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Issues of electronic banking services: The case of commercial bank of Iraq

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Abstract:

The banking sector has made significant investments in the use of information technology during the last 20 years. Most banks have relied on electronic work to complete transactions and provide banking services, and they have become effective competitive means in digital and knowledge-based economies. Technological innovations have played an important role in the banking industry by creating value for banks and financial institutions, enabling them to expand the range of their products and services beyond the constraints of time and space, and contributing to enhancing their competitiveness more effectively. However, electronic banking brings along various issues and risks that require identification and management. This paper aims to clarify the difficulties the online banking sector is facing as well as the main complaints from Customers. Using a questionnaire to get specific data about the main issues of electronic banking services with a focus on the customer perspective. The findings revealed that there is a lack of knowledge and awareness of the e-banking system among the Iraqi bank's customers. Due to insufficient knowledge and a lack of confidence in e-banking services, some customers have not yet embraced internet banking. The research reached a number of recommendations, the most important of which is the necessity of providing the necessary infrastructure to implement electronic banking, and working to familiarize bank customers with the importance of modern technology and benefiting from electronic banking services.

Keywords: E-banking services, Cybercriminals, Technological innovations, ATM.

Introduction:

The most recent financial services, together with quick and affordable payment, transfer, credit, and insurance services, are all provided by contemporary Fintech, which is regarded as the industry's driving force today. (Varma & Al-Samman, 2023; Al-Nuaimi et al., 2022). To enhance the quality of customer service delivery and lower transaction costs, banks have made investments in information and communications technology (ICT) and implemented ICT networks to offer a variety of banking products and services. In recent times, banks worldwide have embraced electronic banking services and innovative banking technologies. The integration of modern technology has become a fundamental aspect of banking, allowing banks to develop cutting-edge products, improve their market infrastructure, and reach out to a wide range of geographically dispersed and remote markets. Over the past thirty years, clients' wants and requirements in the banking industry have evolved dramatically. However, with the expectation that these services be available anywhere, at any time, a demand for more individualized banking goods and services has evolved. When they have great faith in a single financial services provider, customers are likely to combine their banking requirements with them in order to simplify their everyday banking services. In addition, there have been major changes in the nature of financial services recently. There is no longer a need for traditional banks or their branches because customers may obtain traditional banking services from anywhere in the world at any time using any delivery method they want (computers, phones, ATMs). Information technologies, which are automated forms of

customer interaction (ATMs, call centers, Internet banking, mobile banking), are posing an increasing threat to the traditional banking network, which consists of a physical branch infrastructure. These technologies involve relatively lower costs and give customers the option to choose from alternative delivery channels (Driga & Isac, 2014).

As a result, banks had to make considerable adjustments to their business plans in response to the advent of new technologies, and as the demand for remote banking services grew, branch banking services started to lag behind virtual banking services. According to Loonam and O'Loughlin (2008), the banking business has undergone significant upheaval as a result of competition, globalization, and shifting societal tendencies, particularly in the area of information and communication technology. The information infrastructure is the foundation for developing new electronic distribution channels for current items, according to developed banks all over the world. The term "electronic banking" refers to remote banking services because of this.

Notwithstanding the fact that banks have put in place security measures to guarantee that online transactions are shielded from cybersecurity risks, the advancement of online banking and the rise in customer use have made it a prime target for hackers worldwide. Electronic banking services face several challenges and risks related primarily to the security of systems and transactions, including data confidentiality and authentication of interested parties, and others related to the continuous availability of the Internet for financial transactions that expose them to significant risks, such as hackers and computer viruses (Sokolov, 2007; Driga & Isac, 2014). Economic crimes carried out via the use of computers and the Internet are referred to as cybercrime, or computer crime. Typical instances of cybercrime are virus spreading, illicit file downloading, phishing, forgery, and theft of personal information such as bank account data (Ibid.).

Every nation's economy benefits greatly from banking, which is an essential component of the financial sector and helps to quicken economic growth rates. The Corona crisis brought to light the beneficial role that banks and other financial institutions play in funding, enabling capital access, and supporting the operations of key markets. The COVID-19 pandemic has expedited long-standing trends in digital payments and banking. Retail banks now have the chance to draw in customers by offering online banking services. However, to succeed, they must present a convincing, multifaceted strategy that includes sensible solutions, particularly for complex banking services like mortgages and investments. The current study intends to highlight the key issues and challenges that the parties involved in the electronic banking process must deal with, as well as the features of the various electronic banking services, their function in the economy, and the benefits they provide to individual and corporate clients.

