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The Role of Information Technology in Enhancing Financial Sustainability: An Applied Study in Iraqi Commercial Banks.

Qaid Khalaf Hamza[1*]
[1] College of Administration and Economics, Tikrit University, Iraq.
[*] Corresponding author: kaed.k.hamzah@tu.edu.iq

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Abstract

The present research was conducted to examine the role that information technology plays in enhancing financial sustainability among the commercial banks in the Tikrit governorate of Iraq. The type of quantitative descriptive approach was used, and it depended on cross-sectional data gathered through the use of the structured survey. The study analyzed primary data. The method of sampling that was used was a simple random sampling method, and the employees were sampled using an online questionnaire which resulted in a total response of 421 people who were all considered as having been sampled and as valid to further analysis. The statistical package of the social sciences version 26 was used to manage the data analysis. The implication of the findings of this study was that the commercial banks sampled in this study have moderate to high degrees of implemented information technology. Besides, there is moderate financial sustainability in these institutions. The results obtained after the multiple linear regression analysis showed that information technology and its dimensions had a significant effect on enhancing financial sustainability among the commercial banks in Tikrit governorate in Iraq. The correlation coefficient (R) of the regression model was found to be 0.767 with the R2 found to be 0.584 indicating that the independent variable and its components explained 58.4 percent of the variance in the dependent variable indicating the strong explanatory ability of the model. Moreover, the entire information technology variable was relevant in enhancing financial sustainability with the communication networks dimension recording the greatest impact of 0.280, implying a positive effect. This means that the availability of communication networks increases by 28 percent in financial sustainability among the surveyed commercial banks and a unit increment. With the results of the study, one of the recommendations was on the possible next research to explore other variables that may be included in the research framework, which may mediate or moderate the relationship. This would help foster a more extensive and thorough understanding of how to better integrate information technology with other organizational factors to achieve favorable outcomes in financial sustainability.

Keywords: Information technology, financial sustainability, commercial banks, Iraq.

Introduction

Over the past two decades, there has been tremendous development in IT and business technologies globally, and there has been a growing volume of activities conducted using IT. This is because information technology has created tools that facilitate the easy handling and processing of information, making task performance much easier. These developments also make effective contributions to increasing productivity, promoting economic growth, and improving the quality of services offered. Additionally, they enable access to new markets to

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enhance financial performance in the markets, as well as business development (Toader et al., 2018; p.1).

This era is now called the electronic or digital era, which has created significant and varied impacts on business organizations and has established a new work environment called the electronic or digital environment. Additionally, the changes that have occurred in the business environment and climate affect the strategic decisions of organizations related to the internal and external environment (Diener & Spacek, 2021; p1). These developments have led to a radical shift in the ways tasks are performed, and globalization has imposed increasing pressures on organizations to keep up with change, which requires efficient business integration not only for survival but also to achieve prosperity in competitive environments. This can be achieved through effective integration using technological tools (Kraus et al., 2021; p1).

The nature and conditions of work have also shifted to new patterns due to numerous ongoing changes and events that are now described as uncertain, which requires business organizations, especially those operating in the banking sector, to work on managing these changes and adapting quickly to new conditions in the work environment in a way that enhances their competitiveness (Al-Anzi et al., 2022: p. 4). This leads to improving organizational efficiency and reducing the cost of production and service delivery at a high quality level. It also helps business organizations generate innovative solutions that address emerging problems in business, as well as strengthen management decisions that enhance the organization's competitive capability (Belkacem & Al-Hadi, 2023: p. 669).

There has been increasing interest nowadays in achieving and reaching the stage of financial sustainability in institutions, as it is considered the best way to conduct business and face professional challenges and difficulties, in addition to its role in generating new jobs and obtaining an advanced position in the market. Institutions, regardless of the activities they engage in, are seeking tools and means that enable them to achieve financial sustainability. Sustainable institutions play an important role in supporting the national economy and contribute to achieving long-term success through their capabilities, which qualify them to keep up with the rapid changes and developments in their internal and external environment (Safar & Khudair, 2023: p.330). Financial sustainability also helps maintain institutional performance and keep up with the rapid changes and challenges in the business environment. It is also viewed by institutional managers as an effective means to address some of their challenges (Lohana et al., 2023: p.4). The main task of financial sustainability in organizations is the process of identifying and analyzing the total cost and the possibility of diversifying the organization's financial sources. The goal of financial sustainability is to ensure the achievement of the organization's objectives.

This research addresses four chapters. In the first chapter, the researcher discussed the general framework of the study. In the second chapter, the researcher dealt with the theoretical framework, including a literature and conceptual review of the study's variables. In the third chapter, the researcher addressed the practical aspect by providing a descriptive presentation of the study's variables and the results of testing the hypotheses derived from the research

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model. In the fourth chapter, the researcher discussed the main conclusions and findings of the study and provided a set of recommendations based on these results.

Chapter One: Research Methodology

First - The study problem:

Similar to other commercial entities, banks endeavor to discover methods, tools, and digital applications that have supported their success within the competitive arena. They concentrate on crafting and executing efficient strategies to guarantee they fulfill their objectives. Yet, in the contemporary landscape, the swift evolution within information technology and digitization, spurred by globalization, presents banks with a host of new challenges as well as the demands of constantly changing and diversifying job requirements. This creates a need for effective methods to invest in and develop their resources while integrating technology to strengthen work ethics and a commitment to societal responsibilities. The character of banking services is closely tied to clients, thus employing technology in delivering these services at banks will cultivate and enhance a favorable customer satisfaction experience. These institutions have also encountered various difficulties due to some auditors neglecting their responsibilities. Improving the financial, operational, and environmental effectiveness of institutions is an objective pursued by both governmental and non-governmental bodies across all nations. Enhancing institutional performance is a crucial component for achieving national economic development, which aids in financial sustainability. As a result, seeking financial sustainability within institutions has become essential. Financial sustainability has become the major agenda in organizational strategies and objectives, especially after the world financial crisis of 2008. It is the financial status in which a given organization is viable to continue realizing its mission in a long-term duration. The better sustainable financial performance is observed in organizations where the resources that enable value creation are used consistently in the present and upcoming activities. Organisations with sustainable performances have a low vulnerability to external interferences that affect value generation in the organisation. To regulators, financial sustainability is an essential factor to stability and growth. Therefore, in this study, the researcher will focus on the role information technology has played in fostering financial sustainability among the Iraqi commercial banks in the city of Tikrit.

Research Questions: Following the identification of the issue that this study intends to address, the researcher put together a series of inquiries that the investigation aims to clarify.

Primary Question: How extensively is information technology utilized in commercial banks in Tikrit, Iraq?

Secondary Question: What is the extent of financial stability in commercial banks in Tikrit, Iraq?

Tertiary Question: How does information technology (including hardware and software, skills and expertise, communication networks, as well as databases) contribute to the improvement of financial stability in the commercial banks of Tikrit, Iraq?

This primary question can be divided into several sub-questions:

1. What is information technology assist in improving financial stability in relation to strategic financial planning?

2- What is the role of information technology in ensuring financial sustainability by increasing the diversification of incomes?

3- What is the role of information technology in ensuring financial stability in terms of effective financial management?
4- What role does information technology play on financial sustainability as far as sustainable financial integration is concerned?
5- What is the influence of information technology with respect to increasing financial sustainability with reference to technology capital ratio?

