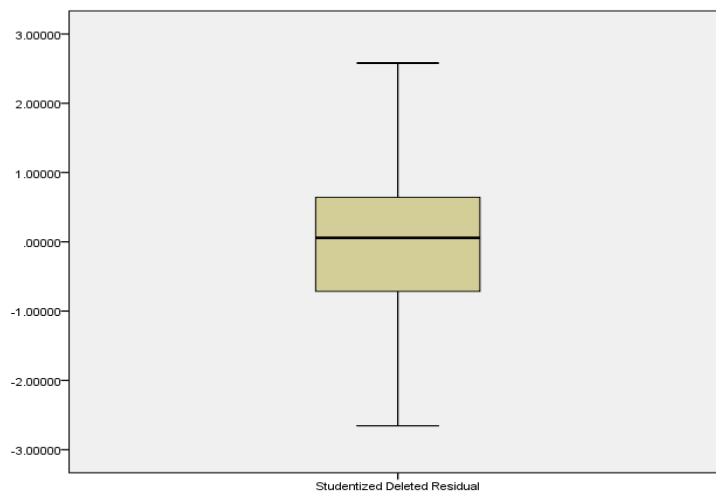

Figure 2 test of outlier

Figure 2 shows if neither end has any circles or asterisks. The box plot indicates that there are no outliers observed.

4.8. Correlation Analysis

The Pearson correlation matrix result in Table 8 shows a positive correlation between the dependent and independent variables. The relationship between Intention to Use (IU) and the predictor variables was found to be positively correlated and significant

Table :8 Pearson Correlation Coefficient

	Intention to Use (IU)	Perceived Usefulness (PU)	Trust & Perceived Risk (TPR)	Rewards & incentives (RI)	Perceived Ease of Use (PEOU)	Perceived Convenience (PC),
Intention to Use (IU)	1					
Perceived Usefulness (PU)	.227**	1				
Trust & Perceived Risk (TPR)	.571**	.087	1			
Rewards & incentives (RI)	.429**	.069	.284**	1		
Perceived Ease of Use (PEOU)	.597**	.104	.172**	.022	1	
Perceived Convenience (PC),	.233**	.122*	.235**	.093	.047	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

4.9. Multiple Regression Analysis

The coefficient of determination indicates the proportion of variance in the dependent variable explained by the study's explanatory variables. Table 9 shows that approximately 68.4% of the variations in the Intention to Use (IU) can be attributed to the combined influence of the predictor variables in the study. This implies that the independent variables collectively account for a significant portion of the observed changes in the IU. However, it should be noted that around 31.6% of the variance in IU is still explained by other factors not considered in the study. These factors could be additional variables or unaccounted influences that contribute to the variability in IU beyond the scope of the current research.

Table 9-Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.830[a]	.688	.684	.31420	1.813

a. Predictors: (Constant), Perceived Convenience (PC), Perceived Ease of Use (PEOU), Rewards and incentives (RI), Perceived Usefulness (PU), Trust and Perceived Risk (TPR)
b. Dependent Variable: Intention to Use (IU)

The ANOVA tests whether the overall regression model fits the data well. If the p-value is < 0.05, the regression model is a good fit for the data. Accordingly, The ANOVA results for the regression model predicting Intention to Use (IU) based on Perceived Convenience (PC), Perceived Ease of Use (PEOU), Rewards and Incentives (RI), Perceived Usefulness (PU), and Trust and Perceived Risk (TPR) indicated that the model was statistically significant, $F(5,351)=155.03$, $p<.001$, with a Regression Sum of Squares of 76.52, a Residual Sum of Squares of 34.65, and a Total Sum of Squares of 111.18. The Regression Mean Square was 15.31, and the Residual Mean Square was 0.10, demonstrating that the predictors collectively explain a significant portion of the variance in Intention to Use (IU). The high F-value and low p-value ($p<.001$) suggest that the model provides a good fit to the data, and the predictors significantly contribute to explaining the variance in the dependent variable.

