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THE ROLE OF SUSTAINABILITY ACCOUNTING AND ITS REFLECTION IN DIGITAL FINANCIAL SERVICES FOR BANKS A FIELD STUDY ON IRAQI COMMERCIAL BANKS- DIWANIYAH

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Abstract:

The study aims to analyze the role of Sustainability Accounting and its reflection in digital financial services in Iraqi commercial banks-Diwaniyah , The study was based on a descriptive-analytical approach to measure its variables The five-factor Likert scale was used as a tool to collect data from a sample consisting of (106) factors , The study focused on an important question that the role of Sustainability Accounting and its reflection in digital financial services at Iraqi commercial banks-Diwaniyah , In order to address these problems, the study adopted two packages to analyze the results based on (SPSS.V.28 & SMART.PLS), As a result, the study came out with a set of results, the foremost of which was the existence of a role for Sustainability Accounting in the digital financial services of banks, and this contributed to clarifying how sustainability practices affect the development and provision of digital financial services, Sustainability Accounting contributes to enhancing the social responsibility of banks and reducing the environmental impact of their financial activities , The study concluded with a set of recommendations, the most important of which is the need to develop training and awareness programs for bank employees , With the aim of developing the necessary skills to assess and analyze the social and environmental impact of digital financial services and increasing awareness of Sustainability Accounting and its impact on digital financial services.

Keywords: Sustainability Accounting, digital financial services, Iraqi commercial banks

INTRODUCTION

Digital financial services constitute an innovative mechanism to improve the operations of the banking sector through the use of digital technologies in the provision of traditional banking services such as digital payment services , Transferring funds and facilitating borrowing or financing and saving operations, It represents a form of change in the banking environment and culture inside and outside financial and economic institutions, Which has significantly affected the stability of the banking financial sector, which subsequently leads to sustainable economic growth and is one of the important factors for achieving the Sustainable Development Goals, Therefore, commercial banks need a sustainable mechanism through which to improve their capabilities and internal environment, as Sustainability Accounting is one of the most important stages of accounting development in financial institutions, it is an information system for the function of measuring and analyzing the environmental and social performance of institutions. This is what raised the issue of Sustainability Accounting as it represents an important pillar in enhancing the potential of the commercial banking sector in improving digital financial services. Banks are beginning to realize that the operations of the banking sector affect the environment and society and require sustainability strategies, through the effective allocation of their resources in order to enhance value and decision-making in line with the Sustainable Development Goals. Sustainable development is a challenge facing the whole world, Sustainable development has been at the forefront of the regional and

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international arena at the beginning of the last decade. In light of the global shift towards sustainability and the growing interest in the issue of protecting the environment and society, It has become necessary for Iraqi banks to adopt sustainability accounting standards to strengthen their competitive position and achieve sustainable development in the country. Commercial banks are considered one of the most important financial institutions that have a vital role in financing and developing economic activity. Therefore, this research aims to find out how sustainability accounting affects the design and provision of digital financial services to Iraqi commercial banks.

The first Part: the methodology of the study and previous studies

First: study methodology

1. The problem of study

Digital financial services for banks are among the elements that lead to sustainable economic growth, which is one of the important factors to achieve sustainable development goals, and therefore commercial banks need a sustainable mechanism through which they can improve their capabilities and internal environment, and this is what raised the issue of sustainability accounting as it represents an important pillar in enhancing the capabilities of the commercial banking sector to improve digital financial services. Therefore, Therefore, the problem of the study was represented in the following question (Does sustainability accounting have a role in digital financial services in Iraqi commercial banks? In order to answer the main question, appropriate solutions must be developed to the following sub-questions:

a - What are the appropriate mechanisms through which to enhance the transparency of banks and increase the level of disclosure related to sustainability performance in digital financial services?

b - What is the level of provision of information and evidence necessary to make sustainable strategic and operational decisions in banks?

c - What are the appropriate dimensions through which sustainable practices can be promoted in banks by clarifying the importance and role of sustainability accounting in achieving sustainable goals and enhancing the sustainability performance of banks?

2. Importance of study

The role of sustainability accounting in digital financial services enhances the transparency of banks and public confidence by providing clear and reliable information about sustainability performance and associated risks, as well as confidence in the ability of banks to deal with sustainability challenges and achieve sustainable financial results, as sustainability accounting has an important role in enhancing banking compliance with standards and legislation related to sustainability by understanding the potential impact of social, environmental and governance risks on the financial performance of banks.