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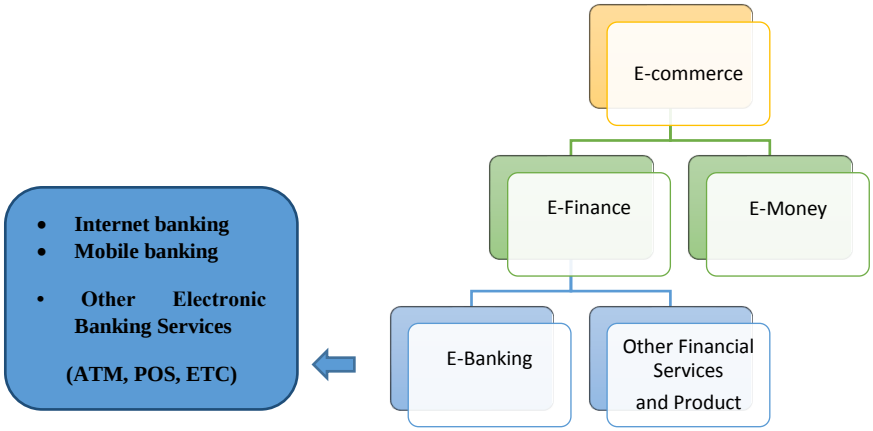
Theoretical Literature:

The term "electronic banking" or "internet banking" is defined as remote banking services provided by authorized banks or their representatives through devices operated either under the direct supervision or management of the bank or under an outsourcing agreement. In other words, electronic banking is an umbrella term for the process by which a customer can conduct banking transactions electronically without visiting a branch and also includes systems that enable customers of banks, individuals, or companies to access accounts, conduct business transactions, or obtain information about products and services in finance through the Internet (Khan, 2017). These services are called by many terms, such as digital banking services, internet banking, remote electronic banking, home banking, online banking, or service banks. Self-service banking, or Web banking, also includes phone banking and the use of automated teller machines (ATMs).

Digital banking services emerged as a result of the technological development in the field of information and communications, the increase in the growth of transactions and electronic business around the world, and the business need for banks to provide financial services according to unconventional methods (Gikandi & Bloor, 2010). Since electronic business and commerce cannot be achieved without electronic banking services, recent business transformations have sparked new concepts in electronic banking services, including electronic transfer of funds, bank cards, electronic payment of electronic money for bills, automated clearing houses, etc. Technological innovations such as communication networks, mobile phones, automated teller machines (ATMs), and electronic money have also changed the ways of service provided by banks and financial institutions. It provided the banks with many advantages in focusing on new distribution channels, as it is possible to provide banking services without temporal and spatial restrictions, and thus it is possible to reach and cover the needs of wider geographical areas with the possibility of electronic shopping and the ability to access and monitor personal accounts, which led to an increase in the strength of competition for banks within the Modern complex (ibid.). The emergence of electronic banking dates back to the beginning of the eighties, coinciding with the emergence of electronic cash. The use of cards began at the beginning of the last century in France in the form of cardboard cards used in the public phone and metal cards used at the postal level in the United States of America (Arab Monetary Fund, 2002).

Figure (1) the flow of electronic banking services



Source: Khan, H. F. (2017). E-banking: Benefits and issues. American Research Journal of Business and Management, 3(1), p2.

With the use of electronic banking services, banks may gain a competitive edge and expand their market share. Furthermore, because banks and other financial institutions may quickly and easily verify many accounts, the adoption of electronic services can reduce the cost of resources required for traditional banking services and enable rapid and continuous access to information. In addition to improving cash management, which boosts business efficiency for short- and long-term deposits, commercial paper, bonds, and money market shares (Mondal & Kujur, 2021), Aladwani (2001) discovered that electronic banking services offer benefits to customers. By checking in on the bank's website, customers may now more easily access them, saving them time thanks to service technology. Performing financial transactions is one of the most significant benefits of using online services, in addition to ease.

There is no requirement for customers to physically visit the bank in order to make payments—they may do it from anywhere at any time. The technology also guarantees quick transaction completion and offers the ease of online account tracking, electronic check book requests, account updates, and interest rate inquiries for a range of financial products (Khan, 2017).

Even with the benefits and advantages of automating Customer money management and banking service processing, many customers continue to steer clear of online banking services. The primary issue is that the majority of people do not trust online transactions because of concerns about security and confidentiality when using electronic channels, ease of use, language barrier, lack of brochures, lack of confidence when using electronic banking, and satisfaction when interacting with direct branches. Other concerns include inadequate Internet knowledge (i.e., insufficient skills to use the service). Additionally, using online banking services might result in manipulation by banks through the imposition of commissions or other costs. The effectiveness of electronic banking can be diminished by a number of factors, including the absence of the computer or other equipment required to use electronic channels, a lack of knowledge about the advantages of these services, poor bank marketing, service restrictions like raising the maximum amount that can be taken out in cash, and the availability of banking services like documentary credit that cannot be offered through electronic channels (Al-Shammari & Al-Abdlat, 2008).

