

تقييم رضا العملاء عن الخدمات المصرفية الرقمية: دراسة حالة مصرف التجارة والتنمية، بنغازي

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An Assessment of Customer Satisfaction with Digital Banking Services: A Case Study of the Bank of Commerce & Development, Benghazi

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الملخص:

هدفت هذه الدراسة إلى دراسة رضا العملاء عن الخدمات المصرفية الرقمية التي يقدمها مصرف التجارة والتنمية في بنغازي، ليبيا، حيث أصبحت الخدمات المصرفية الرقمية ذات أهمية متزايدة لتعزيز الراحة وإمكانية الوصول. استخدم استبيان مهيكل لجمع البيانات من 187 مُستجيبًا، وُحلت النتائج باستخدام أساليب إحصائية مناسبة. كشفت النتائج أن سهولة الاستخدام المُتصورة، والفائدة المُتصورة، والثقة، والموقف تجاه الخدمة، والراحة، جميعها كان لها تأثيرات إيجابية وهامة على رضا العملاء. على الرغم من أن الدراسة أقرت ببعض القيود مثل التحيز المُحتمل للمستجيبين واحتمالية ألا تعكس بعض الردود الآراء الفعلية بشكل كامل، إلا أن هذه القيود لم تُعتبر ذات دلالة إحصائية نظرًا لحجم العينة. قدمت النتائج آثارًا وتوصيات قيمة لصانعي السياسات والمؤسسات المصرفية والباحثين في المستقبل لمواصلة تحسين الخدمات المصرفية الرقمية وتعزيز رضا العملاء.

الكلمات المفتاحية: الخدمات المصرفية الرقمية، رضا العملاء، مصرف التجارة والتنمية، بنغازي.

Abstract: This study aimed to examine customer satisfaction with digital banking services provided by the Bank of Commerce & Development in Benghazi, Libya, where digital

banking had become increasingly important for enhancing convenience and accessibility. A structured questionnaire was used to collect data from 187 respondents, and the results were analyzed using appropriate statistical methods. The findings revealed that perceived ease of use, perceived usefulness, trust, attitude toward the service, and convenience all had positive and significant influences on customer satisfaction. Although the study acknowledged certain limitations such as potential respondent bias and the possibility that some responses might not fully reflect actual opinions these limitations were not considered significant given the sample size. The results provided valuable implications and recommendations for policymakers, banking institutions, and future researchers to further improve digital banking services and enhance customer satisfaction.

Keywords: Digital Banking, customer satisfaction, Bank of Commerce & Development, Benghazi.

1. Introduction

The concept of digital banking has become an essential financial service for users of banks, allowing them to perform various activities such as bill payments, transfers, account data inquiries, financial investments, currency exchange, and transaction verification through online platforms. This global connectivity through the Internet has made it easier for people to perform desired banking activities, such as making payments, transferring funds between accounts, and obtaining reports that are performed at any time and day. The development of e-business is the primary ingredient of digital banking, catalyzing economic development and paving the way for future financial services, particularly in banking sector transactions (Akhter et al., 2022). The preponderance of technology has been pressuring banks around the world to adopt digital services for the sake of ease and convenience for users, making digital banking an important service in increasing customer loyalty to banks (Neguyen, 2020). With the advent of digital banking, the banking sector has become more competitive and offers convenient banking options. It aims to improve customer service and achieve a cashless economy. However, challenges like cyber threats, low internet connectivity rates, and a lack of awareness persist. To successfully transition to digital banking, it's crucial to address these issues, improve internet connectivity, and raise awareness among the banking community (Kataria, 2019).

2. Problem Statement

Although digital banking services have become increasingly available in Libya, customer satisfaction and adoption rates remain relatively limited compared to global trends. Despite significant advancements in banking technology and the growing efforts of financial institutions such as the Bank of Commerce and Development to expand and enhance their digital platforms, many customers still encounter challenges that hinder the full utilization of these services. These challenges often relate to issues of trust, security, ease of use,

service reliability, and the perceived value of digital banking solutions (Hakizimana et al., 2023).

Understanding the factors that influence customer satisfaction and the adoption of digital banking at the Bank of Commerce and Development in Benghazi is therefore essential. Examining how customers interact with the bank's digital platforms and how their experiences shape their satisfaction and continued usage can provide valuable insights. Addressing this research problem will contribute to improving the design, functionality, and delivery of digital banking services, thereby enhancing customer satisfaction and promoting broader acceptance of digital financial solutions across Libya.

