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RESEARCH PAPER

The Performance Evaluation of Tejarat Internet Bank Services (AHP and Eisenhower Matrix Methods)[1]

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Abstract

Online banking is becoming a popular choice for many clients who value convenience and efficiency. However, it is also important to evaluate how well internet banks perform in terms of client satisfaction. The aim of this study is to measure the performance of Tejarat internet bank services, one of the largest Iranian banks that offers online banking services to its clients. We used two methods: The Importance-Performance Matrix and the analytical Hierarchy Process. The Importance-Performance Matrix helped us rank the identified factors according to their importance and urgency for improving the bank's performance. The analytical hierarchy process helped us compare and weigh the relative importance of various criteria and sub-criteria that affect the bank's performance. We collected data from a sample of 169 Tejarat online financial services users through a questionnaire survey. Our results showed that the bank's performance was influenced by five factors: efficiency, ease of use, security, speed, and support. We also found that security and ease of use were the most critical and urgent factors that required immediate attention from the bank. Therefore, we recommend that Tejarat internet bank services focus on enhancing security and ease of use as their top priorities to improve their performance. We also suggest that they improve the quality of service in the client support section by being more responsive and fast. These insights are not only beneficial for Tejarat Internet Bank Services but also for other banks that want to improve their performance in the online banking sector.

Keywords: AHP, Client Satisfaction, E-Commerce, Importance-Performance Matrix Analysis (IPMA), Internet Banking.

JEL Classification: G41, M29, M19.

1. Introduction

One of the most widely used digital banking services in the financial sector right now is internet banking(Almaiah et al.., 2022; Namahoot and Laohavichien, 2018).

[1]. The present article has been extracted from the thesis titled 'Evaluation of Internet Bank Indicators Using AHP Methods and Eisenhower Matrix (Case Study: TEJARAT Bank)'. The thesis was conducted under the supervision of Majid Afsharirad.

As more people use the internet and mobile devices, internet banking has become a handy and effective way for clients to handle their money (Namahoot and Laohavichien, 2018). Internet banking also offers banks a low-cost and scalable way to serve many clients. Due to the COVID-19 epidemic, banks were supposed more than ever to deliver a seamless and secure online banking experience. This article examines the factors that influence client satisfaction in internet banking and gives practical advice for banks that want to improve their internet banking services.

The banking sector has undergone tremendous changes from the traditional era to the modern age. Therefore, a study has been conducted to understand the client's preference for digital banking. This study (Alsmadi et al., 2022) also examines the various factors that affect digital banking, the challenges faced by digital banking, and the different modes of digital payment used by clients. However, despite the growing importance of internet banking, there is a notable research gap in the literature concerning the comprehensive evaluation of performance indicators and the application of decision-making methods like the Analytic Hierarchy Process (AHP) to improve internet banking services in the context of the evolving banking industry. This study aims to fill this gap by delving into the application of AHP in evaluating the performance of internet banking services, identifying critical indicators, and providing insights to enhance client satisfaction and loyalty, especially in the face of intensified competition within the banking sector (Abbasi et al., 2020). To overcome this challenge, many banks have started using analytical methods to evaluate the performance of their internet banking services (Kaur et al., 2021; Seçme et al., 2009). The analytic hierarchy process (AHP) is one such method that has gained popularity in the banking industry (Shamshur and Weill, 2019; Xi and Li, 2022). AHP is a technique that assists decision-makers in prioritizing and ranking multiple criteria based on their relative importance. By applying AHP, banks can identify the most critical performance indicators of internet banking services and allocate resources in the best way possible. However, the growing competition in the banking industry has made it essential for banks to evaluate the performance of their internet banking services to ensure client satisfaction and loyalty (Abbasi et al., 2020). Evaluating internet banking performance is a complicated task that involves the assessment of multiple performance indicators such as security, support, ease of use, speed, and efficiency (Hu and Liao, 2011).

1.1 Internet Banking Performance Indicators

Internet banking has become a critical component of the banking industry, providing clients with a convenient and accessible means of managing their finances (Almaiah et al., 2022; Namahoot and Laohavichien, 2018). To ensure the success of internet banking services, banks must evaluate their performance based on various indicators, such as security, support, ease of use, speed, and efficiency. Evaluating internet banking performance is a difficult task that requires the evaluation of multiple performance indicators such as security, support, ease of use, speed, and efficiency.

1.1.1 Security

Security is a vital factor in internet banking services, as clients need to trust that their personal and financial information is safe (Nazaritehrani and Mashali, 2020). Security has become a crucial factor in encouraging the use of internet banking, which has seen a huge increase in usage. Banks and financial institutions must ensure that their internet banking systems are secure and reliable to gain the trust and confidence of their clients. Sensitive client data security necessitates a thorough strategy that addresses a number of issues, including authentication and access control, data privacy and protection, encryption, secure communication, and defense against fraud and cyberattacks. A secure internet banking system is essential to reducing the risks of unauthorized access, identity theft, data breaches, phishing attacks, and other types of cyber threats. In aiming to promote the widespread use of internet banking services, security in the adoption of internet banking is crucial.

1.1.2 Support

Support is another key indicator of internet banking services, as clients may face technical issues or need assistance with their transactions (Anouze and Alamro, 2020). Banks must provide prompt and effective client support, such as online chat or phone support, to address client questions and concerns. Because internet banking uses technology and can be challenging for certain users, it is important for financial institutions to offer enough support to guide users through the process and help them with any challenges they might run into. Depending on the client's level of technological knowledge and the unique features of the internet banking system, several levels of support may be needed.

1.1.3 Ease of Use

Clients are more likely to adopt and stick with internet banking services if they find them easy to use(Ezzi, 2014). The design of the web application, the availability of services, and the website navigation all affect how simple it is to use the internet banking system. These are significant components that affect how clients view and employ internet banking services.