Second - Significance of the study:

The relevance of the present research lies in the fact that it analyzes modern technological elements in the Iraq banking industry. Banks need to embrace the rapid changes in the field of information technology to flourish, grow, and develop. Also, the topicality of the given investigation is due to the paramount importance of its topic and the lack of attention to it in the available literature on financial sustainability. The purpose of the study is to bridge the gap in the previous literature regarding this subject and its major variables. The researcher observed that there were no studies that incorporate all the research variables in a single study. The significance of the given research is further stressed by the findings of the current analysis. The importance of the banks under study, namely the commercial banks currently found in Tikrit Governorate that provide banking services, is also important in the relevance of the applied research and the field. The researcher therefore hopes that his research will be useful to the commercial banking industry in Iraq..

Third – Study Objectives:

First Main Objective: To assess the extent of information technology utilization in commercial banks located in Tikrit, Iraq.
Second Main Objective: To evaluate the degree of financial sustainability in Iraqi commercial banks functioning in Tikrit.
Third Main Objective: To explain how information technology (including hardware and software, expertise and skills, communication networks, and databases) contributes to improving financial sustainability in commercial banks throughout Tikrit.
This main objective is subdivided into the following sub-objectives:
1. To analyze the impact of information technology on supporting financial sustainability through strategic financial planning in commercial banks situated in Tikrit, Iraq.
2. To examine how information technology aids in enhancing financial sustainability by diversifying income sources in Iraqi commercial banks based in Tikrit.
3. To assess the contribution of information technology towards better financial management practices that enhance financial sustainability in commercial banks located in Tikrit, Iraq.
4. To explore the influence of information technology on promoting financial sustainability through sustainable financial integration in Tikrit's Iraqi commercial banks.
5. To clarify the impact of information technology on advancing financial sustainability by evaluating the (technological capital ratio) in commercial banks operating in Tikrit, Iraq.

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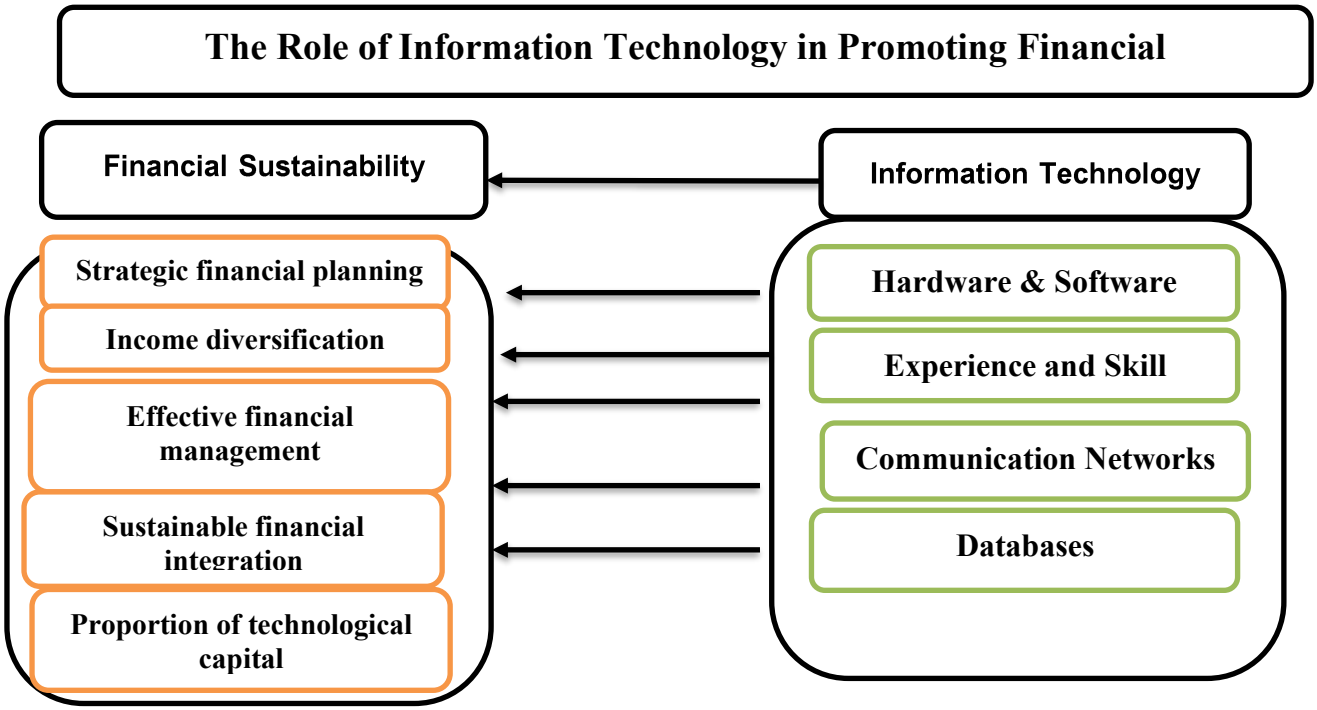
Fourth – Study Model:



Hypotheses of the study

Primary Hypothesis: H1 Information technology, encompassing its various dimensions (including hardware, software, user experience and skills, communication infrastructure, and databases), plays a significant role in enhancing financial sustainability for Iraqi commercial banks located in Tikrit. This is supported by the following hypotheses:

H1.1 Information technology contributes to the advancement of financial sustainability subsequent to strategic financial planning in Iraqi commercial banks situated in Tikrit.

H1.2 Information technology aids in the promotion of financial sustainability related to post-income in Iraqi commercial banks operating in Tikrit.

H1.3 Information technology plays a vital role in boosting financial sustainability following proper financial management in Iraqi commercial banks based in Tikrit.

H1.4 Information technology is instrumental in fostering financial sustainability after achieving sustainable financial integration in Iraqi commercial banks located in Tikrit.

H1.5 Information technology has a role in enhancing financial sustainability subsequent to establishing a technology capital ratio in Iraqi commercial banks operating in Tikrit.

Research methodology:

The methodology represents a structured approach to addressing a research problem and subsequently analyzing it to validate or refute hypotheses. The objective is for the student to understand "The Role of Information Technology in Enhancing Financial Sustainability: An Applied Study on Iraqi Commercial Banks in Tikrit". This approach stands out as one of the most suitable research techniques in social and administrative studies, since it helps yield more precise and clearer outcomes, as these studies depend on primary data collected through surveys to meet their objectives.

Second Topic: Theoretical Framework

Information Technology: (IT) refers to the accumulation, safeguarding, execution of the methods it manages, distribution and application, encompassing more than just physical and software elements (Bloom et.al, 2014; p2662). It can be described as anything that enables the collection, processing, and storing of data not constrained by a spatial or time limit. The processes consist of four basic components of IT, namely, people, mechanisms, tools, and structures, which make it possible to transfer information along the value chain, which are the results of the interrelationship of the components mentioned above (Romashkova et.al, 2018; p49). Also, it is known as an automated framework, which includes a set of elements to acquire data resources and transform them into valuable information products that can be used to make informed decisions and, consequently, lead to a paradigm shift in the journey of the organization (Salahshour Rad et.al, 2018; p364). This method is a strategic benefit that helps the organization in improving the productivity of its services and business operations, as well as providing a means through which organizations can gain real-time information that is vital in sustaining their business operations (Huddiniah, 2019; p247). It also includes gadgets, tools, and means of transportation that allow the people in the organization to collect, store, and retrieve information at astounding pace, thanks to the rapid technological progress and the appearance of innovations that are meeting the shifts in various spheres (Al-Rashidi and Al-Hanandeh, 2020: p. 378). According to (Chatterjee et.al, 2020; P3), it represents a contemporary innovation, marking the pinnacle of human creativity in the current era, dedicated to processing information automatically to render it useful and of value. This information can then be stored, manipulated, and subsequently sent and received through advanced information devices for reuse as necessary, and distributed to a group of individuals requesting this information all at once. The researcher outlines IT as the technology emerging from the convergence of information processing and communication technologies, along with satellites, communication networks, and the Internet, aimed at gathering, storing, processing, and transmitting information, whether in audio, symbols, shapes, texts, or images.