3. Research Questions

1. How do the key factors influence customer satisfaction with digital banking of the Bank of Commerce & Development?
2. How do customers of the Bank of Commerce & Development interact with digital banking platforms?

4. Research Objectives

Although digital banking is widely accessible, the willingness to use these services differs across countries. As banking services and technology rapidly advance, driven by the increasing complexity of the banking sector and the prevalence of smartphones and computers, it is important to recognize that the mere provision of digital banking services does not necessarily guarantee customer satisfaction. Therefore, this research aims to accomplish the following objectives:

1. To identify the key factors that influence customer satisfaction with digital banking services of the Bank of Commerce & Development.
2. To evaluate how customers of the Bank of Commerce & Development interact with digital banking platforms.
3. To examine if the (perceived ease of use, perceived usefulness, trust, attitude towards the service, and convenience) encourage customers to use digital banking services of the Bank of Commerce & Development.

5. Research Hypotheses

H0a: Perceived usefulness has no impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H1a: Perceived usefulness has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H0b: Perceived ease of use has no impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H1b: Perceived ease of use has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H0c: Trust has no impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H1c: Trust has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H0d: Attitude Toward the Service has no impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H1d: Attitude Toward the Service has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H0e: The convenience of the service has no impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

H1e: The convenience of the service has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

6. Research Significance This research addresses the factors that impact customer satisfaction with banking services in Libya, using a well profound questionnaire (Nguyen, 2020) to measure whether the five chosen factors (Perceived ease of use, Perceived usefulness, Trust, Attitude towards the service, and Convenience) have a negative or positive influence on the customer satisfaction. The research findings will give Libyan digital banking providers important information that will help them improve customer experiences and their service offerings. Policymakers will also benefit from this knowledge regarding prospective regulatory interventions and areas in the digital banking sector that need attention. Traditional financial institutions may apply the research findings to improve their digital banking offerings and strategies, meeting customer expectations and effectively competing with digital-native banks. Understanding key factors influencing satisfaction can help customers select providers that align with their preferences. This research can contribute to existing knowledge on digital banking and customer satisfaction, serving as a reference for future studies and expanding understanding of digital banking in Libya and beyond.

7. Literature Review

Digital banking has revolutionized the financial industry by offering a vast array of services via online platforms, where banks take on the role of intermediaries, easing the flow of funds between savers and investors by offering convenient access to financial services. The most recent

development, mobile banking, allows customers of banks to carry out several financial operations without visiting a branch (Yakubiv et al., 2019). This transformation combines big data sets with physical domains, resulting in a transformation of the banking industry. Automated Teller Machines (ATMs) and computerized banking systems reduce human error, increase convenience, and enable banks to generate reports and conduct data analysis (Ramesh, 2020). According to the research of (Hakizimana et al., 2023), banks must focus on increasing ATM availability and debit/credit card offerings when working with point-of-sale transactions to ensure a digital economy. Likewise, effective management practices can save labor and operating expenses, boost productivity, and reduce paperwork, highlighting the need for further research on electronic banking and the financial success of banks.

As the worldwide trend of digital banking takes hold, Libyan financial institutions need to recognize the transformative power of technology in the industry. Digital banking may improve customer experiences, simplify operations, and foster financial inclusion. Understanding the structure of the Libyan financial system is critical in this context since it provides the foundation for the implementation of digital banking services. This understanding provides the foundation for exploring how digital banking may successfully meet the requirements and standards of customers of Libyan banks while also addressing opportunities and challenges specific to the banking sector in Libya.

7.1 Overview of The Bank of Commerce and Development

The Bank of Commerce and Development is recognized as a prominent institution within Libya's banking industry, committed to delivering high-quality services and maintaining excellent performance standards. Since commencing operations on June 9th, 1996, the bank has emerged as a symbol of innovation and growth in the financial sector.

Focused on ensuring customer satisfaction, the bank has consistently provided a wide range of financial solutions tailored for both individual clients and businesses, cultivating a diverse and loyal customer base. Its guiding principle, "Always with You," underscores the bank's dedication to continuous support and reliable service.

Established under Law No. 1 of 1993 concerning Banks, Currency, and Credit, and in accordance with the General People's Committee Decision No. 537 of 1423 AH, the bank was founded on a strong legal and operational framework aimed at strengthening Libya's banking sector.

7.2 Perceived Ease of Use

To effectively meet the wants of customers in digital banking, financial institutions must have an in-depth understanding of all of the factors that impact digital banking. The first factor relates to the ease of access to electronic banking, which is considered below.