3. Study objectives

The main objective of the study is to find out how sustainability accounting affects the design and delivery of digital financial services for banks, and from this goal several sub-objectives emerge:

a . The research aims to improve bank openness and the amount of disclosure connected to long-term success in digital financial services. Bank reporting may be enhanced by sustainable accounting, and customers, investors, and other stakeholders can be supplied with complete and credible information.

b . The study's goal is to give the knowledge and data needed to make long-term strategic and operational choices in banks. Understanding the effects of sustainability accounting on digital financial services allows banks to recognize possibilities and challenges and make sound decisions to improve long-term performance.

c. The study's purpose is to encourage sustainable practices in banks by highlighting the relevance and function of sustainability accounting in attaining sustainable goals and improving bank sustainability performance. This might involve building a framework for implementing acceptable accounting principles and standards in digital financial services.

4. Hypothetical scheme and hypothesis development

This paragraph is an essential component of the scientific research process. The hypothetical scheme is a theoretical framework that specifies the supposed link between the independent variables and the variables utilized in the investigation. It is used to construct a theoretical framework for the study and determine the assumptions that will be evaluated and analyzed. Figure (1) shows the hypothetical scheme of the study. The independent variable (sustainability accounting) has five dimensions (absorptive capacity and financial inclusion, data security and customer privacy, managing the legal and regulatory environment, managing systemic risks,

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integrating ESG risk factors) (in credit risk analysis) A scale was adopted for this purpose, while the dependent variable is represented in (digital financial services) and is a one-dimensional variable .)Hussein,2023(

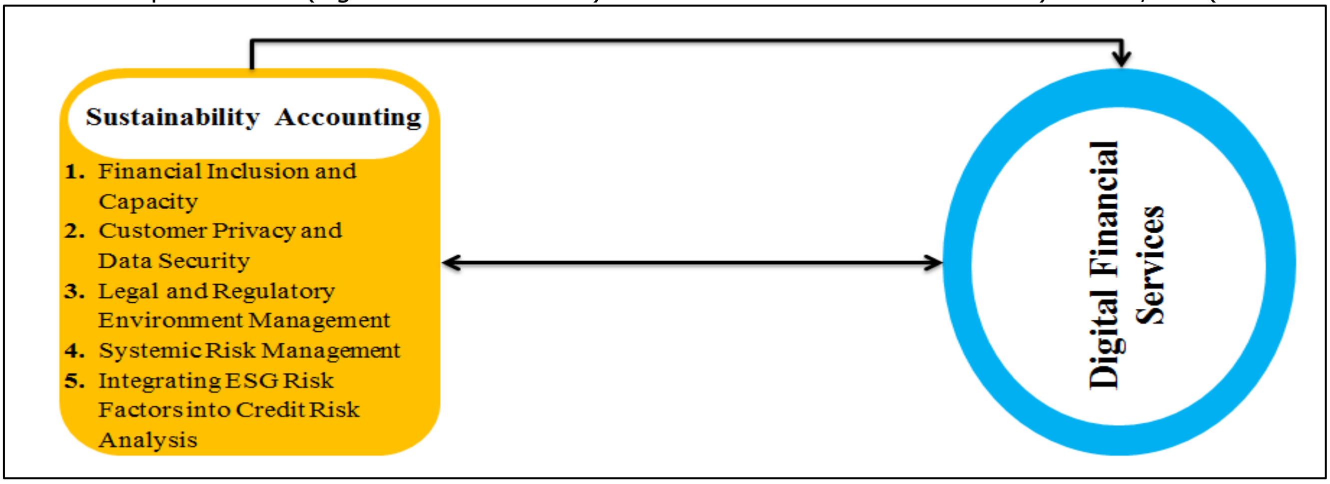

Figure (1) The hypothesis study plan

Source: Researcher Preparation

H1: There is a relationship of moral connotation between (sustainability accounting and digital financial services), and the following hypotheses branch:1 There is a statistically significant correlation between capacity listings, financial listings, and digital financial services.

H2: There is a statistically significant effect between (sustainability accounting and digital financial services), and the following hypotheses branch:

Study sample

The study community is represented in commercial banks in Diwaniyah Governorate – Iraq (Baghdad Investment, Iraqi Union, Dar es Salaam, Gulf, Islamic World), In particular, the study sample included a group of workers in these banks, which numbered (120) workers , Thus, (24) questionnaires were distributed to each bank by a total number of questionnaires of (120), and thus the method of comprehensive inventory of all society was used , And retrieved (113) questionnaires by (7) questionnaires that are not valid for analysis , Thus, (106) questionnaires were suitable for analysis.