1- The significance of information technology: IT serves as the crucial engine and mechanism through which an organization's activities are executed. The absence of IT in an organization's operations can result in weakened decision-making, negatively impacting work outcomes. The significance of implementing IT within business organizations is emphasized as follows (Mohammed, 2019): pp. 380-381:

- It essentially engages the organization in a radical change that touches all its units, operations and markets in the effort to support the attainment of its various activities, such as the provision of products and services that are most precise and of high quality.
- It enables the organization to quickly respond and adapt to the requirements of the changing work environment since using information technology practices in businesses requires one to be abreast with changes to avoid being isolated.
- It helps in improving skills and competencies that are essential in providing intellectual resources to the staff, enabling the production of output and interchange of innovative ideas. Besides, it also helps in reducing economic costs as it offers benefits like speed, consistency and accuracy that have a positive outcome on the performance of employees and the overall organizational performance.

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- It gives the organization the authority to develop the cooperation skills of the divisions and creates support among the organizations with the use of communication networks and computers.It minimizes the chances of crises related to the future provision of databases.
- It has enhanced the quality of decisions made by supplying accurate data and timely access through contemporary communication methods, which have improved the flow and exchange of information.
- It serves as a powerful instrument for making the organization more dynamic and adaptable by reducing management layers and implementing a linked organizational framework rather than the conventional one that consumes human resources and energy. It also aids in embracing contemporary strategies to achieve success in the planning and organizational processes.
- It assists the organization in creating a robust information foundation for executing its strategy due to its exceptional capabilities in handling precise information, equipping the organization with a competitive edge.

1- IT Dimensions

The investigator incorporated four aspects of contemporary IT evaluation, which are hardware and software, experience and expertise, communication networks, and databases, based on the research conducted by Abu Jumaa (2022: p. 219) and Manaseer et al. (2019: p. 490).

First: Hardware and Software: Technology signifies the advancement of all technical components within an organization, including software, skilled technicians, and the overall technical infrastructure. The process of technological advancement encompasses analyzing all administrative tasks and transforming them into computer programs and applications. This necessitates the availability of essential equipment such as computer networks, databases, and measures for information security (Jawad & Abdullatif, 2020: p. 428). It also involves the enhancement of diverse communication and information networks, aligning with the environment of electronic transformation, which requires a substantial and expansive information network capable of handling large volumes of data, in addition to physical technical equipment (Al-Khazraji & Khalaf, 2022: p. 21). Moreover, this pertains to computer networks and systems that interact with each other and necessitate software systems for equipment management during connections, enabling the transmission of data among themselves. This facilitates user collaboration (employees) in sharing resources and devices such as printers that aid in expediting transactions aimed at achieving organizational objectives. Network systems also play a crucial role in delivering information from distant locations to bank branches, assisting in the information transfer and the emailing process from service providers to customers, regardless of vast distances, characterized by high quality, flexibility, and reliability in service distribution, as well as the rapid completion and execution of complex tasks involving a significant number of computers utilized in fulfilling the required activities (Manaseer et al., 2019: p. 492).

Second: Experience and Skill: This emphasizes the expertise and capabilities related to computer operation concerning all organizational processes and transactions. It requires a contemporary level of specialized skills, alongside the provision of training initiatives that help enhance employees' skills and competencies, especially in areas such as innovative thinking, creativity, and computer applications. Additionally, there is a need for workers to have both professional and technical abilities to effectively utilize and operate computers for monitoring

developments in this domain. These applications also meet user expectations concerning technical elements of system design and practical processes (Abu Jumaa, 2022: p. 221).

Third: Communication networks: Information and data transfer occurs over the Internet, which encompasses a network of stations, cables, wires, telephone lines, satellites, and terminal controllers (Abu Jumaa, 2022: p. 222). These are vital for the implementation of technology and play a significant role in assisting decision-makers by facilitating swift and straightforward information exchange (Abu Al-Qasem, 2021: p. 93).

Fourth: Databases: A database is a collection of interconnected data or information that is stored in various data storage systems. It involves guidelines pertaining to personal information management and sharing protocols. These guidelines are typically used by workers within a particular organization or establishment, along with distributed protocols that consist of multiple computers where data is maintained at different sites and interconnected through a computer network (Abu Al-Qasim, 2021: p. 93).

Financial Sustainability: The banking sector is faced with significant challenges by the stiff competition in the financial industry, which requires the banking industry to focus on the financial sustainability. This element is a modern and critical one, which assists in the development of sustainable banking services, which could withstand lending even in the time of financial and banking crises. This concept suggests that the bank can ensure sufficient funds to cover the cost of its operations, which were monetary costs as well as administrative costs and profits, and which implies that the bank can rely on its internal operations to sustain its financial sustainability in the long term (Wachira, 2018; p3).

The Finconcept of Financial Sustainability.

The financial sustainability can be defined as the ability of an organization to meet its financial services and financial obligation commitments, as well as to enact and enforce financial policies in the future without causing a continued rise in the debt ratio (Duong et al., 2022; p2)**.** Additionally, financial sustainability entails the capacity to finance annual budgets using existing financial assets, without hampering the organization's overall future functioning (Gleibner et al., 2022; p7). It is also regarded as the proficiency to operate, enhance, and maintain a balance between assets and liabilities amid a fluctuating business landscape both internally and externally, which guarantees improved spending efficacy and financial viability, as well as attractiveness for long-term investment within endorsed boundaries (Kharusi & Murthy, 2017; p31). Furthermore, financial sustainability indicates an organization's capability to fulfill all of its resource and funding commitments, whether sourced from user fees or budget allocations, while meeting obligations and serving stakeholders consistently over time (Navarro-Galera et al., 2016; p3968). Likewise, Badr and Shaheen (2022; p. 164) characterize financial sustainability as the achievement of enduring profits and favorable cash flow while developing and conserving resources, aiding the organization in minimizing leverage ratios and reliance on external debt, while aligning with sustainable development needs. The objective is to mitigate risks of future defaults and ensure sustainable growth to foster financial resilience amidst financial crises impacting both local and global economies. In light of the aforementioned, financial sustainability can be expressed as banks' ability to mobilize additional financial resources and ensure sustained financial health in both the short and long term through their internal and external activities, allowing them to realize their present and future objectives.

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The Importance of Financial Sustainability

A financial management perspective of business that has emerged as a prime trend in the modern sphere is financial sustainability. In the prevailing business environment, which is highly competitive with a focus on technology and the increased uncertainties, it has been vital that companies maintain their presence in the markets, add value and secure the cash flows to the shareholders. Therefore, financial sustainability becomes a logical development to deal with the constant and changing shifts on the external environment. The significance of financial sustainability can be encapsulated in the following points:

1. **Diversifying financial resources:** Financial sustainability assists organizations in broadening their financial resource bases, which allows them to fulfill their financial duties and address all of their obligations. This approach also facilitates debt servicing through the establishment of reliable financial resources and cash flows, negating the necessity for future financial commitments, which boosts their capability to prevent financial defaults and subsequent failures.
2. **Capturing future opportunities:** Financial sustainability empowers businesses to seize forthcoming opportunities effectively by sustaining their financial equilibrium in both internal and external cash flows, thereby strengthening their competitive standing in the market.
3. **Enhancing revenues without resource depletion:** Financial sustainability enables organizations to boost their revenues while preserving their financial resources, which supports the continuity of their operations in a dynamic environment marked by increasing market and technological competition and heightened social responsibilities.
4. **Facilitating revenue growth support:** Financial sustainability plays a role in addressing challenges that organizations might encounter due to their inability to ensure growth in long-term operating revenues, whether through internal inflows or external financial sources.
5. **Amplifying profit opportunities:** Financial sustainability increases the chances for profits and expansion by allowing organizations to capitalize on suitable investment possibilities, generating considerable financial value for both the company and its shareholders, thus maximizing wealth and achieving modern financial management objectives.
6. **Preserving service resilience:** Financial sustainability aids in ensuring the ongoing delivery of services offered by organizations, helping them achieve a level of resilience that equips them to handle short-term financial disruptions.
7. **Encouraging customer responsiveness:** Financial sustainability necessitates that companies become more attuned to customer requirements, prompting enhancements in their products, services, banking procedures, and communication efforts to deliver optimal financial offerings. This approach also contributes to generating increased economic values and advantages for customers.
8. **Strengthening market standing:** Financial sustainability fortifies an organization's market position by balancing profits with risks and maintaining financial liquidity that allows it to address various shocks that could adversely impact its financial stability and market presence.