The ease of access to electronic banking applications and information is a key factor in determining users' satisfaction with their banking experience online (Cabanillas et al. 2013). The results of Abdelghani Echchabi's (2018) study showed that behavioral intention to use e-banking in Islamic banks is significantly positively affected by both perceived usefulness and ease of use. According to research by Nkoyi et al. (2019), attitudes about e-banking usage intentions are greatly impacted by perceived ease of use. To increase use intentions, retail banks could strengthen relationship commitment, raise the usefulness of technology, and improve customer views. The perceived ease of use has an indirect effect that has a significant influence on attitudes toward adopting Internet banking services (Kaur & Malik 2019). Prastiawan et al. (2021) found that perceived ease of use in banking is crucial, with mobile banking being a user-friendly and convenient option, making it a popular choice among users due to its easy learning and use features. According to Alnemer's (2022) study, digital banking adoption in Saudi Arabia is heavily influenced by perceived ease of use, perceived usefulness, and trust. Mohamad et al. (2023) in their study found that perceived ease of use significantly influences attitudes towards digital banking which influences customer satisfaction, although it doesn't have a strong influence on perceived usefulness, trust, and peer influence, despite its positive and significant impact. Customer satisfaction in Libya is significantly influenced by perceived ease of use, suggesting that e-banking services' ease of use is a crucial factor in determining financial service satisfaction. Also, Indonesian customers' behavior can be strongly influenced by perceived ease of use, especially when it comes to banking applications. Customers prefer reliable applications that are easy to use; consequently, this perceived ease could increase behavioral intention and trust (Alfani et al., 2023).

7.3 Perceived Usefulness

There is a positive relationship between perceived usefulness and e-banking adoption, indicating that customers are more likely to adopt a new idea or technique if it is perceived to improve productivity or work performance and is easy to use (Mohamed et al., 2019). Perceived usefulness significantly influences customer intention to use e-banking services, influencing both intention and actual usage (Anouze & Alamro, 2019). The adoption of technology in banking is significantly influenced by the perceived usefulness of the technology (Akbar et al., 2020). Islam and Ahmed (2020) found that

customers' behavioral intention to adopt Internet banking is significantly affected by perceived usefulness. This helps commercial banks improve the usefulness of Internet banking for customers, saving them money, effort, and time. The usefulness and time-savings of e-banking services are key factors in the perceived usefulness of e-banking adoption. With the adoption being affected by factors, including users' previous and future usage. (Nayanajith, etc., 2021) found that perceived usefulness is the second most significant influence on customer satisfaction. Customers' satisfaction is largely influenced by how easy it is to execute transactions via e-banking services. Also, Shwehdi (2023) found that costumers were positively influenced by the perceived usefulness of adopting digital banking. According to the research (Mohamad et al., 2023), we can determine that perceived usefulness is the most important aspect, of their study, which noted the increase in demand for digital banking services in Malaysia. It also outlines the difficulties that traditional banks have in providing multiple channels and counter services resulting in great influences on the attitudes of customers toward them.

7.4 Trust

The study by Mohamed et al., (2019), indicates that trust significantly enhances the adoption of digital banking, with trust being a positively related factor. Trust is a vital element in e-banking services, as it significantly influences customer usage, leading to increased usage and satisfaction. For e-banking services to be successful, security of privacy and trust are critical (Nustini & Fadhilah, 2020). Pambudi et al. (2021), found that due to its influence on customer trust, trust plays a crucial role in the adoption of digital banking services. Trust is a key factor in enhancing the perception of the usefulness of technology, particularly for digital banking adoption among millennials in India (Mer & Viridi, 2021). Trust is the strongest factor influencing bank customers' intention to use digital banking, as it forms a positive attitude towards the system and ensures a reliable platform for their banking transactions (Mohamad et al., 2023). The COVID-19 epidemic and technical improvements have led to a considerable increase in trust in digital banking services. This highlights the need to improve understanding of technology, confidence, and adoption among older customers (Jena, 2023).

7.5 Attitude Toward the Services

The attitude has an important effect on actual usage behavior (Chikondi Daka and Phiri, 2019). According to Mufarih et al. (2020), we can determine that the user's attitude towards a digital banking application significantly influences their intention to use it, with a positive attitude boosting their interest in using the application. The study reveals that the customer attitude of Libyan banks significantly influences their satisfaction with digital banking, emphasizing the

significance of a positive attitude towards financial services. This highlights the need for a positive user experience and excellent customer service to foster a positive attitude towards digital banking. Also, The Study of Mohamad et al. (2023) found that attitude significantly influences the intention to use digital banking, with bank customers with the right attitude being more likely to encourage the practice of digital banking.