1.1.4 Speed

Speed is another important indicator of internet banking services, as clients expect their transactions to be processed quickly (Nazaritehrani and Mashali, 2020). For instance, countries that have superior digital infrastructure, such as smartphones and high-speed internet access, generally have higher adoption rates for internet banking. Likewise, banks with simple and straightforward digital banking interfaces might draw more clients than those with complicated and challenging platforms. Mobile computing is a computing paradigm designed for workers who travel outside the boundaries of their organizations or for any other people traveling outside their homes (Salehnia et al., 2014).

1.1.5 Efficiency

Efficiency is the final indicator of internet banking services, representing the overall performance of the platform in terms of transaction processing times, availability, and reliability (Chen et al., 2019). By decreasing the number of physical branches and workers needed to serve clients, online banking can assist banks in lowering operational costs. Banks may be able to manage transactions and accounts electronically, without having to physically interact with clients, with the help of a comprehensive internet banking system.

This article's objective is to evaluate the performance of online banking services by employing the AHP methods and the Eisenhower Matrix in this situation. As a case study, the study uses Tejarat Bank, one of Iran's large corporations. The goal of the study is to determine the most vital online banking performance indicators for Tejarat Bank and to offer suggestions for how to enhance the effectiveness of its internet banking services. The findings from this research may be helpful for financial firms and decision-makers who want to raise the standard of internet banking services and increase client loyalty and satisfaction. The rest of the paper is structured as follows. Section 2 provides the literature review, and in Section 3, the research methodology is explained. Section4 illustrates the data collection methods, and in Section 5, the empirical findings are

presented. Finally, the conclusion and policy implications of the paper are stated in Section 6.

2. Literature Review

Internet banking has become more common in recent years due to its convenience and accessibility. Many studies have examined the relationship between internet banking and client satisfaction, highlighting the importance of a positive client experience in achieving client satisfaction. Overall, several more studies have looked at the connection between internet banking and client satisfaction, emphasizing the significance of a satisfying client experience. Tang et al. (2024) empirically analyzed the driver role of emerging technologies and new industry trends on bank diversity and liquidity. Finally, they consider the heterogeneous impact of Fintech on banks. We debate the role of bank characteristics (size and ownership structure) and the financial crisis triggered by the COVID-19 outbreak. The sudden outbreak and rapid spread of COVID-19 in late 2019 triggered huge financial upheavals. The Chinese government imposed a series of quarantine measures to control the spread of the virus. These restrictions cause a severe shock to the development of the real economy. Our research examines how Fintech affects bank diversification and liquidity policies in the context of economic turmoil by focusing on a rare COVID-19 epidemic shock. The findings provide further evidence on the interplay between Fintech and the banking sector during the epidemic. Elshaer et al. (2024) social commerce witnessed significant growth due to increasing numbers of consumers choosing online channels as their preferred means of shopping. Consumer attitude and trust are key factors influencing customers purchase decision of buying products and services marketed through online platforms such as social commerce. A positive consumer attitude towards a brand or product can lead to greater level of perceived trust and, hence, increase the likelihood of purchasing. Further, a negative consumer attitude or low trust may deter individuals from purchasing, even if they are interested in the product. This study aims at investigating the mediating role of customers attitude and perceived trust on the relationship the relationship between social commerce and buying intention post-COVID-19 pandemic. Adaptability can enhance client satisfaction by enhancing client engagement. Banks can use client data analysis to better understand their needs and tailor solutions to each individual client, increasing client satisfaction. Also, banks may provide better client care thanks to internet banking. Banks can quickly respond to client concerns by implementing chat bots or virtual assistants, enhancing the entire client experience (Hsu and Lin,

2023). Ultimately, the studies pointed to the need for a satisfying client experience to obtain client satisfaction in internet banking. Client satisfaction and loyalty can be significantly affected by elements like ease of use, security, and client service, which ultimately affect how well-performing banks with online banking services perform financially. The COVID-19 outbreak hastened the uptake of online banking services, making it more crucial than ever for banks to give their clients a safe and straightforward experience (Almaiah et al., 2022; Sasono et al., 2021). Technology has become an increasingly critical success factor in modern day banking like many other aspects of human life; driving competition, process, operation and customer service delivery and satisfaction (Soyebo and Olaiya, 2022). On the other hand, with the increase in the activities of banks, the emergence of new competitors in the industry, and the increase in the complexity of economic variables and society's needs, the importance of defining goals and developing new banking programs has increased (Amiri et al., 2023).

Client satisfaction has significantly decreased as a result of the introduction of internet banking. Clients are now accustomed to the ease of online account access as mobile and internet-based banking become more common. There are several issues with using mobile devices as resource providers, including unstable wireless connections, limited energy capacity, and frequent location changes (Samani and Bashi, 2020). Clients are more satisfied as a result of this accessibility because they can make transactions and participate in banking activities at their leisure without having to go to a physical branch. According to surveys, clients who communicate with their banks through digital means are more satisfied than those who use traditional channels (Szopiński, 2016). Online banking enables clients to manage their accounts, pay bills, transfer money, and perform other banking functions without leaving their homes, resulting in a more enjoyable experience for many clients. Moreover, internet banking empowers banks to offer clients individualized services. Faster response times and more efficient service can help increase client satisfaction levels. A study by Al-Masaeed et al. (2022) examined the factors that contribute to client satisfaction in internet banking. The study found that factors such as website design, ease of use, security, and client service all had a significant impact on client satisfaction. Another study by Salehnia et al. (2014) explored the relationship between internet banking and client loyalty. The study found that a positive client experience, including ease of use, security, and responsiveness, was a significant driver of client loyalty in internet banking. Soyebo and Olaiya (2022) show that emerging technology variables such as Web Payment, Mobile Money operators, Automated Teller Machine and Point

of Sale terminals have positive long run relationships with bank performance in Nigeria.