9. **Promoting expansion and investment:** Financial sustainability positively affects decisions regarding expansion and investments, serving as a vital indicator of organizational sustainability and influencing the decisions of both investors and savers.

Dimensions of Financial Sustainability

Financial sustainability can be categorized into several key dimensions, the most crucial of which are:

First: Strategic Financial Planning: Strategic financial planning serves as a framework and approach that aids an organization in outlining its responsibilities and prioritizing the necessary steps to reach its objectives. Effective financial planning is essential to secure affordable financing options. This planning needs to clarify the sufficiency of the organization's financial resources and how it will obtain additional resources to back the expansion of its future endeavors (Tohamy, 2023: p. 243). The financial action plan mainly comprises of the anticipated expenditures and the capacity of the organization to earn enough revenue to meet the expenditures. Even though a financial plan might seem similar to a budget, there are significant differences between the two concepts; a financial plan is a dynamic document that is aimed at evaluating the existence of sufficient resources within an organization in the medium term to meet the laid down strategic goals (Al-Mashhadani et al., 2023: p. 6).

Second: Income Diversification: Income diversification means the ability of an organization to receive income across various sources as an assurance of adequate funding, instead of having a single source of income within a reasonable range of risk (Tohamy, 2023: p. 243) . This aspect also implies that the organization should possess several varied options for fundraising, as depending on a lone source of income can be risky for financial entities. Consequently, institutions should manage these risks by fostering financial stability through the development of a wide donor network and employing different methods for resource pooling to diversify income sources (Awwad et al., 2024: p. 446).

Sound Financial Management: Sound financial management involves effectively overseeing an organization's resources and is equally as critical as generating revenue for achieving financial sustainability. Sound administrative and financial practices are dictated by a collection of institutional policies aimed at maximizing the use of the organization’s financial assets and ensuring transparency in financial dealings. It is vital to manage these resources efficiently (Al-Mashhadani et al., 2023: p. 6). Financial management also involves identifying the most effective methods for achieving profitability, which includes tracking fund movements and calculating profit and loss ratios linked to all financial operations. The effectiveness of financial decisions in producing positive outcomes serves as evidence of successful financial management fulfilling its role (Awwad et al., 2024: p. 446).

Fourth: Sustainable Financial Integration: This entails forming strong financial connections that guarantee the enduring availability of capital in both the long and short terms to support financial operations and promote green financing strategies. Sustainable financial integration fosters the ongoing nature of financial partnerships across generations, advancing the organization's long-term financial sustainability goals (Tohamy, 2023: p. 243).

Fifth: The proportion of a bank's capital supporting contemporary long-term banking activities over time through the enhancement of banking services and their technological delivery via available electronic platforms such as electronic cards including Visa and MasterCard,

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alongside long-term loans provided, thereby ensuring the organization's financial sustainability (Awwad et al., 2024: p. 446).

Third Topic: The Practical Component of the Research

First- Research Community: The study's population includes all personnel employed in Iraqi commercial banks located in Tikrit Governorate, specifically those in senior and mid-level management who are knowledgeable about and implementing the research variables.

Second- Study Sample: A sample comprising 450 employees was chosen from the Iraqi commercial banks situated in Tikrit Governorate for this research.

Third- The Process of Validating and Preparing the Data: Targeting 15 Iraqi commercial banks, the data for this research was gathered using an electronic form from employees of these institutions. The collection occurred through the process of communications with these banks to obtain permission to collect the data, which occurred in February 2025 and resulted in 421 completed responses. The responses were completely filled in, since due to the electronic format, there was no possibility of not answering the questions, and the obtained information was processed numerically. A preliminary check was provided on the responses after giving the data quantitative weights which revealed that there were five irregular responses where there were duplicated answers to the questionnaire items which indicated that there was a patterned response. Extreme observations were also observed where there were odd distributions that were not similar to the majority in the sample. These outliers have the potential of distorting the statistical analysis results. It was verified using the distance of Cook that the data did not contain these outliers with the largest value of the Cook distance coefficient of 0.03360 which was less than the value of 0.1 recommended by Weinberg and Abramowitz in 2008. Hence, the sample size that was valid in performing statistical analysis was 416 observations.

Statistical Measures, Methods and Tools: The questionnaire used in the study was created using a 5-point Likert scale whereby there were quantitative weights of 1 to 5 in terms of whether the statements in the questionnaire were approved or not. A weight of 1 means there is a strong disagreement whereas a weight of 5 means that there is a strong agreement. A three-point scale was used to find the total agreement score using arithmetic averages. This scale classifies the arithmetic averages into three groups, the values falling between 1 and 2.339 represent the low level of agreement, averages between 2.34 and 3.669 represent the moderate level of agreement, and averages between 3.67 and 5.00 represent the high level of agreement. The ranges between two categories of this scale are 1.33, which is calculated by the difference between the upper limit of the five-point scale and the minimum and divided by three in line with the recommendations provided by Bougie and Sekaran in 2019..

With regards to statistical methods and tools, the 26th version of the Statistical Package of Social Sciences (SPSS) was used, as the given program is considered one of the leaders in data analysis in the area of humanities studies because it has a great number of tests and analytical functions. Various tests were done in this research. The statistical tools included the coefficient of distance used to identify the outlier observations of the data, Pearson correlation coefficient, Cronbach alpha coefficient to find out the reliability and internal consistency of the questionnaire employed in the study, skewness and kurtosis coefficient to determine the

problems of multiple linear correlations, and the descriptive statistics. Finally, multiple and simple linear regression models were used to test the hypotheses presented in the research.

V . Assurance of the stability and consistency of the study tool:

The research instrument has been subjected to statistical assessments to ensure that it has good statistical and internal consistency with regard to the various parts of it. On the internal consistency component, I must state that the inner structure of each component of the scales should be coherent meaning that the items measuring a certain theoretical concept should be closely correlated to show their contribution to the variance of the scale. In statistical terms, the internal consistency can be measured by examining the Pearson correlation between each of the items and their total score. Pallant (2020) says that this correlation must be positive and at acceptable levels, and the necessary threshold must be above 0.20. It was analyzed that all items used in Table 1 were found to be correlated with the corresponding total dimension scores, and the correlation was statistically significant at the level of 0.001. In addition, all the correlations had positive values, and high values that exceed the minimum correlation of 0.20, thus affirming consistency of the research instrument.

Statistically, it is statistically reliable because the tool is capable of providing dependable data at all times it is used to measure theoretical concepts in a similar population as was done in the study.. As suggested by Bougie and Sekaran (2019), Cronbach's alpha coefficients indicate the degree of statistical stability of the scale, with a minimum acceptable coefficient set at 0.70. The findings outlined in Table 2 show that all dimensions and total variables achieved Cronbach's alpha coefficients that were above the required minimum and at acceptable levels, indicating a strong level of statistical reliability for the measures utilized in the research tool. Consequently, the results of these assessments confirm that this instrument is suitable for evaluating the model variables of the study..