7.6 Convenience Nguyen (2020) expressed that convenience does not truly affect customers' decision to use digital banking services. Customers are most likely going to change their point of view after they make them think that the service truly did not put them at risk or harm them.

Furthermore, According to Shwehdi (2023), convenience towards the service has a positive influence among costumers in adopting digital banking. Additionally, Yousuf & Shanyu (2021) state that if customers are more convinced that adopting digital banking will provide them with greater benefits, their willingness to use and recommend it to everyone will increase.

7.7 Reflection

After reading and evaluating several articles and studies, we can state that perceived usefulness, perceived ease of use, customer attitude toward the service, trust, and convenience significantly impacts customer satisfaction and loyalty to e-banking services. These factors can help banks improve their digital banking services and enhance customer satisfaction. The findings highlight the significance of meeting consumer wants and preferences when offering online banking services, as they may have greater implications for the banking sector, particularly in Libya.

8. Methodology

The chapter explores the research methodology, research design, research population, sampling, data source, and questionnaire source. It details the steps for data collection and validity, utilizing a quantitative research approach in this study. The primary data collection source is the questionnaires, and the secondary is the literature review. The online questionnaire was designed under the supervision of Dr. Abdelbaset Al Amroni to determine customer satisfaction with digital banking in Libya. The questionnaire was taken from Nguyen (2020, p. 305). This questionnaire has been distributed to the population in Benghazi, Libya. 187 responses were collected and analyzed. Questions take a 5-point Likert scale in which (1 = strongly disagree), (2 = disagree), (3 = neutral), (4 = agree), and (5 = strongly agree).

Table 1. Likert Scale Interpretation for Respondents' Answers

Weighted Mean	Variables	Scale	Weight	Description
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Weighted Mean	Variables	Scale	Weight	Description
≤ 1.50	Strongly Disagree	1		Very Low
1.51 – 2.38	Disagree	2		Low
2.39 – 3.25	Neutral	3		Moderate
3.26 – 4.13	Agree	4		High
4.14+	Strongly Agree	5		Very High

8.1 Data Collection

This study utilizes questionnaires as the main method of data collection. Questionnaires are a common research tool that can be used to collect data from a large number of participants. The advantage of using questionnaires is that they are easy to administer and can be completed quickly and anonymously, which may increase the likelihood of participants responding truthfully. Additionally, questionnaires are relatively low-cost, especially if they are administered online, and can be easily standardized, which ensures that all participants are asked the same questions in the same way. The data-collection methods were developed to accurately assess the target construct under investigation and guarantee that the study findings were relevant. The questionnaire used to measure the factors in the proposed model was adapted from a previous study by Nguyen (2020, p. 305) and modified to suit the context of the current research. The poll was completed entirely online, using Google Forms. This questionnaire has been distributed to the population in Benghazi Libya, and 187 answers have been gathered. The questionnaire was divided into two sections: demographic questions and closed-ended questions on the research purpose, with a Likert 5-point scale chosen in which 1 strongly disagrees and 5 strongly agrees.

8.2 Population

Determining the exact size of the population of digital banking customers at the Bank of Commerce & Development in Benghazi can be challenging, as the number of active users may fluctuate over time. Not all individuals are users of digital banking services. Therefore, the population for this study specifically focuses on customers of the Bank of Commerce & Development in Benghazi who actively utilize the bank's digital banking services, such as mobile applications, online banking platforms, and electronic transactions.

8.3 Sample

This study investigates customer satisfaction with digital banking services at the Bank of Commerce & Development in Benghazi. Determining the appropriate sample size was challenging due to the difficulty in obtaining accurate data on the total population of digital banking users. The questionnaire was distributed online to customers of the bank who actively use its digital banking services. Data collection was conducted over a period of two weeks, resulting in 187 valid responses. The participants represented diverse gender, age, and nationality groups, providing a balanced view of user experiences. The selected sample size was considered adequate for capturing meaningful insights into customer satisfaction trends among digital banking users at the Bank of Commerce & Development in Benghazi.