Banks can use AHP method and the Eisenhower matrix to assess their internet banking services and decide how to distribute resources based on the data (Liu et al., 2007; Yazdani et al., 2017). This article surveys the current research on internet banking and client satisfaction, showing how these methods can help enhance internet banking services (Hsu and Lin, 2023). We will examine previous studies on internet banking indicators in the next sections.

Table 1. Literature Review of Security KPIs in Internet Banking

KPI	Definition	References
Confidentiality	Protecting customers' personal and financial information from unauthorized access or disclosure	(Fox et al., 2021; Gull et al., 2022)
Integrity	Ensuring the accuracy and completeness of customers' transactions and information	(Fox et al., 2021; Gull et al., 2022)
Availability	Ensuring that customers can access their accounts and perform transactions whenever they need to	(Fox et al., 2021; Gull et al., 2022)
Authentication	Verifying the identity of customers to prevent fraud and unauthorized access	(Fox et al., 2021; Gull et al., 2022)

Table 2. Literature Review of Support KPIs in Internet Banking

KPI	Definition	References
Responsiveness	Timely and effective response to customers' inquiries and issues	(Fan et al., 2018; Meyer-Waarden et al., 2023)
Competence	Adequate knowledge and skills of customer service representatives to resolve customers' issues	(Fan et al., 2018; Meyer-Waarden et al., 2023)
Empathy	Ability to understand and address customers' emotional needs and concerns	(Fan et al., 2018; Meyer-Waarden et al., 2023)

Table 3. Literature Review of Ease of Use KPIs in Internet Banking

KPI	Definition	References
User interface	The design and layout of internet banking platform	(Bach et al., 2018; Hewa et al., 2021)
Navigation	The ease with which customers can find and access the desired features and services	(Bach et al., 2018; Hewa et al., 2021)
Transaction process	The simplicity and intuitiveness of the process for performing transactions	(Bach et al., 2018; Hewa et al., 2021)

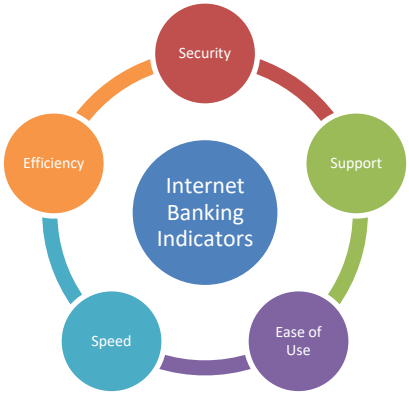

Figure 1. Conceptual Model
Source: Research finding.

Table 4. Literature Review of Speed & Efficiency KPIs in Internet Banking

KPI	Definition	References
Response time	The time it takes for the internet banking platform to respond to customers' requests	(George, 2018)
Processing time	The time it takes for the internet banking platform to process customers' transactions	(Almaiah et al., 2022; Fan et al., 2018)
Transaction cost	The cost to customers for using internet banking services compared to traditional banking channels	(Szopiński, 2016)

The present study focuses on evaluating internet banking indicators with a specific emphasis on privacy, speed, support, ease of use, and efficiency within the context of internet banking services. In this section, we bridge the nexus between our literature review and the development of our conceptual model, providing a clear link between the empirical model's construction and the insights gleaned from prior research.

Consumers' perception of security and privacy risk is a significant factor influencing their use of internet banking (Lin, 2020). It underscores the significance of robust data protection mechanisms to build user trust and satisfaction. In our conceptual model, we position "privacy" at the forefront, acknowledging its pivotal role in influencing user perception and behavior in the realm of online banking services. Lin and Wang (2020) conducted a study titled 'Examining the Factors Affecting Intention to Adopt Internet Banking: Employing the DEMATEL-ANP-SEM Approach' Banks that design their online platforms to

be easy to operate and improve transaction speed can enhance customer satisfaction and increase the likelihood of continued use. We incorporate "speed" as a distinct indicator in our conceptual hierarchy, recognizing its contribution to customer satisfaction and efficient online transactions.

Customers often seek help and support when using internet banking service. This can include assistance with understanding the functions of internet banking, creating logins, and navigating the online platform (Naeem and Ozuem, 2021). We integrate "support" into our hierarchical model, understanding its significance in addressing user concerns and queries promptly. The user interface of a banking app or website should be intuitive and easy to navigate, allowing users to find what they're looking for and perform tasks without difficulty (Fox et al., 2021). In our conceptual model, we allocate a specific category to "ease of use," aligning with research that highlights its influence on user adoption and retention. Banks hope that internet banking will help them maintain profitable growth by enabling them to automate work, reduce costs, and retain customers simultaneously. E-commerce, when properly integrated into existing banking operations, can lead to substantial cost savings and higher profitability (Taherabady et al., 2010).Within our conceptual model, we emphasize "efficiency" as a critical determinant, reflecting its implications for streamlined operations and customer satisfaction. The integration of these indicators into our hierarchical model draws from a synthesis of existing literature. It reflects our commitment to grounding our empirical model in well-established research findings, providing a foundation for the subsequent methodology and analysis sections.

3. Methodology of Research

In this article, two approaches have been used to evaluate the internet bank indices: the Analytic Hierarchy Process(AHP) and the Eisenhower matrix.