Although they are still not generally available, electronic banking services are nevertheless commonly utilized in both developed and developing nations. Developing nations can benefit from industrialized economies' experiences. The majority of banks use electronic banking as a way to raise client satisfaction levels by providing better financial services.

Customers can access electronic banking services through a variety of ways here. The most popular ones include online banking, point of sale systems, and ATMs. Below is a synopsis of every service: (Worku and others, 2016)

The ATM, or automated teller machine: It is a machine that allows one to withdraw cash without going into the banking hall. Recharges and money transfers are also sold there.

Cards and are accessible seven days a week, twenty-four hours a day, with the option to check the amount of the account.

• Financial institutions, which can be physical or virtual banks or credit unions, provide their clients the ability to transact financial business securely via their website. Any online-related transactions might be included. Banks are increasingly running websites where clients may do a variety of financial operations related to banking, including checking account balances, interest rates, and currency rates.

• The spot where the transaction is completed is known as the point of sale (POS), sometimes known as the point of purchase (POP). It is referred to as an electronic cash register and describes

the hardware and software used to process payments for products and services. The point of sale terminal facilitates the creation and printing of receipts and manages the sales process through an interface that allows the sales representative to be contacted. • Mobile banking: Also referred to as M-Banking, mobile banking refers to the use of a mobile device, such as a phone or personal digital assistant (PDA), to perform balance checks, account transactions, payments, credit applications, and other banking tasks. Originally called as SMS Banking, mobile banking provided its services through text messages. There is minimal to no infrastructure for mobile banking in many remote and rural parts of the world. This form of mobile commerce is also prevalent in nations where the majority of people do not use banks. Because banks are exclusively located in large cities, customers in the majority of these areas must drive hundreds of kilometres to go to the closest bank. The range of services offered might include access to specific information, account management, stock market management, and financial transaction facilities.

• Electronic checks: An electronic check, or "E-Check," is a legally binding document that bears the same obligations as paper checks. It contains the same information but is typed electronically, just like an electronic signature. Electronic checks settle payments faster—within 48 hours—than regular checks, which have a longer settlement period. They include costs comparable to regular checks. Furthermore, computerized checks assist in removing the issues related to loss (Draghi, 2015).

Many obstacles and problems that could hinder the development and uptake of online banking transactions accompany banks' use of electronic banking technologies as part of their business strategy to grow, boost revenues, broaden the client base, and foster perfect competition among financial services institutions. As a result, the management of banks and other financial institutions needs to be aware of all risks, identify them, and decide on the best course of action to take when dealing with them.

The quickly developing electronic banking industry confronts the following risks:

1. Operational risk: According to MollaZade (2010), operational risk poses a serious threat to electronic financial services. It encompasses losses brought on by insufficient internal controls, mistakes made by people, malfunctioning technology, and outside events. Fraud from the outside, unintentional causes, and internal sources can all contribute to these hazards. While the Basel Committee has provided guidance on managing operational risks, it has also presented new challenges for businesses. Transaction risk is influenced by the organization's processing environment, technology, service kinds, and complexity. Financial institutions need to make sure their infrastructure has the capacity to deliver dependable services since clients demand 24/7 availability. Controlling transaction risks entails developing appropriate policies, processes, and controls, including fundamental internal controls and information security measures (Kujur & Shah, 2015). Organizations should identify the right level of security measures depending on their sensitivity to information and risk tolerance (Akbari, 2012).

2. Strategic risk: strategic risk refers to the long-term impact on revenues or capital owing to bad business decisions, faulty implementation, or inability to adapt to industry developments (Solanki, 2012). Electronic banking services must to be in line with the bank's overarching financial plan, emphasizing particular business requirements over banking as a stand-alone goal. Improper planning and investment in electronic financial services might create strategic risks (Trufasu, 2004). Banks should set specific goals, weigh the expenses of customer supervision and monitoring operations, and make judgments based on both costs and benefits. Making decisions about investments in the security and administration of communications networks and

information technology systems is part of risk management. A clear strategy and action plan with good performance monitoring are crucial for reacting to these threats (Kujur & Shah, 2015).