Table (1): Pearson correlation metrics among sections and the overall scores of their aspects, along with Cronbach's alpha values, were utilized to assess the statistical reliability and internal consistency of the research instrument (n=416).

Domain (Cronbach Alpha)	Paragraph	Pearson correlation coefficient	Domain (Cronbach Alpha)	Paragraph	Pearson correlation coefficient
Hardware & Software (0.878)	DP1	0.780**	Strategic Financial Planning (0.860)	SFP1	0.790**
	DP2	0.771**		SFP2	0.806**
	DP3	0.840**		SFP3	0.825**
	DP4	0.762**		SFP4	0.745**
	DP5	0.773**		SFP5	0.844**
	DP6	0.809**		IC1	0.767**
	ES1	0.825**		IC2	0.786**
	ES2	0.819**		IC3	0.865**

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Experience and Skill (0.904)	ES3	0.869**	Diversification of income (0.886)	IC4	0.869**
	ES4	0.885**		IC5	0.855**
	ES5	0.854**	Sound Financial Management (0.832)	AFM1	0.778**
Communication Networks (0.897)	CN1	0.818**		AFM2	0.852**
	CN2	0.824**		AFM3	0.843**
	CN3	0.871**		AFM4	0.791**
	CN4	0.857**	Sustainable Financial Integration (0.872)	SFI1	0.843**
	CN5	0.842**		SFI2	0.791**
Databases (0.867)	DB1	0.796**		SFI3	0.820**
	DB2	0.828**		SFI4	0.771**
	DB3	0.753**		SFI5	0.838**
	DB4	0.837**	Percentage of Technology Capital (0.788)	RTC1	0.740**
	DB5	0.838**		RTC2	0.768**
IT Variant (0.942)				RTC3	0.759**
Financial Sustainability Variable (0.935)				RTC4	0.857**

** The relationship is a function at the level of statistical significance (0.001)

Verification of the basic requirements for the study data:

To confirm the appropriateness of the data for parametric statistical analyses like regression models, it was necessary to check that the data did not exhibit issues related to normal distribution, and also to ensure that the characteristics of the independent variable were not affected by multiple linear correlation issues. In order to identify any concerns regarding the normality of the data distribution, both the skewness coefficient and the kurtosis coefficient serve as indicators of how symmetrical the data curves are, with recommendations suggesting that the skewness coefficients should not exceed a kurtosis range of ±2.3 to maintain the moderation of the data as advised by (George, 2011). Table (2) shows that all the skewness and kurtosis connectors of the data used in the research were within the recommended range, which means that the data have an unproblematic natural distribution and no homogeneity challenges the use of parametric statistical procedures..

Table (2): Torsion and flattening coefficients are utilized to analyze the issues related to the natural distribution of the data set (n=416).

Scope	Torsion coefficient	Flattening coefficient
Hardware & Software	-.102	.213
Experience and Skill	.229	-.677
Communication Networks	.199	-.446
Databases	.095	-.385
Variable Information Technology	.060	-.471
Strategic Financial Planning	.057	-.708
Diversification of income	-.368	-.299
Sound Financial Management	-.119	-.514
Sustainable Financial Integration	-.037	.070
Percentage of Technology Capital	-.243	-.250
Financial Sustainability Variable	-.138	-.266

Table (3) presented the results of the tests conducted to determine the presence of multiple linear correlation problems between the elements of the explanatory variable that concerns the aspect of information technology. This issue was revealed using the guidelines proposed by (Pallant, 2020), the results of the three assessments were consistent with the proposed guidelines. All the variance inflation factors were within the limit of 10, and the acceptable amount of variance coefficients was more than 0.10. Also, the correlation value was found to be statistically significant with a significance value of 0.001 between the dimensions. The relationship was positive and had medium strengths that were not of the highest threshold of 0.90. This implies that there is no correlation between the variables of high levels of correlation meaning that the domains of the independent variable do not have the problem of multiple linear correlation..

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Table (3): Variance inflation factors, permissible variance factors, and Pearson correlation metrics among the aspects of the independent variable to investigate the issue of multiple linear correlations (n=416)

Scope	Variance inflation coefficient	Allowable coefficient of contrast	Pearson correlation coefficient			
			1	2	3	4
Hardware & Software	1.642	0.609	1			
Experience and Skill	1.811	0.552	0.572**	1		
Communication Networks	2.768	0.361	0.523**	0.583**	1	
Databases	2.606	0.384	0.506**	0.549**	0.772**	1

** The association is statistically significant with (0.001) value.

Statistical assessment and presentation of results: This part outlines the statistical assessment process and several tests to be used to answer the questions of the study.

Summary of individual and professional characteristics of the participants of the study:

Table (4) shows the number and percentages distribution of the data in the categories of personal and professional characteristics; the results of this distribution were as follows: According to the gender distribution, there were researchers of both sexes, but the representation of men was higher than that of women, which is understandable in the context of the employment system in the Iraqi society which is more open to the inclusion of women as employees. The males in the sample were N = 338, which took (81.3%), and the females were N = 78, which took (18.8%). Regarding the researcher academic qualification, bachelor degree was the most common examined with N=314 which gives (75.5%), then master degree with N=57 which gives (13.7%) respectively. Ph.D. qualification was done twice with a frequency of (0.5%), and diploma qualification was N=43 which is equal to (10.3%). These results highlight the importance of a high educational level of the participants of the study since the level of education is high in the reality of the labor force in Iraq.

As far as age structure of the research participants is concerned, the sample of the research included people of all age groups, with the highest numbers being in the middle-aged groups. This is consistent with the real demographic structure of the labor force in Iraq which is youthful in nature. The age breakdown of the respondents was as follows: the age segment between 25 and 34 years had a count of n = 38, representing (9.1%), the age segment between 35 and 44 years had a count of n = 171, or (41.1%), the one between 45 and 54 years had a count of n = 148, or (35.6%), the one between 55 and 64 years had a count of n = 47, or (11.3 Additionally, the outcomes concerning years of experience demonstrate that the sample under consideration has high levels of experience as all experience groups were represented sufficiently: the category of less than 10 years of experience had n = 86 which constitutes (20.7%), the category of 10 to 15 years had n = 124 which constitutes (29.8%), the category of 20 to 25 years had n = 108 which constitutes (26%), the category of 25 to 30 years had n = 66 which const

Lastly, the population sampled consisted of representatives of diverse job titles, as the greatest number of participants were service workers, and supervisors appeared to be the least represented, which again fits the hierarchical interaction between managers and their subordinates established. The disaggregation of the job titles among the respondents is as follows; the bank manager took n = 2 or (0.5%), assistant bank manager had n = 9 or (2.2%), public relations manager had n = 5, equating to (1.2%), head of department had n = 34 or (8.2%), sales employee had n = 139, making up (33.4) and finally, service employee had n = 227 representing (54.6). The results concerning the dispersal of the participants regarding their personal and professional traits emphasize the diversity and inclusivity of the sample of the research, besides suggest high educational and experience rates, proving the knowledge and ability of such a group to answer the questionnaire offered by the study..