Secondly. Previous studies

1. A study (Diener & Špacek, 2019)

This study examines required sustainable reporting with a specific emphasis on strategy through digitalization in the banking industry, and the framework of the Sustainability Law serves as the foundation for the investigation. The results of the study revealed that, Among the requirements for preparing sustainable reports is legally stipulated. Banks should be partially, but not completely, interested in preparing reports on digital transformation.

2. A study (Buallay, 2020)

The goal of this research is to compare the levels of sustainability reporting (environmental, social, and governance (ESG) and their influence on operational, financial, and market performance in the industry and banking sectors. The extracted results showed that environmental, social and governance standards positively affect the operational, financial and market performance in the manufacturing sector. But it negatively affects the operational, financial and market performance in the banking sector.

3. A study (Al-Duraie & Al-Manna, 2022)

The aim of this research is to identify the concept of sustainability accounting, financial reporting, financial performance and transparency and shows the extent to which Iraqi banks rely on sustainability accounting reports . He reached several conclusions, the most important of which is that banks' disclosure of sustainability aspects in their reports increases the awareness, awareness and confidence of users of these reports, It increases the transparency and efficiency of their financial performance and banks with high profitability are more applicable to the sustainability report.

4. A study (Abdel Rayat & Khalawi, 2020)

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The study and analysis of sustainable accounting and its criteria for health units, as well as the amount of its influence on the accounting system, are the goals of this research. The researchers came at several results, the most important of which are as follows: The government accounting system used in health units is unable to provide information needed to implement sustainability accounting requirements, particularly in terms of the environmental and social aspects.

5. A study (Al-Awwad & Al-Ibrahimi, 2021)

The research aimed to employ sustainability accounting standards (FNO101 commercial banks standard) by knowing the opinions of a group of workers in a sample of commercial banks listed on the Iraq Stock Exchange on the importance of sustainability issues related to the standard (FNO101) and the results of the research that were reached showed that these indicators contribute to enhancing investors' confidence in banks and giving them the full picture in the presentation of annual reports.

6. A study (Abdel Maqsoud, 2022)

This study showed the effect of the accounting accounting in improving the quality of accounting profits in the Egyptian Capital Market, and the study found a significant correlation between sustainability accounting and accounting profit quality indicators.

The second Part: the theoretical side

First: Sustainability Accounting (SUA)

1. The concept of SUA

The concept of sustainability emerged in order to work on balancing the interests that serve society in the economic, environmental and social fields. It is a framework for the efforts made to reach a good standard of life through economic and social development and the preservation of environmental resources depletion and depletion (Singhal & Dev, 2016). We may define it as a system that offers information and statistics about the company's economic, social, and governance activities and practices in order to assist make decisions that promote sustainable development. In business, sustainability refers to all systems of corporate operations, including strategic, legal, human, and functional management. Sustainability obligations represent the institutionalization of environmental initiatives (Sisaye,2021) and commercial organizations' corporate governance standards. Palit (2018) believes that SUA is a branch of financial accounting that focuses on disclosing non-financial information related to the company's performance to all external parties such as investors, creditors, government and other authorities. Sustainability is often referred to as development that meets the needs of the present without compromising the ability of future generations to meet their own needs because it studies all the systems of nature so that they produce everything they need. **(Klymenko et al.,2021)** for the environment to remain in constant balance. As a result, the significance of SUA originates from the fact that it is a process by which the organization's sustainability performance is assessed and reported, imposing accountability to internal and external stakeholders for its social, environmental, and economic performance. SUA is therefore a method of creating, disseminating, and managing information targeted at proving an organization's success toward its long-term goals (Tommasetti et al.,2020).

2. Objectives of SUA

There are several objectives of sustainable accounting, including that SUA provides accounting information to stakeholders in accordance with the principles of sustainability in order to rationalize their decisions and works to evaluate performance through the management of non-financial capital (environmental and social) as it defines responsibilities and achieves a balance between all users of accounting information and improves and develops the dimensions of the accounting system and works to improve the economic performance of the economic unit. **(**Hyršlová**, 2015)**.

3. Dimensions of SUA

SUA is a process in which the economy, environment and society are combined in a way that balances its three dimensions:

a. Environmental sustainability: It entails guaranteeing the continuity of natural resources, biodiversity, and human health, since ecologically sustainable units use resources to the degree that their natural system can handle them and endeavor to limit the environmental consequences of operational operations **(Liu et al ., 2019)**.

b. Economic sustainability: This dimension includes sustainability profitability, operating expenses, the financial position of the unit, natural capital, sustainability in investments, and that knowledge, experience,

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creativity, innovation and how to solve problems is a type of capital that provides economic benefits in the long term (**Berksoy, 2018)**.

c. Social sustainability: It is a 'important' component of the comprehensive sustainable version, which is the result of harmonious civil society development, because this dimension promotes a suitable environment for coexistence with culturally and socially diverse groups, as well as improving the quality of life for all segments of society while preserving and developing well-being to serve future generations **(Doğu & Aras, 2019)**.