3. Reputational risk: A bad public image has the potential to make a bank lose faith in its capacity to conduct business. This might be owing to weak Customer data protection or hacking (Khan, 2017). Events may be swiftly publicized thanks to the internet's ability to spread rapidly. Reputational risk might also rise as a result of customer complaints over the challenges associated with utilizing online banking services. Hackers have the power to harm a bank's brand by eroding trust in the safety of online banking services and impeding growth. Because their choice to offer sophisticated trading services raises reputational risk, electronic banking service providers are concerned about a new kind of systemic risk.

4. Security risk: Ineffective access control, staff fraud, and electronic money counterfeiting are examples of security hazards in electronic banking systems. Online applications are now more trusted due to the complexity of access control brought about by sophisticated computer capabilities, geographic dispersion, and communication channels like the internet (Abdalla, 2018). Bank personnel may use client information against them or store value cards in an unauthorized manner. Banks run the danger of increasing risk and creating debt if they are unable to identify and stop the counterfeiting of electronic money. Adoption of electronic banking services is contingent upon the acceptance of security and privacy concerns, as safeguarding sensitive data is essential. Security breaches are divided into four categories by Kujur and Shah (2015): significant criminal intent, unintentional hacking, system design faults, and security breaches.

5. Legal Risk: In electronic banking, legal risks include breaking laws, rules, regulations, or procedures; they can also arise from situations where it's unclear what each party's legal rights and duties are. Because electronic banking services are still relatively new, there is uncertainty around electronic money operations and associated rights and duties. Because electronic banking services are distant, it can be difficult for banks to use traditional ways to prevent and identify illegal activities (Khan & Karim, 2010). Legal risks encompass Customer disclosures, privacy safeguards, and damages resulting from security breaches. Banks are required to hold clients accountable for security lapses and pay for losses brought on by carelessness, hacker attacks, system malfunctions, or other sources. With internet banking, banks may reach a wider geographic audience more quickly, but their knowledge of local rules and regulations may be limited. Because they conceal the identities of its users, electronic banking services aid in money laundering (Nsouli & Schaechter, 2002).

6. Credit risk: Just because a loan comes from an electronic banking channel doesn't mean that a financial institution's credit risk increases. To ensure that management information systems successfully monitor the performance of portfolios generated using electronic banking channels, management must consider additional safeguards while making and sanctioning loans electronically. The risk of the lending process is harder to control when loans are created and approved online. These factors have the potential to greatly raise credit risk if improperly handled. The following steps must be taken in order to handle this kind of risk effectively: Shah and Kujur (2015)

• Monitoring the continuous expansion, pricing, underwriting standards, and credit quality of loans originating through electronic banking channels. • Confirming the identification of customers for online credit applications and executing a legally binding agreement.

• Assessing collateral and completing concessions throughout a possibly larger geographic region; monitoring and supervising third parties acting as agents or on behalf of the financial institution (such as an online loan creation site or an electronic payment processor).

• Gathering loans from people throughout a potentially large geographic area; • Keeping an eye on any rise in the amount of loans made outside the area

7. Liquidity, interest rate, price/market risks: Because of its independence from regulation, reliance on financial services technology, and diversity, the banking sector has grown to be extremely dangerous. Initiatives in electronic banking may increase investment and finance risks, contingent on price and variations in deposits. Institutions that store deposits, create accounts, conduct in-person meetings or paper communication can manage possible volatility and geographic breadth.

Challenges of E-banking Services:

Financial institutions have been offering remote computer services to businesses and people for a long time. Global standards include small-payment and corporate cash management systems, as well as publicly accessible automated devices for managing retail accounts and cash withdrawals. Nonetheless, banks are opening up new business channels and offering their clients with better services due to the rising global usage of the Internet as a delivery medium for financial goods and services (BCBS, 2001). While e-banking offers several benefits, financial institutions must be mindful of and exercise caution while utilizing it.

The adoption of e-banking by bank customers is influenced by a number of factors, including security concerns, accessibility issues, a lack of service knowledge, and a lack of infrastructure, such as power and telecommunications facilities. These are some of the main factors that Auta (2010) found when conducting their study. Similarly, Anwana (2010) discovered in his study that the primary obstacles to the widespread use of e-banking are insufficient security, a lack of technological expertise, antiquated telecommunications infrastructure and facilities, inadequate public power supplies, a lack of trust, the low socioeconomic status of the populace, and a lack of public confidence in the technology. Based on technological proficiency and security, this research indicates that e-banking products and services are neither reliable nor secure.

Smail and Osman (2012) state that frequent power outages, awkward ATM and Electronic Points of Sale (EPOS) locations, unreachable internet, delayed bank response times for resolving incorrect transactions, and frequent ATM malfunctions are the primary factors influencing customers' adoption of e-banking. Garedachew (2010) found that low levels of internet penetration, poorly developed telecommunication infrastructure, a lack of suitable legal and regulatory framework for e-commerce and e-payments, high internet costs, frequent power outages, customers' reluctance to accept new technology, ignorance of the advantages of new technologies, risk aversion, and a shortage of trained staff in key organizations were the main barriers to internet adoption, which is consistent with the previously mentioned studies.