8.4 Data Analysis

Data was acquired by having the 187 participants fill out Google Forms, which were web-based questionnaires. This made the process more convenient. The data were analyzed using the SPSS version 25 software suite. Several tests were employed to examine the data in this study, including the reliability test, Cronbach alpha, frequencies to indicate differences among participants based on demographic data, the normality test, the Kolmogorov-Smirnov and Shapiro-Wilk test, the hypotheses test, and the non-parametric Wilcoxon signed-rank test. To begin, a frequency test was used to examine the demographic component. Second, Cronbach alpha was employed to assess the project's dependability. Furthermore, a normality test was done to evaluate the normality of data distribution amongst participants, utilizing the Kolmogorov-Smirnov test and Shapiro-Wilk. Lastly, to test the stated hypotheses, the research carried out a non-parametric test, namely the Wilcoxon signed-rank test, as an alternative to one sample test.

8.5 Reliability test

Soden et al. (2004, p. 33) Stated, "Reliability refers to the degree to which a measurement of a phenomenon yields a stable and consistent result". This means that testing for dependability is significant since it pertains to the consistency of a measuring instrument's parts. Four reliability cut-off points: low reliability (0.50 and below), moderate reliability (0.50-0.70), high reliability (0.70-0.90), and good reliability (0.90 and above) (Soden et al., 2004). The generally accepted rule is that a reliability level of 0.6-0.7 is acceptable (Hulin et al., 2001).

Table 2: Reliability Test

Reliability Statistics		
	Cronbach's Alpha	N of Items
Perceived Ease of Use	0.821	6
Perceived Usefulness	0.687	5
Trust	0.800	4
Attitude	0.793	3
Convenience	0.770	3
Total	0.899	21

Table 2 shows that Cronbach's alpha in all dimensions is greater than (0.60) α : "Perceived Ease of Use= 0.821", "Perceived Usefulness= 0.687", "Trust=0.800", "Attitude Towards the Service=0.793", "Convenience= 0.770" and "The total reliability of all variables =0.899". Therefore, the questionnaire is considered dependable and can be used in this study.

9. Demographic Profile Analysis

This section explains how respondents were divided into categories based on their demographic data. The gender, age, and nationality of the study participants are all gathered.

Table 3: Demographic Information Analysis – Gender

Gender			
		Frequency	Percent
Gender	Male	103	55
	Female	84	45
	Total	187	100.0

Table 3 present the gender of the participants; the respondents were females with a percentage of 45%, while males represent the most 55% of the sample.

Table 4: Demographic Information Analysis - Nationality

Nationality			
		Frequency	Percent
Nationality	Libyan	155	85
	Non-Libyan	32	15
	Total	187	100.0

Table 4 illustrates the nationality variable; the majority of the participants are Libyans (85%), and 15% represent the non-Libyan.

Table 5: Demographic Information Analysis - Age Group

Age Group			
		Frequency	Percent
Age	18 to 25	82	45.8
	26 to 35	62	34.5
	36 to 45	10	5.1
	46 to 55	15	7.9
	56 and above	13	6.8
	Total	187	100.0

Table 5 shows the age groups, 18 to 25 years old (45.8%), 26 to 35 years old (34.5%), 36 to 45 years old (5.1%), 46 to 55 years old (7.9%), and 56 and above (6.8%).

10. Normality Test

"Tests for normality calculate the probability that the sample was drawn from a normal population". This set of tests helps in the indication of which hypothetical probability to accept or reject. (Jarque and Bera., 1987, p.163-172).

"H0: data are normally distributed."

"H1: data are not normally distributed."

Table 6: Tests of Normality

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Perceived Ease of Use	0.139	187	.000	0.927	187	.000
Perceived Usefulness	0.140	187	.000	0.955	187	.000
Trust	0.112	187	.000	0.974	187	.002

Tests of Normality						
Attitude Toward the Service	0.202	187	.000	0.928	187	.000
Convenience	0.169	187	.000	0.940	187	.000

Table 6 is conducted to determine how the studied data is distributed. The finding of this test of normality indicates that perceived ease of use, Perceived usefulness, Trust, Attitude Towards the Service, and Convenience are not significant.

In the Kolmogorov-Smirnov and Shapiro-Wilk test, it was indicated that the p-values for all variables being studied were less than the significance level of 0.05 which means that we can reject the null hypothesis the data is not normally distributed. Therefore, nonparametric tests will be used for further analysis.