3.1 AHP

Internet banking customers can use Analytic Hierarchy Process (AHP) to make better decisions about their financial transactions. AHP is a decision-making method that allows users to rank and choose different options based on a set of criteria(Saaty, 1988). Helping consumers choose the best investment opportunities based on their financial objectives and asset allocation is one example of how AHP is used in internet banking. Users can examine several financing options based on factors including projected return, risk tolerance, and time horizon for investments. Clients can use AHP to assign weights to each of these factors, demonstrating their

relative importance and helping them make more informed choices regarding investments(Li and Li, 2023).Another example of using AHP in internet banking is to help customers compare different banking products and services. For instance, customers can use AHP to evaluate different credit card offers based on criteria such as interest rates, annual fees, and rewards programs. By giving weights to each of these criteria, customers can prioritize their preferences and choose the credit card that best suits their needs (Katiyar and Badola, 2018). In summary, AHP is a useful tool for internet banking customers who want to make informed decisions about their financial transactions. By using AHP, customers can prioritize their preferences and compare different options based on a set of criteria, leading to better outcomes and increased satisfaction (Rodriguez et al., 2012).

3.2 Importance-Satisfaction Matrix (Eisenhower Matrix)

The Importance Performance Matrix Analysis (IPMA) is a technique that measures a product's or service's quality based on its importance and performance, two crucial elements. The technique makes use of a graph with four segments, each of which displays a different mix of importance and effectiveness. Data on the significance and performance of the good or service in numerous areas is gathered in order to make use of the tool. This information can be acquired using a variety of market research methods. The importance and performance scores are then shown on the graph, with the horizontal axis for performance and the vertical axis for importance. In this manner, it provides a deeper understanding of how effectively a product or service meets the wants and expectations of clients (Mansouri Rad and Bagherian, 2023; Miranda et al., 2010).

The Urgent/Important Matrix and the Eisenhower Matrix are both names for a management tool that helps assess how important and satisfying different internet banking features are for users when they decide to use or not use them. These two names mean the same thing, and there is no difference between them. Here are the steps to using the Importance-Satisfaction Matrix to measure internet bank acceptance in a questionnaire

3.2.1 Identification of Attributes

The first step is to find out the different attributes or features of internet banking that clients care about. This can be done by reviewing the existing literature or using open-ended questions in a survey to collect responses from clients.

3.2.2 Importance and Satisfaction Scaling

Importance and Satisfaction Scaling: Customers are asked to rate how important and satisfying each attribute is using a Likert scale. The scale goes from "1-Not important" to "5-Very important" for importance and "1-Very dissatisfied" to "5-Very satisfied" for satisfaction.

3.2.2 Construct Matrix

After getting all the responses, we can construct the Importance-Satisfaction Matrix by plotting each attribute on a two-dimensional graph. On the horizontal axis, we plot how important each attribute is, and on the vertical axis, we plot how satisfying it is. Then we have four quadrants that show different users' responses.

3.2.3 Interpret Quadrants

Interpret the four quadrants based on the results obtained. Quadrants I and II are usually the areas that need the most improvement because they show situations where there is a big difference between what clients expect and what they receive. In other words, the most significant and pressing issues can be found in these quadrants, as well as the greatest opportunity for development. On the other hand, Quadrants III and IV are areas that are doing well and may not need as much focus or resources as the other two quadrants. However, this does not mean that these areas can be overlooked or forgotten, as they still show important aspects of the overall situation that need to be maintained or strengthened.

Quadrant I: High Importance, Low Satisfaction: These attributes require immediate attention, and banks must make efforts to boost satisfaction levels in this quadrant.

Quadrant II: High Importance, High Satisfaction: These attributes are the strengths of the internet bank, and thus, it is important to maintain them and avoid making any changes that can reduce users' satisfaction levels.

Quadrant III: Low Importance, Low Satisfaction: Attributes in this quadrant are not critical; however, some clients may be dissatisfied with them. Banks can decide whether to improve them or not based on their overall business and marketing strategies.

Quadrant IV: Low Importance, High Satisfaction: These attributes are minor aspects of internet banking and do not contribute much to clients' acceptance. Nonetheless, banks should continue to maintain them to ensure client satisfaction.

3.3 Data Collection

To gather information, we first held group sessions with experts in the field to identify the relevant indicators. Numerous market research techniques can be used to obtain this data. In doing so, it gives a more comprehensive understanding of how well an item or service fulfills the requirements and desires of customers(Mansouri Rad and Bagherian, 2023). The indicators were then described and specified using the structural equations. Next, in order to rank the appropriate sub-criteria and construct an importance-satisfaction matrix, we transmitted a questionnaire to responders. All respondents had to use Tejarat Bank's internet banking services at least once in the past three months. The sample size was 169, based on the Cochran formula. We first distributed 30 questionnaires, then calculated the Cronbach's alpha coefficient for evaluating the questionnaire's validity. It was determined that the questionnaire was valid because Cronbach's alpha was greater than 0.7. Table 5 shows the exact Cronbach's alpha value.

Table 4. Cronbach's Alpha

Cronbach's alpha	0.78

Source: Research finding.

4. Finding

This article compares the efficacy, consistency, and integrity of two methods for making decisions for assessing internet bank indicators: Analytic Hierarchy Process(AHP) and Importance-Satisfaction Matrix, are in evaluating internet bank indicators. Banks can improve consumer satisfaction while establishing a competitive edge in the field of digital banking by focusing on important indicators including security, support, ease of use, speed, and efficiency. The findings of this study can help banks improve their internet banking services and add to the existing research on decision-making methods in the banking industry. Ultimately, data-driven decision-making can lead to better outcomes for both banks and their customers, resulting in a win-win situation.