Table (4): Frequency counts and percentage distributions for the study sample categorized by personal and functional traits (n=416)

Feature	Category	Repetition	Lineage
Gender	Male	338	81.3%
	Female	78	18.8%
Scientific Level	Diploma or below	43	10.3%
	Bachelor	314	75.5%
	Master	57	13.7%
	PhD	2	0.5%
Age	25 to 34 years	38	9.1%
	35 to 44 years	171	41.1%
	45 to 54 years	148	35.6%
	55 to 64 years	47	11.3%
	65 years and older	12	2.9%
Number of years of experience	Less than 10 years	86	20.7%
	10 to 15 years	124	29.8%
	20 to 25 years	108	26%
	25 to 30 years	66	15.9%
	31 years and above	32	7.7%
	Bank Manager	2	0.5%

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Job Title	Deputy Director of Consumption	9	2.2%
	Public Relations Manager	5	1.2%
	Head of Department	34	8.2%
	Sales Officer	139	33.4%
	Service Officer	227	54.6%

Descriptive analysis of the study variables:

The results of the descriptive analysis of the variables studied in this study are presented in Table (5) to determine the level of information technology use and financial sustainability in the Iraqi commercial banks that participated in the study. On the information technology scale, the mean across the board of this variable was noted to be (3.69) indicating that the level of information technology presence in the banks considered was high as perceived by the researchers. Even though this arithmetic mean is in the high category, it is consistent with the findings of descriptive analysis of the specific areas of this variable. The hardware and software area was the only field that delivered a significant level with an arithmetic mean of (3.90), the other ones at moderate levels were experience and skills area with arithmetic mean of (3.65), databases area and communication networks area with arithmetic mean of (3.61) and (3.60) respectively. All the standard deviations were less than (1), which means that the responses were concentrated around the arithmetic mean with consistency and agreement between the opinions of the participants. The results imply that the implementation of information technology in the analysed Iraqi commercial banks is satisfactory; however, additional efforts and funding are needed in such an important industry as banking.

Conversely, the descriptive analysis findings in the aspect of financial sustainability indicated that, the sample population feels average scores of financial sustainability within the Iraqi commercial banks that are being examined, and the overall arithmetic mean of the variable is determined as (3.47). In the spheres of this variable, the element of good financial management showed a high degree of agreement with an arithmetic mean of (3.90) being the highest degree agreement. At the same time, the rest of the areas were ranked in the middle range of the agreement and were ranked in the following order (strategic financial planning domain with an arithmetic mean of (3.63), sustainable financial integration domain with an arithmetic mean of (3.60), technology capital ratio domain with an arithmetic mean of (3.14) and lastly, the income diversification domain with an arithmetic mean of (3.06). It is worth noting that all standard deviations were under (1), which implies that the responses were immensely grouped around the arithmetic mean, indicating cohesiveness and consensus in the ratings by the evaluators. These results show that the management of the analyzed banks made great efforts to achieve fiscal sustainability; however, continuous efforts are necessary to attain greater levels of financial sustainability..

Table (5): The results of the descriptive analysis of the study variables and their fields (n=416)

Scope	Arithmetic Average	Standard deviation	Rank	Grade
Variable Information Technology				
Hardware & Software	3.90	0.54	1	High
Experience and Skill	3.65	0.65	2	Medium
Communication Networks	3.60	0.65	4	Medium
Databases	3.61	0.69	3	Medium
The variable as a whole	**3.69**	**0.53**	**--**	**High**
Variable Financial Sustainability				
Strategic Financial Planning	3.63	0.72	2	Medium
Diversification of income	3.06	0.87	5	Medium
Sound Financial Management	3.90	0.63	1	High
Sustainable Financial Integration	3.60	0.67	3	Medium
Percentage of Technology Capital	3.14	0.83	4	Medium
The variable as a whole	**3.47**	**0.59**	**--**	**Medium**

- **Results of the study hypothesis test:**

This section embodies the findings of the research testing the assumptions of the hypotheses by estimating the linear regression models whose findings of the main hypothesis are drawn using the multiple linear regression model, and the secondary ones using the simple linear regression model.

The outcomes of the main hypothesis testing in regards to the estimation of the multiple linear regression model may be observed in Table (6):

Main Hypothesis: H1 The various aspects of information technology, which include hardware and software, expertise and skills, communication networks, and databases, play a significant part in improving the financial sustainability of commercial banks in Iraq, specifically those located in Tikrit.

Table (6): Outcomes of the Multiple Linear Regression Analysis to Evaluate the Impact of Information Technology on Boosting Financial Sustainability in Iraqi Commercial Banks Located in the Tikrit Region (N=416)

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Linear Regression Model	**Correlation coefficient R**	**Interpreted coefficient of variance R2**	**F value**	**Model Function**	
	0.767	**0.584**	**146.363**	**0.000***	
Independent variable	**Non-standard transactions**		**Standard Transactions**	**Test (T)**	
	Value b	**Standard Error**	**Beta Value (β)**	**Value (T)**	**Function**
Fixed Value (a)	.329	.143	--	2.296	0.000*
Hardware & Software	.185	.044	.170	4.194	0.000*
Experience and Skill	.223	.039	.244	5.724	0.000*
Communication Networks	.254	.048	.280	5.314	0.000*
Databases	.191	.044	.222	4.347	0.000*

Variable affected: The business sustainability of commercial banking institutions within the Tikrit Governorate, Iraq.

The significance is statistically significant at a significant level (a [?] 0.05).

The results of the multiple linear regression analysis on the role of information technology in its different aspects in enhancing the financial sustainability of the Iraqi commercial banks in the Tikrit governorate demonstrated the relevance of the model. The analysis produced an estimated F coefficient of (146.363), with a statistic of significance lower than (0.05), which highlights the paramount importance of information technology when it comes to promoting the phenomenon of sustainability. As well, the correlation coefficient of the R model was established to be (0.767), and the correlation is strong in a direct sense. This means that the higher the information technology levels increase in its various dimensions, the higher the financial sustainability in the Iraqi commercial banks. R2 coefficient was recorded at (0.584) which means that the independent variable together with its dimensions explained 58.4% of the variance recorded in the dependent variable and is quite impressive in explaining the model. The effect of every dimension of the independent variable on the dependent variable is summarized as follows:

Hardware and Software Dimension: The impact factor recorded during this dimension was (.170) which indicates a positive impact. It implies that at every given unit of hardware and software availability, there will be 17% increase in financial sustainability in the commercial banks that have been examined. This was statistically significant, and the T coefficient of (4.194) exceeded the critical value of (1.96) but the level of statistical significance was less than (0.05).

Experience and Skill Dimension: The impact factor was at (.244) in this dimension showing that there is a positive relationship. Practically, one unit of experience and availability of skills relates to the financial sustainability of the 24.4% increment in the examined commercial

banks. This effect was also statistically significant having a T coefficient of (5.724) that was greater than the critical level of (1.96) and less than the level of significance of (0.05).

Communication Networks Dimension: The coefficient of impact of this dimension registered at (.280), which was a positive influence. Thus every unit of communication network availability is associated with the 28 percent improvement of financial sustainability in the surveyed commercial banks. This was statistically significant, as depicted by T coefficient of (5.314) exceeding the critical value of (1.96) and had a statistical significance not exceeding the value of (0.05).

Database dimension: The impact result that has been recorded in this dimension was (.222), which implies that there is a positive effect, implying that as the availability of the database dimension increases by one unit, the probability of the financial sustainability of the evaluated commercial banks increases by 22.2%. This correlation was statistically relevant, with the T coefficient being (4.347) above the critical value of the coefficient (1.96) and the level of statistical significance being less than the value of the level of significance (0.05).

The hypothesis is confirmed based on the previous results that emphasized the importance of information technology in enhancing financial sustainability of commercial banks in Iraq in the Governorate of Tikrit.