E-banking is evolving faster than ever before in terms of technology and innovative customer service. New financial applications used to be introduced gradually and with a great deal of testing involved. Banks are under pressure to release new business apps in the present competitive market within incredibly short timeframes—often just a few months—from concept to production. This rivalry hampers managers from ensuring that they carry out proper risk assessments, security evaluations, and strategic assessments before deploying new e-banking systems (BCBS, 2001).

E-banking increases banks' dependence on information technology, making a number of operational and security-related issues more technically challenging. It also quickens the trend toward an increase in partnerships, alliances, and outsourcing contracts with unregulated third parties.

Research Methodology:

The goal of the study was to identify the challenges that Commercial Bank of Iraq's electronic banking services face. The study used a descriptive research approach. Cooper & Schindler (2006) state that a descriptive study's goal is to ascertain the where, what, and how of an occurrence. As a result, the descriptive design worked well for this study since it covered the process of collecting and analysing data from the participants, who were Commercial Bank of Iraq Customers.

The data for the study was gathered using a questionnaire with closed-ended questions, which allowed for the creation of detailed suggestions. The meticulously designed questionnaire was pre-tested on a small sample of the population to allow for any required adjustments. Pre-testing on a small population sample increased the validity and accuracy of the data collected for the research.

Both quantitative and qualitative data analysis techniques were used in the study (Yates, Moore, & Daren, 2008). The data was coded according to the several factors to facilitate data entry and interpretation. Descriptive statistics and SPSS version 21 are used to present the results and assist decide how much was used. To examine the collected quantitative data, statistics were used. Nineteen of the twenty questionnaires that were provided were filled out and returned by respondents. 95% of the responses is considered a decent rate. We considered the frequency and percentages of the factors under investigation in the research.

The purpose of our questionnaire was to identify the main issues and obstacles that bank customers face in obtaining electronic banking services. The questionnaire was divided into five different parts; the first part of the questionnaire is about the bank clients' background. The second part consists of questions about the types of E-banking services utilized by users; the third part contains questions about the infrastructure issues associated with the use of E-banking services; the fourth part consists of questions about legal and security issues; and the final part contains questions regarding customers' exposure and literacy issues. . Alongside the survey, semi-constructed in-depth interviews were conducted with 10 participants to get a deeper understanding of how the participants described their experiences and obstacles regarding electronic banking services. To ensure that respondents completely understood the survey questions, the questionnaire was conducted in Arabic and then translated to English.

Findings:

According to information from the Commercial Bank of Iraq's website and the kinds of online banking services the bank offers its clients, the bank always strives to provide the best by keeping abreast of the latest technological developments. This enables its clients to take advantage of these electronic banking services by simply connecting online using a smartphone or personal computer from anywhere in the world. The client doesn't need to evaluate anything in order to complete their own banking transactions. Bank branches provide applications such as the extremely easy and secure way to request a checkbook. They also enable customers to check their

balances, obtain account statements, transfer money between accounts, and move money from one client account to another within the same bank. As indicated in Table 1, the respondents provide their answers to the questions about the e-banking services they use..

Table 1. E-Banking Service Types Utilized by Users

E-Banking services	Freq.		Percent	
	Yes	No	Yes	No
ATM service	18	0	95%	5%
balance inquiries	15	4	79%	21%
transfer funds between accounts	10	9	53%	47%
changing the secret code of the card	8	11	42%	58%
Get the statement of account	9	10	47%	53%
the request of the chequebook	6	13	32%	68%

Source: Survey, 2023

The table above illustrates the primary and most popular e-banking services, as reported by the respondents during interviews with some of the Commercial Bank of Iraq's clients: using ATMs for cash withdrawals (95%), balance inquiries (79%), and account transfers (53%). The most often utilized e-banking services by bank clients are fund transfers between accounts, balance queries, ATM cash withdrawals, and requests for mini statements, according to bank managers and e-banking managers.

Cronbach's alpha:

Following the completion of the empirical data collection, the data was assembled into an Excel file, where the internal reliability of the research was examined for each of the variables. Using the Cronbach's alpha approach, the internal reliability was assessed using the statistical program SPSS (Pallant, 2010). The question that is examined is whether distinct survey questions assess the same underlying component; for each factor to be able to guarantee this, at least three statements must be included (Bryman & Bell, Business Research Methods, 2011). A high Cronbach's alpha score indicates that the various responses assess the same component and are correlated with one another. A rule of thumb is to utilize Cronbach's alpha of roughly 0.700 as a cut-off point (Pallant, 2010). However, there is a gray region with acceptable values between 0.600 and 0.700 (Bryman, 2008). In order to determine if statements belonging to distinct variables may be consolidated into a single variable and hence assess their high reliability, Cronbach's alpha is used (Pallant, 2010).