At this point, we're going to begin by identifying the main criteria and sub-criteria that belong to the questionnaire. The outcomes of each sub-criteria is going to be evaluated using the Analytic Hierarchy Process(AHP) method in the order of importance. The questionnaire's major criteria are "security," "support," "ease of use," "speed," and "efficiency." There are specific sub-criteria for each of these criteria. As an example, the sub-criteria for "security" include "use of strong passwords", "protection of users' personal information", and "use of modern

security technologies". A scale for rating each sub-criteria will be presented in order to rank them. Evaluations for each sub-criteria will then be submitted via the AHP comparison matrix using the given scale, the output of each sub-criteria will be shown numerically and based on priority against other sub-criteria.

Table 6. Prioritization of Criteria

KPI	Rank
support	5
Speed	4
Ease of use	2
Security	3
Efficiency	1

Source: Research finding.

Table 7. Prioritization of Sub-criteria (Speed)

Internet Banking Speed	Performing transactions by receiving a one-time password that can be used without internet access in case of operator disruption of the mobile phone.	5
	Performing transactions with a one-time password that can be used in the transaction basket.	4
	Fast internet banking login via a one-time password.	2
	Fast activation of internet banking without visiting bank branches.	3
	Fast access to the bank's homepage.	1

Source: Research finding.

Table 8. Prioritization of Sub-criteria (Support)

Internet Banking Support	Responsiveness in case of problems through customer service center(1554)	2
	Quick response time.	4
	Attention to suggestions and criticisms.	3
	Appropriate response and follow-up through customer service personnel(1554)	1

Source: Research finding.

Table 9. Prioritization of Sub-criteria (Security)

Internet Banking Security	Possibility to deactivate and block the card via internet banking or by contacting the customer communication center.	2
	Use of one-time password and hardware token to enhance security.	4
	Use of two-factor authentication: personal static password + one-time SMS password.	3
	Protection of privacy regarding personal and financial information.	1

Source: Research finding.

Table 10. Prioritization of Sub-criteria (Ease of Use)

Ease of Use	Ease of accessing internet banking.	3
	Ease of learning how to use different sections.	1
	Clear and understandable process for performing different transactions.	4
	Suitable and user-friendly design.	2
	Ease of using provided features such as recurring payments, payment basket, batch transactions with a single password.	5

Source: Research finding.

Table 11. Prioritization of Sub-criteria (Efficiency)

Efficiency	Providing a wide range of services in one platform	3
	Successful transactions during banking operations	7
	Improvement of banking activity and providing necessary services for each group of customers.	6
	Control over banking operations by displaying entry times and performed transactions.	4
	Reduction of the costs of direct visits to branches or ATMs.	8
	Tracking unsuccessful transactions.	5
	Reduction of banking activity time.	1
	The minimal possible number of errors.	2

Source: Research finding.

After ranking the main criteria and relevant sub-criteria, it is now time to construct the satisfaction importance matrix.

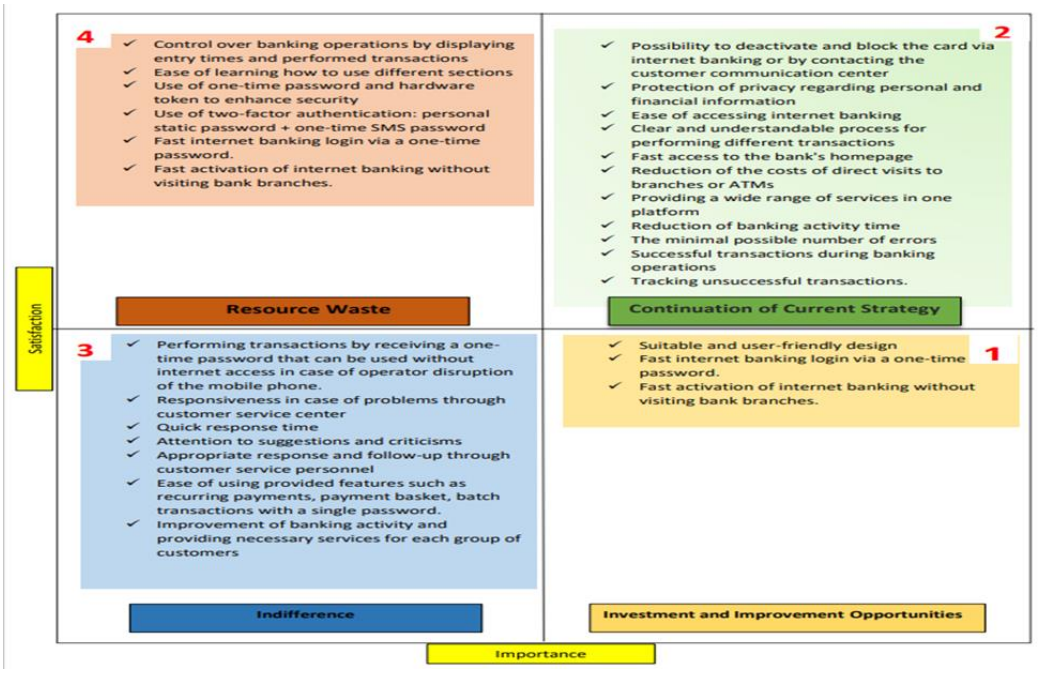

Figure 2. Importance-Performance Matrix
Source: Research finding.

Now we will evaluate the different parts of this matrix in more detail.

Quadrant 1: This quadrant has points that are very important but not satisfying. There is a direct link between electronic banking and customer satisfaction such that improving the quality of service with online banking also improves customer satisfaction. Low consumer satisfaction with internet banking services provides an opportunity for investment to meet the high customer satisfaction-focused objectives electronic banking. Therefore, directors can seize these opportunities quickly and utilize them to their advantage, developing their organization.

Quadrant 2: Shows the successful result of every careful and effective decision-making process The services provided in this quadrant best achieve both significant and satisfying characteristics. By following to their previous methods, managers can take proactive measures to maintain and achieve the primary goals of customer engagement.