The findings after estimation of the simple linear regression model have been found to be presented in the following tables to evaluate the subhypotheses.:

H1.1 Information technology plays a part in advancing financial sustainability following strategic financial planning within the commercial banks of Iraq that are situated in Tikrit**.**

Table (7): Outcomes from the Simple Linear Regression Model aimed at assessing the contribution of information technology to improving financial sustainability post strategic financial planning in Iraqi commercial banks based in Tikrit Governorate (N=416)

Linear Regression Model	**Correlation coefficient R**	**Interpreted coefficient of variance R2**	**F value**	**Model Function**	
	0.689	**0.473**	**373.835**	**0.000***	
Independent variable	**Non-standard transactions**		**Standard Transactions**	**Test (T)**	
	Value b	**Standard Error**	**Beta Value (β)**	**Value (T)**	**Function**
Fixed Value (a)	.159	.182	--	.874	.383
Information Technology	.942	.049	.689	19.335	0.000*

- **Dependent Variable: Financial Sustainability after (Strategic Financial Planning) in Iraqi Commercial Banks Operating in Tikrit Governorate**
  - *The effect is statistically significant at an acceptable level of significance (a [?] 0.05).

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The results of the simple line regression model analysis on the role of information technology in financial sustainability after the strategic financial planning in the Iraqi commercial banks located in Tikrit governorate indicated the significance of the model. The obtained F value was 373.835 and a statistical significance is lower than the level of 0.05, which proves that the information technology becomes the key to making sustainability level high. It was revealed in the analysis that the correlation coefficient in the R model was 0.689 and this indicates a moderate direct correlation. This implies that with the increased level of information technology, there is a moderate increment of financial sustainability following the strategic financial planning of the Iraqi commercial banks. The R2 was determined to be 0.473 and indicates that the independent variable explained 47.3 per cent of the variation in the dependent variable hence a good amount of explanatory power of the model. Moreover, the value of the impact factor stood at 0.689 and this indicates a positive relationship between the two variables, thus a one unit change in the resources of IT would increase the financial sustainability following strategic financial planning in the commercial banks reviewed by 68.9 percent. This statistical significance was statistically significant, with the T value of 9.335 which is a statistically significant value, more than the critical value of 1.96, but at the same time, the level of significance was smaller than the critical value of 0.05. These results explain the significant role of information technology in promoting financial sustainability following strategic financial planning in the Iraqi commercial banks within the Tikrit governorate hence supporting the initial sub-hypothesis..

H1.2 Information technology plays a significant part in fostering financial sustainability after income generation in commercial banks located in Tikrit, Iraq.

Table (8): Outcomes of the Simple Linear Regression Model used to Assess the Impact of Information Technology on Improving Financial Stability post-Income Diversification in Iraqi Commercial Banks functioning within Tikrit Governorate (n=416)

Linear Regression Model	**Correlation coefficient R**	**Interpreted coefficient of variance R2**	**F value**	**Model Function**	
	0.572	**0.327**	**201.017**	**0.000***	
Independent variable	**Non-standard transactions**		**Standard Transactions**	**Test (T)**	
	Value b	**Standard Error**	**Beta Value (β)**	**Value (T)**	**Function**
Fixed Value (a)	-.419	.248	--	-1.687	0.092
Information Technology	.944	.067	.572	14.178	0.000*

- Dependent variable: Financial viability following (income diversification) in Iraqi commercial banks functioning in Tikrit governorate

- The difference is significant at the level of significance (a [?] 0.05).

The results of the evaluation of the simple linear regression equation on the effects of the information technology on enhancing financial sustainability after diversification of income of

the commercial banks in Tikrit governorate in Iraq accentuated the significance of the model. The F statistic of this model was (201.017) and a statistical significance of (201.017) was less than the acceptable level (0.05), indicating that there is a noteworthy impact of information technology on sustainability. The results indicated the correlation coefficient in the model of R was (0.572) thus indicating that there was a moderate direct relationship. This means that as financial sustainability rises with the use of information technology, there is moderate rise in financial sustainability following income diversification in Iraqi commercial banks. On the R2 coefficient, it was established that the independent variable explained (0.327) which indicates that the independent variable explained 32.7 percentage of the variation experienced on the dependent variable, which is a good level of explanatory strength within the model. Also, the influence factor was (0.572), which is a positive influence since one unit increase in IT availability had a positive and corresponding 57.2% financial sustainability improvement following income diversification in the banks being examined. The difference was statistically significant, and the T coefficient of (14.178) exceeds the value of the critical coefficient (1.96) and also retained the level of statistical value of less than (0.05). These preceding results highlight the instrumental role of information technology towards the improvement of the financial sustainability with the aftermath of income diversification in Iraqi commercial banks within the Tikrit governorate hence support the second sub-hypothesis..

H1.3 Information technology has a part to play in enhancing financial sustainability following proper financial management in commercial banks in Iraq that are based in Tikrit.

Table (9): Outcomes of the Simple Linear Regression Analysis to Assess the Contribution of Information Technology to the Advancement of Financial Sustainability after Proper Financial Management in Iraqi Commercial Banks Functioning in Tikrit Governorate (n=416)

Linear Regression Model	**Correlation coefficient R**	**Interpreted coefficient of variance R2**	**F value**	**Model Function**	
	0.607	**0.367**	**241.387**	**0.000***	
Independent variable	**Non-standard transactions**		**Standard Transactions**	**Test (T)**	
	Value b	**Standard Error**	**Beta Value (β)**	**Value (T)**	**Function**
Fixed Value (a)	1.218	.175	--	6.980	0.000*
Information Technology	.727	.047	.607	15.537	0.000*

- Dependent variable: Financial viability following effective financial administration in commercial banks located in the Tikrit region of Iraq.

- The impact is statistically important at the significance threshold ($\alpha \leq 0.05$).

The relevance of the simple linear regression model to the studies of the effect of information technology on improving the financial sustainability after efficient financial management in the Iraqi commercial banks situated in Tikrit governorate was established through the findings

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of the assessment of the simple linear regression model. The model had a calculated F coefficient of 241.387, which had a statistical significance of less than the level of 0.05, which indicates the significant role played by information technology in enhancing sustainability. It was seen that the correlation coefficient of the R model was 0.607 which has a moderate value and shows a direct correlation. This means that as the level of information technology is higher, financial sustainability increases following effective financial management of Iraqi commercial banks to a moderate level. The calculated R2 was 0.367 indicating that the independent variable explained 36.7 percent of the change in the dependent variable and this is a good level of explanatory power of the model. In addition, the impact factor was recorded to be 0.607 that represents a positive influence meaning that every unit of increase in the IT availability leads to an increase of sustainability by 60.7%. This effect was statistically confirmed because T-coefficient was found to be 15.537 and this is greater than the critical coefficient level of 1.96 and the p-value was not more than 0.05. These results indicate the important role played by information technology in promoting financial sustainability following successful financial management in Iraqi commercial banks located in the Tikrit governorate hence supporting the third sub-hypothesis..

H1.4 Information technology plays a part in enhancing financial sustainability following sustainable financial integration within commercial banks in Iraq's Tikrit region.

Table (10): Outcomes of Assessing the Basic Linear Regression Model to Evaluate Information Technology's Contribution to Advancing Financial Sustainability Following Sustainable Financial Integration in Iraqi Commercial Banks Functioning in Tikrit Governorate (N=416)

Linear Regression Model	**Correlation coefficient R**	**Interpreted coefficient of variance R2**	**F value**	**Model Function**	
	0.634	**0.401**	**278.368**	**0.000***	
Independent variable	**Non-standard transactions**		**Standard Transactions**	**Test (T)**	
	Value b	**Standard Error**	**Beta Value (β)**	**Value (T)**	**Function**
Fixed Value (a)	.644	.179	--	3.597	0.000*
Information Technology	.801	.048	.634	16.684	0.000*

Dependent variable: The financial sustainability after sustainable financial integration among commercial banks in Iraqi governorate of Tikrit.