11. Hypotheses Testing

The Wilcoxon signed-rank test is a non-parametric test that evaluates the significant difference between observed and specified values in a single sample. It does not rely on normality assumptions and is based on the rank of differences. going to use the Wilcoxon signed-rank test as an alternative to the parametric one-sample t-test when the data are not normally distributed. and the results were as follows:

Table 7: Wilcoxon signed rank test

Wilcoxon signed-rank test		
	Hypothesis	P-Value
Perceived Ease of Use	= 3	0.000
Perceived Usefulness	= 3	0.000
Trust	= 3	0.000
Attitude Toward the Service	= 3	0.000
Convenience	= 3	0.000

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From Table 7, can see that the corresponding p-value of Perceived ease of use is 0.0000 and it is clear that is less than the level of significance at 0.05, so we can reject the H0a: "Perceived ease of use has no impact on customers' satisfaction with digital banking of the Bank of Commerce & Development" and accept H1a: "Perceived ease of use has an impact on customers' satisfaction with digital banking of the Bank of Commerce & Development".

In addition, the Wilcoxon signed rank test indicates the p-value for perceived usefulness is 0.000, which is less than 0.05. This leads to rejecting H0b: "Perceived usefulness has no impact on customers' satisfaction with digital banking of the Bank of Commerce & Development" and accepting H1b: "Perceived usefulness has an impact on customers' satisfaction with digital banking of the Bank of Commerce & Development"

Furthermore, the Wilcoxon signed rank test indicates the p-value for perceived usefulness is 0.000, which is less than 0.05. This leads to rejecting H0c: "Trust has no impact on customers' satisfaction with digital banking of the Bank of Commerce & Development" and accepting H1c: "Trust has an impact on customers' satisfaction with digital banking of the Bank of Commerce & Development".

Moreover, the results of the Wilcoxon signed rank test reveal the p-value for perceived usefulness is 0.000, which is less than 0.05. This leads to rejecting H0d: "Attitude Toward the Service has no impact on customers' satisfaction with digital banking of the Bank of Commerce & Development" and accepting H1d: "Attitude Toward the Service has an impact on customers' satisfaction with digital banking of the Bank of Commerce & Development".

Lastly, the table of the Wilcoxon signed rank test indicates the p-value for perceived usefulness is 0.000, which is less than 0.05. This leads to rejecting H0e: "The convenience of the service has no impact on customers' satisfaction with digital banking of the Bank of Commerce & Development" and accepting H1e: "The convenience of the service has an impact on customers' satisfaction with digital banking of the Bank of Commerce & Development".

After finding that there is an impact on customer satisfaction with digital banking, we will compute the median for each factor to investigate a positive or negative impact.

Table 8: Median of factors

Statistics	
	Median
Perceived Ease of Use	3.833
Perceived Usefulness	3.800
Trust	3.250
Attitude Toward the Service	4.000
Convenience	4.000

Table 8 and Figure 2 show the median for each factor; the median that is equal to or more than 3.000 will have a positive impact and less than 3.000 have a negative impact. From the table and the figure, we can see that the perceived ease of use median is 3.833. It is clear that this is more than 3.000 and can be figured out to have a positive impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

In addition, the perceived usefulness median is 3.800; it is clear that it is more than 3.000 and can be figured out to have a positive impact on customer satisfaction with digital banking of the Bank of Commerce & Development. Furthermore, the trust median is 3.250; it is clear that it is more than 3.000 and can be figured out to have a positive impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

Additionally, the Attitude Toward the Service median is 4.000; it is clear that it is more than 3.000 and can be figured out to have a positive impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

Moreover, the convenience median is 4.000; it is clear that it is more than 3.000 and can be figured out to have a positive impact on customer satisfaction with digital banking of the Bank of Commerce & Development.