Quadrant 3: According to Figure 5-1, all points located in this quadrant show poor performance in terms of the two key and basic factors of this matrix – namely importance and satisfaction. According to the outcome of the questionnaire, both criteria obtain poor scores. It's necessary to keep in mind that while these factors

might be taken into account when managers are making decisions about the examination of desired plans, they do not necessarily need to be given priority.

Quadrant 4: In this quadrant, all points act as a warning signal for managers. Even though they have low importance, These criteria have managed to attain a high level of consumer satisfaction despite their modest priority. Although the fact that the satisfaction indicator is always measured, the desired indicator's significance should not be dismissed. As a result, there will be tremendous resource waste as a result of these conflicts.

To connect the importance-satisfaction matrix with the results of ranking using the AHP method, you can use a three-step approach:

- Rate the importance of each of the criteria that matter to you using the AHP method, and then calculate the importance-satisfaction matrix for each sub-criterion.
- Calculate the total ranked scores for each sub-criterion in the importance-satisfaction matrix.

Compare the total ranked scores with the importance of each sub-criterion in the importance-satisfaction matrix and identify a subset of sub-criteria that have the most impact on satisfaction. By following the steps outlined above, you can present your results in a way that is easy to understand. Providing more information on the methods used, such as evaluating importance with the AHP method and calculating the importance-satisfaction matrix, will allow readers to better analyze the results. By combining Tables 6 and 7 with Figure 2 as suggested, stakeholders and others can make informed decisions based on their analysis.

5. Conclusion and Policy Implications

According to a study conducted by (Munusamy et al., 2010), efficiency was identified as a significant factor impacting customer satisfaction in the banking industry. Efficiency is the most significant factor, followed by reducing the amount of time required for banking operations and limited errors, according to the evaluation of TEJARAT Internet Bank Services carried using the methodology known as AHP. The majority of the bank's services, according to the importance-performance Matrix approach, fall into the "important and urgent" quadrant, necessitating immediate attention and action. After reviewing previous studies, such as one conducted by Suhaimi et al. (2018) that examined the factors influencing the acceptance of DB in Malaysia, it is clear that the primary determinant is perceived ease of use. The relationship between perceived usefulness and intention to use DB is insignificant, as is that between perceived

self-efficacy and intention to use DB. However, the services' performance investigation reveals a number of areas that need improvement, including acceptable and user-friendly design, quick internet banking activation without entering bank workplaces, and swift internet banking authentication. The results presented imply that even while the bank has focused on the correct requirements for service evaluation and identified immediate issues, some areas still have room for improvement.

However, TEJARAT Bank can improve its digital banking services significantly by following these policy implications. First, to improve the security of its services, the bank should focus on investing in advanced security measures such as two-factor authentication and hardware token to enhance security. In a study by (Raza et al., 2020), A considerable improvement in client satisfaction with banking services via the internet was shown to result from the implementation of modern security measures, such as biometric verification. Second, TEJARAT Internet Bank should consider making improvements to its smartphone application and website's user interface and experience to make them easier to use and more user-friendly. Third, in order to cope with the challenges with response, TEJARAT Internet Bank has to hire more customer service representatives and improve their support and training so they can provide clients immediate and effective assistance. Fourth, in order to assure quick and successful execution, TEJARAT Internet Bank has to concentrate on the urgent and crucial tasks discovered using the Eisenhower Matrix approach. Overall, by following these policy implications, TEJARAT Internet Bank can improve its services and enhance its competitive edge in the digital banking market.

Statements and Declarations

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References

Abbasi, B. N., Umer, M., Sohail, A., Tang, J., Ullah, I., & Abbasi, H. (2020). Service Quality, Customer Satisfaction and Loyalty in Banking Sector of Pakistan. International *Journal of Management & Entrepreneurship Research, 1*(1), 1–8. Retrieved from https://doi.org/10.51594/IJMER.V1I1.1

Al-Masaeed, S., Al Nawayseh, M. K., AlFawwaz, B. M., Maqableh, M., Alnabhan, M., Masa'deh, R., & AL-Shatnawi, A. (2022). Factors Affecting Consumers' Intention to Use Mobile Ride Hailing Services in Developing Countries. *International Journal of Interactive Mobile Technologies, 16*(11), 207–223. Retrieved from https://doi.org/10.3991/IJIM.V16I11.30579

Almaiah, M. A., Al-Rahmi, A. M., Alturise, F., Alrawad, M., Alkhalaf, S., Lutfi, A., Al-Rahmi, W. M., & Awad, A. B. (2022). Factors Influencing the Adoption of Internet Banking: An Integration of ISSM and UTAUT with Price Value and Perceived Risk. *Frontiers in Psychology, 13*, 4811. Retrieved from https://doi.org/10.3389/FPSYG.2022.919198/BIBTEX

Alsmadi, A. A., Shuhaiber, A., Alhawamdeh, L. N., Alghazzawi, R., & Al-Okaily, M. (2022). Twenty Years of Mobile Banking Services Development and Sustainability: A Bibliometric Analysis Overview. *Sustainability, 14*(17), 1-14. Retrieved from https://doi.org/10.3390/SU141710630

Amiri, M., Hashemi-Tabatabaei, M., Keshavarz-Ghorabaee, M., Antucheviciene, J., Šaparauskas, J., Keramatpanah, M. (2023). Evaluation of Digital Banking Implementation Indicators and Models in the Context of Industry 4.0: A Fuzzy Group MCDM Approach. Retrieved from https://doi.org/10.3390/ axioms12060516

Anouze, A. L. M., & Alamro, A. S. (2020). Factors Affecting Intention to Use E-Banking in Jordan. *International Journal of Bank Marketing, 38*(1), 86–112. Retrieved from https://doi.org/10.1108/IJBM-10-2018-0271/FULL/PDF

Bach, L. M., Mihaljevic, B., & Zagar, M. (2018). Comparative Analysis of Blockchain Consensus Algorithms. *2018 41st International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2018 - Proceedings*, 1545–1550. Retrieved from https://doi.org/10.23919/MIPRO.2018.8400278

Chen, W. C., Chen, C. W., & Chen, W. K. (2019). Drivers of Mobile Payment Acceptance in China: An Empirical Investigation. *Information*, *10*(12), 1-20. Retrieved from https://doi.org/10.3390/INFO10120384.