4. SUA Measurement Standards

To hold sustainability five indicators that can be adopted as a SUA

a. Absorptive capacity and financial inclusion: Financial listing is the process of registering and trading securities of a company in an official financial market. Financial listing involves listing a company's shares on a stock exchange, where shares become available for sale and purchase by public investors. Financial listing enhances the transparency, goodwill and tradability of the company, and provides it with an opportunity to attract capital, expand its scope of activity and achieve the necessary financing for growth and expansion. (Vintil et al. ,2019), While the carrying capacity represents the maximum capacity of the infrastructure or system to efficiently accommodate a certain volume of traffic or energy. (Popovich et al.,2021)

b. Data security and customer privacy: She is a concept refers to the protection and respect for the confidentiality and privacy of customers' personal information **(**Eskens, 2020), Data security refers to the protection of data from unauthorized access and use, alteration or disclosure. (Sankar et al., 2023).

c. Legal and regulatory environment management: Legal and regulatory environment management refers to the processes and practices carried out by organizations and companies to comply with applicable environmental laws and regulations and achieve their environmental obligations. (Shahzad et al.,2021).

d. Regular Risk Management: It is a process of identifying, assessing, monitoring and addressing risks related to compliance with laws, regulations and legal and regulatory standards applicable in different areas of organizations and companies. (Monciardini et al.,2021).

e. ESG risk variables are being included into credit risk assessments: The inclusion and assessment of environmental, social, and governance factors in the process of assessing credit-related risks and estimating their impact on debt repayment capacity and the strength of corporate financial performance is referred to as integrating ESG risk factors into credit risk analysis (Angelova et al., 2021).

Second: Digital Financial Services

1. The concept of digital financial services

It is a general term for a business whereby a customer can carry out banking operations electronically without visiting a branch. In other words, they are the systems that enable bank customers, whether individuals or companies, to access their accounts or obtain information related to financial services through a public or private network, including the Internet. Digital financial services are also defined as a financial service that includes a banking agency, cell phone banking, and online banking services aimed at improving physical financial services (Arora et al., 2021). It can be defined as every financial or banking service related to all cases of withdrawal, deposit, money transfer or balance detection via the Internet or modern technological screens and developed devices, digital financial services include all operations or activities that are held or promote optical or electronic means such as telephone, computer, ATM, Internet digital television and others,(Qwaider, 2020).

2. The importance of digital services

Financial services have great importance in the world and can be summarized as follows (Majouri & Nasr 2022)

a. Save time and effort and reduce costs.
b. Ease of conducting operations and transferring money.
c. Access to different accounts and financial procedures at any time.
d. Improving the bank's capabilities in carrying out business through digital programs based on physical means of computing and infrastructure.
e. Providing services based on modern and not traditional technological methods and tools.
f. Using a wide range of digital channels to assist customers with payments, credit, transfers and insurance (Amneh, 2022).
g. Improving banking (Fernandes et al., 2021)

3. Types of digital services

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There are many types of digital services, the most important of which is: (kharfi, 2022):
The first type: banking through the ATM, which provides services to the customer, including withdrawal and savings in local currency, deposit, transfer from one account to another, balance inquiry.
The second type: mobile banking after the emergence of the new generation of smart mobile phones, which have the same characteristics as the computer, once the network coverage network is available, the customer can get any banking service he wants.
The third type: Banking via digital television. This type is done by linking the television set, the customer's computer, and the bank via satellite, as the customer can enter the bank's computer through his secret number that is given to him in order to carry out the required operations.
The fourth type: Online banking It means using the Internet as a channel for obtaining banking services, including opening accounts, transferring money, and obtaining new banking services.

Third: SUA and Digital Financial Services

Sustainability and digitization are buzzwords these days because they represent potentially revolutionary forces for businesses and society (Joyce & Paquin, 2016). Due to the economic turmoil associated with crises, particularly the Covid pandemic and the subsequent large losses as a result of preventive and precautionary measures put in place by countries to limit the spread of the pandemic, countries require crisis-resilient infrastructure to ensure that vital sectors such as the financial sector are not disrupted (Velashani, Sallal & Salehi, 2022). The growth of technology, such as mobile phones and the Internet, must be used in digital financial inclusion to provide safe and cheap financial services to everyone, regardless of geography or socioeconomic standing (Joyce & Paquin, 2016). Digital solutions are an important pillar in achieving the Sustainable Development Goals because they provide community members with simple tools, as well as access to financial services and a financial safety net. Digital finance enables increased inclusion at all levels of society, which is required to offer services to an expanding population, as well as better openness in the use of public monies, which is also required to combat corruption (Daboush & Berry, 2022). Financial inclusion is critical for ensuring that all people have equal access to financial services in order to provide fair, transparent, and affordable financial services that can be utilized to build thriving and sustainable economies. As a result, digital financial services provide real promise for getting the world back on track to meet the Sustainable Development Goals (Al-Awwad & Al-Ibrahimi, 2021).