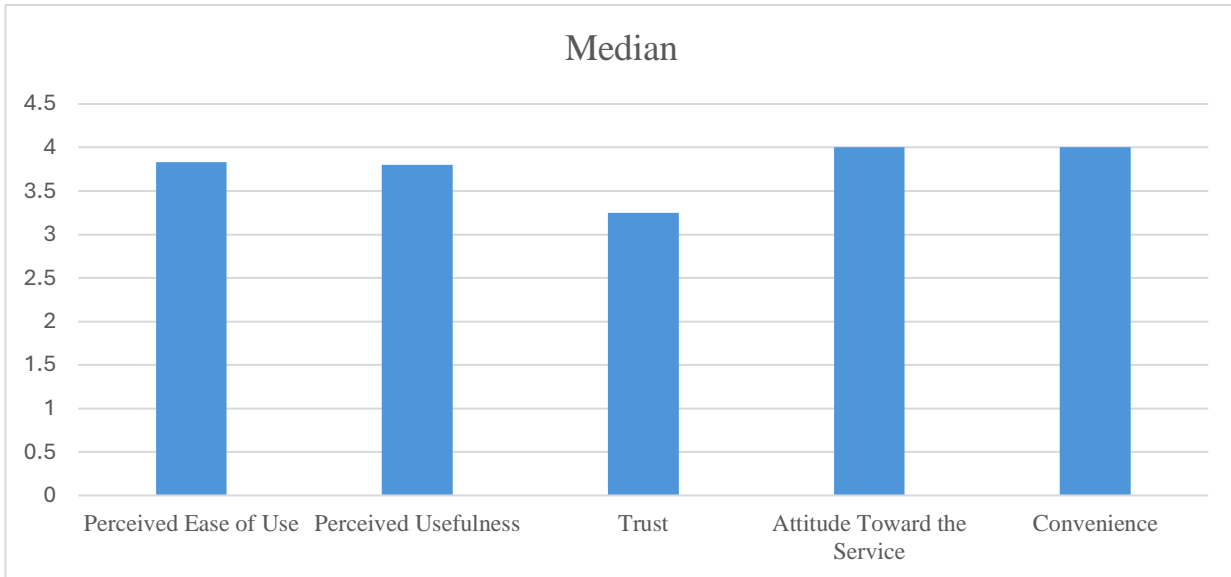


Figure 1 Median of factors

12. Empirical Results

12.1 Key results

The findings of the study reveal the following:

1. Customers' perception of the usefulness of digital banking services positively influences their overall satisfaction with services provided by the Bank of Commerce & Development.
2. The perceived ease of use of digital banking platforms contributes positively to customer satisfaction at the Bank of Commerce & Development.
3. Trust in the bank and its digital services has a favourable effect on customers' satisfaction levels.
4. A positive attitude toward the digital banking services offered enhances customer satisfaction.
5. The convenience offered by the digital banking services is a significant factor that positively impacts customer satisfaction.

The above findings clearly show that perceived usefulness, perceived ease of use, trust, attitude, and convenience are important factors so desired to ensure customer satisfaction with digital banking services offered by at The Bank of Commerce & Development. The bank will be able to improve customer satisfaction and offer a good experience with digital banking to their customers by focusing on these factors.

12.2 Discussion

The outcomes of this study have reported that five factors positively affect customer satisfaction with digital banking. This illustrates that when customers have an advantageous attitude towards digital banking, they become more convinced of it and consider that it would benefit them in a more significant way. which further satisfaction with the services along with willingness to use them and recommendations to others for using them will increase.

This study observed that the factors that increase users' intention to use digital banking have a positive effect. Also, they encourage people to use digital banking in a significant way if they have a positive attitude towards it, further convincing them that they will get sounder benefits through its adoption than conventional banking. These findings are similar to the studies conducted by Yousuf and Shanyu in 2021

In agreement with the findings of Jena (2023), emboldening perceived ease of use, perceived usefulness, and attitude towards the services all influence customer satisfaction with digital banking. Moreover, the results of this study are in line with the view of Yousuf and Shanyu in 2021 on the relevant data that show perceived ease of use, perceived usefulness, trust, attitude toward the service, and convenience in understanding the behavior towards the use of digital banking. However, the analysis of the customers' perceptions of using digital banking has made it possible to conclude the usefulness of this service. According to the current findings, customers will have a good attitude towards digital banking if they are aware of and believe that learning to use these services is simple and adds value in terms of maintaining time and transaction security. Moreover, if customers think digital banking is reliable for sensitive information that is exchanged online, they will be encouraged to embrace and use these services, making sure they are certain that banks will ensure and be compliant that access to their sensitive information and documents is restricted.

In addition, the research findings indicated that trust has a positive impact on customer satisfaction with digital banking at The Bank of Commerce & Development. Customers with high trust levels in the security, sustainability, reliability, and privacy of digital banking services would gain more satisfaction with the banking experience. Thus, this trust within the Libyan context is an important driver in fostering the relationship between the customer and the bank, as well as elevating digital banking to be perceived more positively.

Also, there is a positive impact of perceived ease of use on customer satisfaction in the digital banking industry at The Bank of Commerce & Development. Perceived ease of use enhances customers' experience when accessing services that are offered through digital banking at The Bank of

Commerce & Development, hence giving them a positive digital banking experience. The results of the study revealed that when customers of the Bank of Commerce & Development in Benghazi perceive digital banking platforms as easy to navigate, understand, and interact with, their levels of satisfaction tend to increase significantly. This highlights the importance of ensuring that the bank's digital banking services are user-friendly and intuitive, as these features play a vital role in enhancing customer satisfaction. The findings also indicated that customers' attitudes toward digital banking services have a positive and significant effect on their satisfaction levels. Customers who maintain a positive perception of the bank's digital services are more likely to be highly satisfied with their overall experience. Moreover, many customers perceive the digital banking system of the Bank of Commerce & Development as a smart and innovative solution that provides numerous benefits, further reinforcing their positive attitude and continued engagement with the service.