The difference is statistically significant at the level of significance (a [?] 0.05)

The results obtained by assessing the simple linear regression model on the impact of information technology on improving financial sustainability after the successful financial integration process in a sustainable manner among commercial banks in Tikrit governorate in Iraq found that the simple linear regression model is significant. The model gained a calculated

F factor of 278.368 and the statistical significance of the result at less than 0.05 meaning that information technology makes a significant contribution towards ensuring sustainability..

The outcomes of the model indicated that the correlation coefficient in the R model reached 0.634, suggesting a direct and moderately strong relationship. This signifies that as the levels of information technology increase, so does the financial sustainability following sustainable financial integration in Iraqi commercial banks, albeit to a moderate extent. The reported R-squared value was 0.401, showing that the independent variable accounted for 40.1% of the fluctuation in the dependent variable, which reflects commendable explanatory power in the model.

Furthermore, the identified impact factor was 0.634, suggesting a positive correlation, which means that each unit increase in IT resources corresponds to a 63.4% improvement in financial sustainability after sustainable financial integration in the banks examined. This impact was statistically significant, indicated by a T coefficient of 16.684, surpassing the critical threshold of 1.96, and maintaining a statistical significance below the 0.05 level. The preceding findings highlight the crucial role of information technology in enhancing financial sustainability after sustainable financial integration in the Iraqi commercial banks situated in Tikrit governorate, thereby corroborating the fourth sub-hypothesis.

H1.5 Information technology plays a part in facilitating financial sustainability following the technology capital ratio in commercial banks in Iraq that are located in Tikrit.

Table (11): Findings from the Estimation of the Basic Linear Regression Model to Assess the Impact of Information Technology on Improving Financial Sustainability following the Technology Capital Percentage in Iraqi Commercial Banks Functioning in the Tikrit Governorate (N=416)

Linear Regression Model	**Correlation coefficient R**	**Interpreted coefficient of variance R2**	**F value**	**Model Function**	
	0.566	**0.319**	**195.120**	**0.000***	
Independent variable	**Non-standard transactions**		**Standard Transactions**	**Test (T)**	
	Value b	**Standard Error**	**Beta Value (β)**	**Value (T)**	**Function**
Fixed Value (a)	-.122	.237	--	-.514	0.608
Information Technology	.886	.063	.566	13.969	0.000*

- Dependent variable: Financial viability following (proportion of technological assets) in commercial banks based in Tikrit governorate, Iraq

- The impact is statistically important at the significance threshold ($\alpha \leq 0.05$)

The outcomes of assessing the straightforward linear regression model regarding the influence of information technology on enhancing financial sustainability following the percentage of technological capital in commercial banks located in Tikrit governorate, Iraq, demonstrated the

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model's significance. The model has obtained a calculated F coefficient of 195.120 that has less value than the level of 0.05 which indicates that information technology has a significant role in promoting sustainability. The outputs of the model were that the correlation coefficient in the R model achieved a value of 0.566, meaning that an increase in the degree of information technology is associated with high financial sustainability to a moderate level relative to the percentage of technological capital in Iraqi commercial banks. The R2 value was recorded as 0.319 indicating that the variation in the dependent variable was explained by the independent variable to an extent of 31.9 percent which implies that the model has sufficient explanatory power. Moreover, the factor of impact was 0.566, which also indicates a positive effect, that is, with the increase of the unit of IT availability, the percentage of technological capital in the examined commercial banks increases by 56.6. This effect was statistically significant as the value of the T coefficient was 13.969 which exceeds the critical level of the coefficient which is 1.96 and the level of statistical significance was below 0.05. The previous results highlight the necessity of information technology as the means of enhancing financial viability when the percentage of technological capital among the Iraqi commercial banks, which operate in the Tikrit Governorate, is taken into account, which supports the fifth sub-hypothesis even further..

Fourth Topic: Conclusions and Recommendations

The section of the research states the key findings and recommendations developed by the researcher about the role of information technology to promote financial sustainability, in this particular case, an applied study of commercial banks in the Tikrit region of Iraq with the help of statistical analyses and conclusions based on the theoretical framework.

Conclusions

- The results showed that there is a significant contribution of information technology towards enhancing financial sustainability in commercial banks in the Tikrit region in Iraq, which indicates the existence of a strong direct relationship where high rates of information technology are associated with high levels of financial sustainability in the commercial banks.
- Evidence is available that information technology is an important tool in improving the financial sustainability of strategic financial planning, and there is a direct correlation between the technology and related components and strategic financial planning in Iraqi commercial banks in Tikrit region.
- According to the study, information technology plays a very important role in enhancing financial sustainability after diversifying income strategies, which illustrates a direct relationship between technology, its component, and income diversification in Iraqi commercial banks in Tikrit.
- The study points out the impact that information technology has on financial sustainability on the consideration of good financial management and found that there is a direct relationship between technological tools and their facets and good financial management among Iraqi commercial banks in Tikrit.
- The information technology has an interesting role to play in increasing financial sustainability after sustainable financial integration and a direct correlation is noted between technology and its components and sustainable financial integration of the commercial banks in Tikrit among the Iraqi banks.

- Significant contribution of information technology was determined in enhancing the financial sustainability after evaluating the percentage of technological capital with a direct relationship being drawn between technology and its aspects and percentage of technological capital among the Iraqi commercial banks in Tikrit.

Recommendations:

Drawing from the results of this research and considering the discussions in prior literature and studies related to information technology and financial sustainability, the following future recommendations regarding the integration of information technology to enhance financial sustainability in Iraqi commercial banks in Tikrit have been proposed.

First: Scientific Recommendations.

1. Iraqi commercial banks are encouraged to allocate more resources toward information technology advancements, which significantly improves essential services within the banking industry.
2. It is advised that Iraqi commercial banks persist in their administrative and financial efforts aimed at achieving greater financial sustainability to enhance their performance within the Iraqi commercial banking landscape, especially amidst the intense competition faced across various sectors, not just the commercial sector.
3. It is recommended that the Iraqi commercial banks under review should consider paying more attention to the integration of information technology and its adaptation to enhance the financial sustainability because the results of the analysis of the linear regression model revealed the significance of this factor. Subsequently, the successful use of information technology may lead to the high level of financial sustainability in Iraqi commercial banks.
4. It is also recommended that future studies consider other variables that could be included in the research model to act as mediators or moderation of the relationship so that a more comprehensive and broad picture of how information technology can be aligned with other organizational factors to achieve positive degrees of financial sustainability.

Researcher recommendations to researchers in future studies:

With this study, we propose that researchers should engage in further research:

1. Conducting a prospective research on the connection between the use of financial technology and financial sustainability in the Saudi banking institutions.
2. To start a further study of the impact of the evolution of the digital banking on the enhancement of financial sustainability..
3. Carrying out a study to explore the elements that impact the attainment of financial sustainability in Iraq's banking industry.
4. Performing an analysis on how financial sustainability affects the financial performance of organizations in Iraq.
5. Executing a study into how financial resilience contributes to boosting financial sustainability in Iraqi banks.
6. Conducting research on how electronic banking services influence the competitiveness of banks in Iraq.
7. It is suggested that banks recruit skilled professionals with expertise in modern information technology.

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8. There is a necessity to provide training for sales and customer service personnel on IT applications to optimize their usage.
9. Banks need to foster a robust culture alongside perpetually advancing technology to establish formidable teams that can empower them in confronting future challenges arising from rapid technological advancements.
10. Increasing employment opportunities and raising the number of qualified and skilled individuals in the digital realm so that banks can transform technological challenges into possibilities for going digital, thereby sustaining employee productivity and effectiveness..

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