Elshaer, I. A., Alrawad, M., Lutfi, A., & Azazz, A. M. S. (2024). Social Commerce And Buying Intention Post COVID-19: Evidence from a Hybrid Approach Based on SEM –

fsQCA. *Journal of Retailing and Consumer Services, 76*, 1-15. Retrieved from https://doi.org/10.1016/j.jretconser.2023.103548

Ezzi, S. W. (2014). A Theoretical Model for Internet Banking: Beyond Perceived Usefulness and Ease of Use. *Archives of Business Research, 2*(2), 31–46. Retrieved from https://doi.org/10.14738/ABR.22.184

Fan, J., Shao, M., Li, Y., & Huang, X. (2018). Understanding Users' Attitude Toward Mobile Payment Use: A Comparative Study between China and the USA. *Industrial Management and Data Systems, 118*(3), 524–540. Retrieved from https://doi.org/10.1108/IMDS-06-2017-0268

Fox, G., Clohessy, T., van der Werff, L., Rosati, P., & Lynn, T. (2021). Exploring the Competing Influences of Privacy Concerns and Positive Beliefs on Citizen Acceptance of Contact Tracing Mobile Applications. *Computers in Human Behavior, 121*, 1-18. Retrieved from https://doi.org/10.1016/J.CHB.2021.106806

George, A. (2018). Perceptions of Internet Banking Users—A Structural Equation Modelling (SEM) Approach. *IIMB Management Review, 30*(4), 357–368.

Gull, H., Saeed, S., Iqbal, S. Z., Bamarouf, Y. A., Alqahtani, M. A., Alabbad, D. A., Saqib, M., Qahtani, S. H. Al, & Alamer, A. (2022). An Empirical Study of Mobile Commerce and Customers Security Perception in Saudi Arabia. *Electronics*, *11*(3), 293-310. Retrieved from https://doi.org/10.3390/ELECTRONICS11030293

Hewa, T., Ylianttila, M., & Liyanage, M. (2021). Survey on Blockchain Based Smart Contracts: Applications, Opportunities and Challenges. *Journal of Network and Computer Applications, 177*, 102857. Retrieved from https://doi.org/10.1016/J.JNCA.2020.102857

Hsu, C. L., & Lin, J. C. C. (2023). Understanding the User Satisfaction and Loyalty of Customer Service Chatbots. *Journal of Retailing and Consumer Services, 71*, 103211. Retrieved from https://doi.org/10.1016/J.JRETCONSER.2022.103211

Hu, Y. C., & Liao, P. C. (2011). Finding Critical Criteria of Evaluating Electronic Service Quality of Internet Banking Using Fuzzy Multiple-Criteria Decision Making. *Applied Soft Computing Journal, 11*(4), 3764–3770. Retrieved from https://doi.org/10.1016/J.ASOC.2011.02.008

Katiyar, R., & Badola, S. (2018). Modelling the Barriers to Online Banking in the Indian Scenario: An ISM Approach. *Journal of Modelling in Management, 13*(3), 550–569. Retrieved from https://doi.org/10.1108/JM2-01-2018-0006/FULL/XML

Kaur, S. J., Ali, L., Hassan, M. K., & Al-Emran, M. (2021). Adoption of Digital Banking Channels in an Emerging Economy: Exploring the Role of In-Branch Efforts. *Journal of*

Financial Services Marketing, 26(2), 107. Retrieved from https://doi.org/10.1057/S41264-020-00082-W

Li, C., & Li, Y. (2023). Factors Influencing Public Risk Perception of Emerging Technologies: A Meta-Analysis. *Sustainability (Switzerland), 15*(5), 3939. Retrieved from https://doi.org/10.3390/SU15053939/S1.

Lin, W. R., Wang, Y. H., & Hung, Y. M. (2020). Analyzing the factors influencing adoption intention of internet banking: Applying DEMATEL-ANP-SEM approach. PloS one, 15(2), e0227852. Retrieved from https://doi.org/10.1371/journal.pone.0227852.

Liu, Y. W., Kwon, Y. J., & Kang, B. Do. (2007). A Fuzzy AHP approach to evaluating e-commerce websites. Proceedings - SERA 2007: Fifth ACIS International Conference on

Software Engineering Research, Management, and Applications, 114–122. Retrieved from https://doi.org/10.1109/SERA.2007.16.

Mansouri Rad, H., & Bagherian, B. (2023). Importance-performance analysis (IPA) of banking factors affecting the improvement of business environment and prevention of corporate bankruptcy through the IPA model. Int. J. Nonlinear Anal. Appl, 14, 2008–6822. Retrieved from https://doi.org/10.22075/ijnaa.2022.26860.3429.

Meyer-Waarden, L., Bruwer, J., & Galan, J. P. (2023). Loyalty programs, loyalty engagement and customer engagement with the company brand: Consumer-centric behavioral psychology insights from three industries. *Journal of Retailing and Consumer Services, 71*, 103212. Retrieved from https://doi.org/10.1016/J.JRETCONSER.2022.103212.