12.3 Tested Hypotheses

Table 9: Tested Hypotheses

Hypotheses	Results
H0a: Perceived usefulness has no impact on customer satisfaction with digital banking of the Bank of Commerce & Development.	Reject
H1a: Perceived usefulness has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.	Accept
H0b: Perceived ease of use has no impact on customer satisfaction with digital banking of the Bank of Commerce & Development.	Reject
H1b: Perceived ease of use has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.	Accept
H0c: Trust has no impact on customer satisfaction with digital banking in Libyan banks.	Reject
H1c: Trust has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.	Accept
H0d: Attitude Toward the Service has no impact on customer satisfaction with digital banking of the Bank of Commerce & Development.	Reject
H1d: Attitude Toward the Service has an impact on customer satisfaction with digital banking in Libyan banks.	Accept
H0e: The convenience of the service has no impact on customer satisfaction with digital banking of the Bank of Commerce &	Reject

Hypotheses	Results
Development.	
H1e: The convenience of the service has an impact on customer satisfaction with digital banking of the Bank of Commerce & Development.	Accept

13. Conclusion

13.1 Implications and Recommendations

The results of this study on customer satisfaction with digital banking services at the Bank of Commerce & Development in Benghazi provide several important implications for both bank management and policymakers. Understanding the factors that influence customer satisfaction allows the bank to improve user experiences, enhance service quality, and increase customer loyalty and retention. Additionally, the findings can guide regulatory and internal policies aimed at strengthening data security, protecting customer privacy, and safeguarding digital banking users' rights. Insights from this study also inform strategies for the bank's ongoing digital transformation, helping to expand access to digital services and promote financial inclusion in Benghazi, particularly among underserved or marginalized communities. Addressing infrastructure limitations and promoting digital literacy are essential steps toward reducing the digital divide, thereby increasing the adoption and effective use of digital banking services.

Based on the study findings, several recommendations can be made to improve digital banking services at the Bank of Commerce & Development. First, enhancing the user experience should be a priority, which includes designing user-friendly interfaces, intuitive navigation, and offering personalized services that meet customer needs. Second, the bank should strengthen trust and security measures by implementing robust cybersecurity protocols, clearly communicating data-handling practices, and educating customers about safe online behaviors. Third, promoting digital literacy through awareness campaigns and targeted training programs can help customers better engage with digital platforms and increase service adoption. Fourth, investing in infrastructure development, such as reliable internet connectivity and mobile accessibility, is crucial to ensure broader access to digital banking. Fifth, collaborations with fintech companies and technology providers can accelerate the development of innovative solutions and improve service delivery. Additionally, continuous monitoring and evaluation of customer satisfaction and usage patterns will help the bank identify areas for improvement and respond proactively. Lastly, providing efficient, multi-channel customer support is

essential for addressing queries and concerns, ensuring a positive customer experience.

By implementing these recommendations, the Bank of Commerce & Development in Benghazi can enhance the overall digital banking experience, strengthen customer satisfaction, foster financial inclusion, and maintain a competitive edge in the evolving banking sector.

13.2 Limitations

While this research provides valuable insights for both the banking industry and academic studies, several limitations should be acknowledged. First, the intended sample size was 400 respondents; however, only 187 participants completed the questionnaire due to time constraints. Future studies could consider a larger sample to improve the reliability and generalizability of the findings.

Second, this study relied solely on quantitative data collected through a structured online questionnaire. While useful for statistical analysis, this approach may overlook nuanced factors influencing customer satisfaction that qualitative methods, such as interviews or focus groups, could uncover.

Third, distributing the questionnaire online may have limited the representativeness of the sample, as respondents were primarily those with internet access and familiarity with digital platforms. Consequently, certain regions or demographic groups across Libya may not have been adequately represented.

Fourth, response bias is a potential concern. Participants may have provided socially desirable answers or misinterpreted some questions, which could affect the accuracy of the reported satisfaction levels.

Finally, as the study focused on customers of the Bank of Commerce & Development in Benghazi, the results may not be fully generalizable to other banks or regions in Libya. These limitations suggest areas for improvement in future research, including the use of mixed-method approaches, broader geographic coverage, and strategies to minimize response bias.

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