Table 2. Cronbach's alpha tests

Variable	Number of Items	Cronbach's Alpha Value
Infrastructural Issues	5	0.665
Legal and security issues	5	0.632
Customers' Exposure and Literacy	5	0.645

Source: Survey, 2023

Quantitative Analyse and Discussions

Table 3. Demographic Profile of Respondents

Variables	Category	Freq.	Percent
Gender of the Respondents	Male	12	63%
	Female	7	37%
Age	20-30years	2	11%
	31-40years	8	42%
	41-50 years	5	26%
	Above 51 years	4	21%
Education levels	Secondary	3	16%
	Undergraduate	4	21%
	Graduate	5	26%

	Post graduate	7	37%
Access to internet	Yes	14	74%
	No	5	26%

The above table shows the demographic profile of respondents. Accordingly, it indicated that more than half of the respondents are males (12, 63%). This implies that males have better e-banking usage experience as compared to females. This may be because men have the courage to take up new technology as compared to women, even with little information about it.

With regard to age category, the majority of the respondents are young, with an age range of 31–40 (42%). This suggests that the majority of the e-banking users' are in the middle age group and have better e-banking usage practices as compared to old and young customers. In contrast, a study conducted by Margaret and Ngoma (2013) shows that the young generation is more familiar with computers and the internet, so they are more interested in using e-banking systems, particularly ATMs and online transactions, rather than old and traditional banking services. The rationale for having more people adopt or use e-banking in this age group is because these are people who were born during the digital era and understand technology faster than those who are in their late thirties and above (Muzividzi et al., 2013). Related to educational level, the majority of the respondents are graduates and postgraduates (63%). This also suggests that educated people with a graduate degree and above have better e-banking usage experience as compared to those who have a first-degree educational qualification. In relation to access to the internet, about 74% of the respondents have access to the internet, while only 26% do not. This implies that respondents engaged in this study had enough knowledge to understand and respond to the questions on the challenges facing internet banking. Table 4 shows the responses from the participants' perspective in evaluating the e-banking services and determining their main obstacles.

Table.4 Descriptive Statistics of Infrastructure Issues

	Items	N	Mean	Sd.
1.	The bank's website's accessibility	19	3.35	0.956
2.	The accessibility of online banking services	19	2.980	1.045
3.	The online banking services' user-friendliness	19	3.345	0.908
4.	The banking system's response times are	19	2.879	0.899
5.	The nation's internet accessibility	19	3.023	0.943
6.	The online banking services' cost-effectiveness	19	3.854	0.988
	Weighted mean	19	3.238	1.174

The infrastructural problems or obstacles listed in the above table prevent customers of the commercial bank of Iraq's e-banking service from effectively utilizing the service. We used a 5-point Likert scale to measure the metrics shown in the table, with 1 representing strongly disagree, 2 representing disagree, 3 representing neutral, 4 representing agree, and 5 representing strongly agree. Thus, for each question statement or set of challenges, the mean value in the table above represents the average value of all respondents' responses. Accordingly, among the proposed infrastructure issues that hinder the effective utilization of e-banking services are the bank's website's accessibility with a mean value of 3.35, the accessibility of online banking services with a mean value of 2.980, the online banking services' user-friendliness with a mean value of 3.345, the online banking system's response times with a mean value of 2.879, the nation's internet accessibility with a mean value of 3.023, and the online banking services' cost-effectiveness with a mean value of 3.854. A standard deviation of 1.174 suggests that there was no variation in the replies from the average score.

Table.5 Descriptive statistics of Legal and Security Issues

	Questions	N	Mean	Sd.
1	Security of financial transactions through Internet Banking,	19	3.230	0.846
2	The privacy of electronic banking transactions for clients	19	2.980	1.542
3	Security and privacy of customers' personal data	19	3.565	0.945
4	The respect of moral principles in E-banking services	19	2.067	0.971
	Weighted mean	19	2.961	1.081

The use of digital transcription is mainly related to e-banking security. The fourth question was about how secure you find online banking transactions. E-banking services are not effectively utilized due to a number of suggested legal and security issues. As shown in Table 5, the security of financial transactions through Internet banking has a mean value of 3.230, the privacy of electronic banking transactions for clients has a mean value of 2.980, the security and privacy of customers' personal data have a mean value of 3.565, and the respect of moral principles in e-banking services has a mean value of 2.067.