Table 10 ANOVAª

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	76.524	5	15.305	155.025	.000ᵇ
Residual	34.652	351	.099		
Total	111.176	356			

a. Dependent Variable: Intention to Use (IU)

b. Predictors: (Constant), Perceived Convenience (PC), Perceived Ease of Use (PEOU), Rewards and incentives (RI), Perceived Usefulness (PU), Trust and Perceived Risk (TPR)

4.7. Discussion and Interpretation of Findings

A significant test is performed to determine whether independent variables influence the dependent variable. If the p-value is below 0.05, the results have a significant effect. The results of the significance test are shown in Table 11:

Table: 11 Tests variables' level of significant

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	-1.047	.260		-4.031	.000
Perceived Usefulness (PU)	.154	.042	.111	3.678	.000
Trust and Perceived Risk (TPR)	.249	.022	.370	11.434	.000
Rewards and incentives (RI)	.294	.031	.297	9.544	.000
Perceived Ease of Use (PEOU)	.433	.026	.512	16.844	.000
Perceived Convenience (PC),	.066	.025	.081	2.637	.009

a. Dependent Variable: Intention to Use (IU)

1) Perceived Usefulness (PU): Perceived usefulness refers to an individual's belief that using a specific technology, such as e-banking services, will improve their job performance or meet their daily needs. In this study, a significant relationship was found between perceived usefulness and customers' intention to use digital banking services. The data revealed a strong beta coefficient of 0.154 and a p-value of 0.000, demonstrating that perceived usefulness significantly influences customers' decision to use digital banking. Previous research supports these findings. For example, [14] highlighted the role of perceived usefulness in technology adoption, and [30] found that when individuals perceived mobile banking as a tool that enhanced convenience, saved time, and improved financial management, they were more likely to adopt it. This consistency across various studies reinforces the idea that customers' intention to use digital banking services is closely tied to their perception of its usefulness.

2) Trust and Perceived Risk (TPR): Trust and perceived risk (TPR) play a crucial role in shaping customers' intention to use digital banking services. This study found a strong relationship between TPR and the intention to use digital banking services, with a significant beta coefficient of 0.294 and a p-value of 0.000. This indicates that customers' trust in digital banking services and their perception of associated risks strongly influence their willingness to adopt these services. The findings align with prior research, such as [16] study, which found that trust increases when service providers demonstrate commitment to the relationship. Additionally, [14] found that the lack of trust was a major barrier to adopting internet-based services. These consistent results underline the importance of trust and the mitigation of perceived risks in encouraging the adoption of digital banking services.

3) Rewards and Incentives (RI): Rewards and incentives (RI) have been shown to be a significant factor influencing customers' intention to use digital banking services. In this study, the data indicated a strong relationship between the rewards and incentives offered by financial institutions and the customers' intention to use digital banking services, with a significant beta coefficient of 0.249 and a p-value of 0.000. This finding suggests that when financial institutions provide attractive rewards such as cashback offers, loyalty points, or exclusive discounts, they are more likely to encourage customers to engage with digital banking platforms. By offering such incentives, institutions can increase customer adoption and usage of digital banking services, as evidenced by this study's findings.

4) Perceived Ease of Use (PEOU): Perceived ease of use (PEOU) refers to the belief that using a technology will require minimal effort or be user-friendly. The study revealed a significant but weak positive relationship between perceived ease of use and customers' intention to use digital banking services, with a beta coefficient of 0.433 and a p-value of 0.000. This indicates that when customers perceive digital banking services as easy to use and navigate, they are more likely to adopt them. These findings align with prior research, such as [18], which also found a positive correlation between perceived ease of use and the intention to use digital banking services. Thus, providing user-friendly interfaces and simplifying processes is essential for driving customer adoption of digital banking platforms.

5) Perceived Convenience (PC): Perceived convenience refers to the belief that a service saves time and reduces cognitive, emotional, or physical effort. In this study, perceived convenience was found to have a small but significant effect on customers' intention to use digital banking services, with a beta coefficient of 0.066 and a p-value of 0.009. This suggests that when customers perceive digital banking services as convenient, time-saving, and reducing effort, they are more likely to express an intention to use these services. This finding is consistent with research by [18], which observed a positive relationship between perceived convenience and

the intention to use digital services. Therefore, enhancing convenience through streamlined processes and reducing cognitive or physical burdens on customers is a key factor in encouraging the adoption of digital banking services.