Miranda, F. J., Chamorro, A., Murillo, L. R., & Vega, J. (2010). An Importance-Performance Analysis of Primary Health Care Services: Managers vs. Patients Perceptions. *Journal of Service Science and Management, 03*(02), 227–234. Retrieved from https://doi.org/10.4236/JSSM.2010.32028.

Munusamy, J., Chelliah, S., & Mun, H. W. (2010). Service Quality Delivery and Its Impact on Customer Satisfaction in the Banking Sector in Malaysia. *International Journal of Innovation, Management and Technology, 1*(4), 398.

Naeem, M., & Ozuem, W. (2021). The Role of Social Media in Internet Banking Transition During COVID-19 Pandemic: Using Multiple Methods and Sources in Qualitative Research. *Journal of Retailing and Consumer Services, 60*, 102483. Retrieved from https://doi.org/10.1016/j.jretconser.2021.102483.

Namahoot, K. S., & Laohavichien, T. (2018). Assessing the Intentions to Use Internet Banking: The Role of Perceived Risk and Trust as Mediating Factors. *International*

Journal of Bank Marketing, 36(2), 256–276. Retrieved from https://doi.org/10.1108/IJBM-11-2016-0159

Nazaritehrani, A., & Mashali, B. (2020). Development of E-banking Channels and Market Share in Developing Countries. *Financial Innovation, 6*(1), 1–19. Retrieved from https://doi.org/10.1186/S40854-020-0171-Z/TABLES/5

Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet Banking Service Quality, E-Customer Satisfaction and Loyalty: The Modified E-SERVQUAL Model. *TQM Journal, 32*(6), 1443–1466. Retrieved from https://doi.org/10.1108/TQM-02-2020-0019/FULL/HTML.

Rodriguez, R. M., Martinez, L., & Herrera, F. (2012). Hesitant Fuzzy Linguistic Term Sets for Decision Making. *IEEE Transactions on Fuzzy Systems, 20*(1), 109–119. Retrieved from https://doi.org/10.1109/TFUZZ.2011.2170076

Saaty, T. L. (1988). *What is the Analytic Hierarchy Process. Mathematical Models for Decision Support*. Boston: Springer.

Salehnia, M., Saki, M., Eshaghi, A., & Salehnia, N. (2014). A Model of E-Loyalty and Word-Of-Mouth Based on e-trust in E-banking services (Case Study: Mellat Bank). *8th International Conference on e-Commerce in Developing Countries: With Focus on e-Trust*, Retrieved from https://ieeexplore.ieee.org/abstract/document/6836764

Samani, Z. N., & Bashi, M. R. K. (2020). Reliable Resource Allocation and Fault Tolerance in Mobile Cloud Computing. *Journal of Information Systems and Telecommunication (JIST), 2*(26), 2-96. Retrieved from https://doi.org/10.7508/JIST.2019.02.002.

Sasono, I., Jubaedi, A. D., Novitasari, D., Wiyono, N., Riyanto, R., Oktabrianto, O., Jainuri, J., & Waruwu, H. (2021). The Impact of E-Service Quality and Satisfaction on Customer Loyalty: Empirical Evidence from Internet Banking Users in Indonesia. *The Journal of Asian Finance, Economics and Business, 8*(4), 465–473. Retrieved from https://doi.org/10.13106/JAFEB.2021.VOL8.NO4.0465.

Seçme, N. Y., Bayrakdaroğlu, A., & Kahraman, C. (2009). Fuzzy performance evaluation in Turkish Banking Sector using Analytic Hierarchy Process and TOPSIS. *Expert Systems with Applications, 36*(9), 11699–11709. Retrieved from https://doi.org/10.1016/J.ESWA.2009.03.013.

Shamshur, A., & Weill, L. (2019). Does Bank Efficiency Influence The Cost Of Credit? *Journal of Banking and Finance, 105*, 62–73. Retrieved from https://doi.org/10.1016/j.jbankfin.2019.05.002.

Ilo, B. M., Soyebo, Y. A., & Olaiya, I. K. (2024). Emerging Technology Adoption and Financial Performance of Deposit Money Banks in Nigeria. *Iranian Economic Review, 28*(2), 607-617. Retrieved from https://ier.ut.ac.ir/article_97726_89fd9f11569fcefdf8139680c442880e.pdf

Szopiński, T. S. (2016). Factors Affecting the Adoption of Online Banking in Poland. *Journal of Business Research*, Retrieved from https://doi.org/10.1016/j.jbusres.2016.04.027

Taherabady, A., Khotanlu, M., & Nosrati, A. R. (2010). Explaining Efficiency in Electronic Banking. *SSRN*, Retrieved from https://ssrn.com/abstract=1709028

Tang, M., Hu, Y., Corbet, S., Hou, Y. G., & Oxley, L. (2024). Fintech, Bank Diversification, and Liquidity: Evidence from China. *Research in International Business and Finance, 67*(Part A), 102082. Retrieved from https://doi.org/10.1016/j.ribaf.2023.102082

Wang, X., Liu, W., Yang, H., Wang, D., Procedia, J. Y.-T. R. (2019). Customer Behavioural Modelling of Order Cancellation in Coupled Ride-Sourcing and Taxi Markets. Retrieved March 24, 2023, from https://www.sciencedirect.com/science/article/pii/S2352146519300535

Xi, Y., & Li, Q. (2022). Improved AHP Model and Neural Network for Consumer Finance Credit Risk Assessment. *Advances in Multimedia*, *2022*, Retrieved from https://doi.org/10.1155/2022/9588486

Yazdani, M., Fomba, S., & Zarate, P. (2017). Decision Support System for Multiple Criteria Decision Making Problems. In *17th International Conference on Group Decision and Negotiation (GDN 217)* (67-75). Retrieved from http://oatao.univ-toulouse.fr/19142

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