Table.6 Descriptive Statistics of Customers' Exposure and Literacy Issues

	Questions	N	Mean	Sd.
1.	Knowledge in using computers	19	2.712	1.216
2.	The extent of customers' familiarity with using technology information	19	2.434	0.845
3.	The bank's information useful before creating an online banking account for customers	19	3.349	0.921
4.	The ease of access to information on online banking	19	3.099	0.977
5.	Updating of the bank's website's content	19	2.634	0.957
	Weighted mean	19	2.846	0.983

Source: Survey, 2023

Table 6. Indicates the customers' exposure and literacy issues that could hinder their usage of e-banking. The level of knowledge possessed by bank customers in using computers with a mean of 2.712, which is one of the problems and challenges for using electronic banking services; the extent of customers' familiarity with using technology information with a mean of 2.434; the third question asked participants how helpful the information provided by the bank before opening customers' online banking accounts with a mean of 3.349; the ease of access to information on online banking with a mean of 3.099; and the updating of the bank's website's content with a mean of 2.634.

Pearson Correlation coefficient

Table. 7 Correlation Coefficient

		infrastructural challenges	Legal and Security Issues	Customers' Exposure and Literacy
E-banking services	Pearson Correlation	0.587	0.643	0.713
	Sig. (2-tailed)	.000	.000	.000
	N	19	19	19

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

We examined the association between online banking and infrastructure difficulties using correlation analysis. The investigation found a substantial, significant, and positive association (r = 0.587). The statistical significance threshold is 0.000, indicating a p-value of less than 0.05, indicating a substantial relationship between online banking and infrastructure difficulties.

To further explore the existence and nature of the link between legal and security issues and online banking, the researchers also carried out a correlation analysis. The investigation revealed a

highly significant and favourable connection (r = 0.643). There is a substantial correlation between legal and security issues and online banking, as indicated by the significance level of 0.001, which is below 0.05 ($p<0.05$).

The study also aimed to determine the correlation between the exposure and literacy of customers to computers, information technology, and online banking. The findings show that there is a substantial positive correlation (r = 0.713) between online banking and customers' exposure to and literacy in computers and information technology. The findings show that there is a substantial positive correlation (r = 0.713) between online banking and customers' exposure The study found a strong correlation between online banking and customers' exposure to and literacy in computers and information technology. The significance level is 0.000, which is statistically significant ($p<0.05$), indicating a strong correlation between online banking and customers' exposure to and literacy of computers and information technology.

Discussion

With internet banking, banks may transcend geographical barriers and change their strategic course—as long as they have the required technology in place. The internet continues to be a versatile medium that enables companies to quickly and simply provide their services to customers. The development of e-commerce and online banking, two intricately linked systems, depends on social identity, robust legislation, well-built networks, and strong government support. Among the many obstacles faced by internet banking are the challenges of building an adequate infrastructure for electronic banks and the challenges of updating the data so that customers can examine the most recent products.

Technology risks comprise a variety of possible consequences, such as system failures, software bugs, operational errors, processing errors, hardware malfunctions, capacity constraints, network vulnerabilities, cyberattacks, fraudulent activity, and inadequate recovery capabilities. Information technology innovations affect the risk profiles of banks. There are increased banking risks and decreased banking hazards. Special attention must be given to operational, legal, and strategic considerations. Investors are more vulnerable to fraud, deception, and direct marketing of unregulated financial services when they utilize the internet. Technological developments have the potential to increase operational risk to the point that banks are required to modernize their internal control frameworks in order to adapt to the ever-evolving operating landscape.

Prior to using global technology to address local demands, banks need to make necessary investments in infrastructure and human capital development. For example, an examination of the Society for Worldwide Interbank Financial Telecommunications' (SWIFT) internet migration plan indicates that many poor countries have not yet finished the entire migration because they lack the infrastructure, working cash, and technological know-how required. Internet Banking: Benefits and Challenges in Developing Economies Electronic payment systems that are extensively utilized would be another illustration of this. Many firms and Customers in certain poor nations either need to have access to the infrastructure necessary to handle electronic. Banks should have standby hardware, software, and network components in order to provide prompt recovery in the event that a part or function fails or is damaged.

Online banking, while more convenient, has ethical and security challenges. Key logger technology allows criminals to get into computers and steal personal information. Concerns about customer privacy, transaction legality, and relevant rules and regulations give rise to legal risk in the context

of remote banking. Since the internet is a public forum, banks must move swiftly to protect their employees and customers there.