The findings highlight the significant role that various factors play in shaping customers' intention to use digital banking services. Perceived usefulness, trust and perceived risk, rewards and incentives, perceived ease of use, and perceived convenience are all influential in determining customers' adoption of digital banking platforms. While the strength of each factor varies, the consistent pattern observed across multiple studies suggests that these factors are crucial drivers in the decision-making process regarding the use of digital banking services.

Table 12. Summary of Hypothesis testing:

Hypothesis	*P-Values*	Decision
Hypothesis 1: Perceived usefulness of digital banking systems has a positive impact on customer intention to utilize these systems.	.000	Supported
Hypothesis 2: Perceived ease of use of digital banking systems has a significant positive impact on customer intention to use these systems.	.000	Supported
Hypothesis 3: Customers' levels of trust and perceived risk towards digital banking systems significantly influence their intention to use these systems.	.000	Supported
Hypothesis 4: Providing incentives and rewards can significantly impact customer intention to utilize digital banking systems.	.000	Supported
Hypothesis 5– Perceived Convenience (PC) of digital banking systems has a positive impact on customer intention to utilize these systems.	.009	Supported

5. Conclusion

The study examined the key factors influencing customer intention to use digital banking services in the Commercial Bank of Ethiopia, specifically in the Babile City Administration. The findings revealed that perceived usefulness, trust and perceived risk, rewards and incentives, perceived ease of use, and perceived convenience significantly impact customer adoption of digital banking. The study highlighted the importance of enhancing customer awareness, ensuring security and trust, simplifying user interfaces, and offering attractive incentives to encourage digital banking usage. Despite the potential benefits of digital banking, challenges such as low awareness, security concerns, and resistance to change continue to hinder adoption. The study recommends that financial institutions implement strategies to build trust, improve the user experience, and provide tangible incentives to increase adoption rates. Future research should focus on broader and more diverse samples, incorporating qualitative methods and cross-cultural comparisons to gain deeper insights into digital banking adoption patterns. By addressing these factors, banks can drive greater digital banking adoption, ultimately enhancing financial inclusion and operational efficiency in Ethiopia.

6. Recommendations
Based on the analysis conducted in this study, several recommendations can be made to enhance customers' intention to use digital banking services:

1) Perceived usefulness was identified as a highly influential factor in customers' intention to use digital banking services. Therefore, financial institutions should focus on highlighting the benefits and advantages of their digital banking offerings. Educating customers about how these services can enhance their daily needs and improve their overall banking experience can increase their intention to use them.

2) Trust and perceived risk were found to have a strong relationship with customers' intention to use digital banking services. To overcome any hesitations or concerns, financial institutions should invest in building trust by ensuring the security, reliability, and transparency of their digital platforms. Providing clear information about privacy policies, encryption measures, and customer support can help alleviate perceived risks and increase trust.

3) Rewards and incentives were identified as a significant influencing factor on customers' intention to use digital banking services. Financial institutions can design reward programs, loyalty schemes, or personalized offers to incentivize customers to engage with digital banking services. By providing tangible benefits and demonstrating value, customers are more likely to be motivated to utilize these services.

4) Perceived ease of use was found to have a moderate positive relationship with customers' intention to use digital banking services. Financial institutions should focus on designing user-friendly interfaces, intuitive navigation, and simplified processes. By reducing the cognitive and physical effort required to use digital banking services, customers will find them more accessible and convenient.

5) Perceived convenience was identified as an influencing factor on customers' intention to use digital banking services. Financial institutions should prioritize convenience by offering features that save customers' time, such as quick and easy transactions, 24/7 access, and seamless integration with other digital platforms. Additionally, reducing the cognitive and emotional burdens associated with using digital banking services can further enhance convenience.

6) As customer preferences and technology evolve, it is important for financial institutions to continuously monitor and adapt their digital banking services. Regularly gathering customer feedback, conducting usability testing, and staying updated on industry trends can help identify areas for improvement and ensure that the services meet customers' changing needs.

To address the study's limitations, future research should consider using a larger, more diverse sample to improve generalizability, and employing a longitudinal design to explore causal relationships over time. Incorporating qualitative methods like interviews or focus groups would deepen understanding of customer perceptions, while comparative analysis across different cultures could identify region-specific factors. Additionally, examining variables such as demographics, technological factors, and social influences could provide a more comprehensive view. These recommendations would help enhance the understanding of factors influencing digital banking adoption and inform more effective strategies in the industry.

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