The bank's possible selling of its customers to other companies and the possible disclosure of personal data creates security risks. Thanks to technological improvements, banks can now reduce these risks. However, users also need to take precautionary measures, such downloading antivirus software, changing passwords often, and not disclosing pin numbers or passwords to unauthorized people.

A transaction may have legal risks if there is ambiguity regarding the parties' obligations and rights, or if there are violations of laws, rules, regulations, or suggested practices. Insufficient information about the responsibilities and rights of Customers may lead to fines from authorities or lawsuits against the bank.

Online banking is preferred over traditional banking techniques since it is available 24/7. Understanding client needs is critical to building long-lasting relationships and delivering cost-effective services. The use of internet banking is significantly influenced by education levels, with low literacy and education serving as significant barriers. Financial institutions should support awareness and education campaigns to guarantee that a wider range of customers, irrespective of language or cultural background, can readily obtain information. Customers' perceptions will be impacted by online banking, which will also make it easier to create successful alliances.

Customers' satisfaction levels with a bank's online banking services are influenced by the way the bank presents its website and user interface. Customers like services that are reasonably priced and provide good value. Using technology has its limits and isn't always beneficial for establishing long-term financial relationships. A well-designed website reduces perceived risks and promotes user-friendliness. Dependability and service quality are critical since they shape customers' perceptions. Affordability, expertise, and sufficient security are further factors that can improve client satisfaction.

Conclusion

Customers are the biggest group of stakeholders for banks. Customer satisfaction with online banking services is influenced by the bank's initial interface and site style. Customers want services that are economical and offer good value. Technology use may be objective, which is counterproductive for long-term financial partnerships. A well-designed website lowers perceived risks and encourages user-friendliness. Dependability and service quality are important since they influence customers' opinions. Customer satisfaction can also be raised by affordable prices, appropriate security, and friendly practice awareness campaigns.

The Iraqi commercial bank has unique legal and security challenges, even if the majority of respondents follow the rules. While online banking is convenient, it also puts banks at risk for security issues like malware or hacking, which might lead to data being distributed to the wrong person.

In the context of the Iraqi banking sector, the study focuses on Customers' exposure to and knowledge about computers and information technology. With a mean of 2.3407 and a standard deviation of 0.8247, respondents think they are good. Relationship building is greatly impacted by internet banking; yet, adoption may be hampered by bugs in the online interface at first.

Prior research suggests that increasing Customer knowledge about the features and advantages of the services offered is essential to increase use. However, enhancing the user experience and comfort of the online banking interface is not enough to increase the number of people using online banking. The organization has to consistently implement trust-building measures in order to

lower perceived risk and increase online confidence. In order to increase Customer awareness and bring attention to these offers, emphasize the benefits of using online banking services in your marketing campaigns. By employing customer innovativeness level as a segmentation variable, managers may increase the usage of online banking among genuine Customers who are either light or non-users of the electronic banking system.

This study may have collected empirical data through in-depth interviews with a small number of participants using a qualitative technique. But the study has to make general conclusions about concerns and obstacles bank customers might experience to offer a non-misleading outcome (Denscombe, 2016). Quantitative data was deemed most appropriate for this study since its goal is to investigate how Customers' faith in the bank has been impacted by the digitalization of banking services.

Seclusion, negative feedback was discovered in addition to the good feedback from the electronic banking transactions, which opened up a lot of potential. Certain respondents contended that certain customers had not yet adopted online banking because of their lack of knowledge and confidence in the services. Furthermore, studies have indicated that a negative attitude toward e-banking is partly caused by a lack of knowledge about how to use the internet and restricted access to services. Saying that. Plans to attract more traditional banking customers to utilize online banking services may include supplying additional resources and information about internet connectivity to banking users as well as teaching them about the benefits of e-banking services. In order for customers to grasp it, customer service should be simple to use. State banks ought to provide these services as well in order to achieve their goals. Moreover, banks and the government have to work together to safeguard potential clients' privacy and solve issues with safety, security, and privacy.

The study's findings indicate that the majority of bank clients use ATMs as their primary means of accessing e-banking services. In Iraq, other e-banking systems including internet and mobile banking are still relatively new. The study found that a number of factors, including frequent network/internet failures, power outages, ignorance of e-banking channels, security issues, and malfunctioning ATMs, seriously restrict customers' ability to fully accept and utilize e-banking services. The study's findings suggest that Iraqi commercial banks should inform their customers about the benefits and applications of electronic banking, especially in relation to mobile and online banking. The research recommends the importance of providing the required supplies to expand the range of electronic banking services while providing protection for the data of the bank's customers and providing training opportunities for its employees to provide these services efficiently. It is also important to inform customers of the importance of information technology and the necessity of benefiting from electronic banking services.

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