The third Part: the practical side

First: Description of the research community and its sample

1. Coding study variables

Coding variables in a study is an important process in statistical analysis, where qualitative and quantitative information is converted into symbols or numbers that can be easily analyzed and interpreted. Variables coding helps in standardizing and organizing data, which facilitates comparison and statistical analysis of results, as in Table (1).

Table (1) Coding of study variables

Code		Paragraphs	Dimensions	Variables
SUA	SFA	5	**Absorptive capacity and financial inclusion**	Sustainability Accounting
	SCD	2	**Data security and customer privacy**	
	SMR	2	**Managing the legal and regulatory environment**	
	SRM	5	**Systemic Risk Management**	
	SEC	4	**Integrating risk factors (ESG) into credit risk**	
DFS		10	One-dimensional	Digital Financial Services

2. Test normal distribution

The results of Table (2) show that the variables of the study and their dimensions follow the normal distribution through the use of the Kolmogorov Smirnov test, because the moral value of the distribution test for

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all study variables is higher than (0.05) and this means that the results of the study met on the possibility of generalizing them to the studied community, the normal distribution aims to determine whether the results reached by the study can be used in the future or not.

Table (2) Z test results

Sig.		Kol-Smi Z		Dimensions and variables
0.133	0.133	1.369	1.369	SFA
	0.210		2.160	SCD
	0.197		2.032	SMR
	0.153		1.576	SRM
	0.190		1.956	SEC
0.133		1.366		**Digital Financial Services**

3. Stability of the measuring instrument

There is a set of statistical tools that are used to know the stability of the measurement tool and in this research the Alpha Cronbach coefficient was used as in Table (3), which shows the stability of the measurement tool towards its variables (SUA, and digital financial services for banks) and the sample answers showed results of (0.896) for SUA, and (0.879) for digital financial services. This shows the importance and reliability of the measuring instrument and its consistency towards the answers of the sample surveyed.

Table (3) alpha cronbach coefficients

Cronbach's Alpha		Variables
0.896	0.887	SFA
	0.835	SCD
	0.757	SMR
	0.877	SRM
	0.861	SEC
0.879		**Digital Financial Services**

4. Descriptive Statistics of Personal Data

The personal characteristics of the research sample members are provided in Table (4), with the proportion of men (63%), which is larger than the percentage of females. In terms of the highest age category, the (35-45) group received the greatest percentage (33%). Bachelor's degree holders had the highest percentage of academic accomplishment (49%). The number of years of service was (36%), which is the greatest percentage of those with (10-15) years of service. The job title had the greatest proportion (41%).

Table (4) Demographic information of respondents

Demographic information of respondents		**Frequency**	**Percent**	**Demographic information of respondent**		**Frequency**	**Percent**
Gender	Male	76	63%	Professional grade	Member of the Board of Directors	5	4%
	Female	44	37%		Manager	10	8%
Age	Under 35 years old	32	27%		Internal Auditor	23	19%
	35-45 years old	40	33%		Accountant	34	28%
	45-55 years old	38	32%		Other	48	41%

Demographic information of respondents		Frequency	Percent	Demographic information of respondent		Frequency	Percent
	Above 55 years old	10	8%				
Experience	Less than 5 years	21	18%	Level of education	Diploma	29	24%
	10-15 years	43	36%		Bachelor's degree	59	%49
	15-25 years	40	33%		Master's degree	27	23%
	More than 25 years	15	13%		Doctoral degree	5	4%
Total		120	100%	Total		120	100%

5. Descriptive statistics of research data

It is clear from Table (4) that the total rate of the SUA variable is (4.06) with a standard deviation of (0.46), where after the financial inclusion and the absorptive capacity was with an account average of (4.09) and a standard deviation equal to (0.47), then the management of the legal and regulatory environment with an account average of (4.08) and a standard deviation of (0.46), then the management of systemic risks with an account average of (4.08) and a standard deviation of (0.49) followed by the integration of ESG risk factors into the credit risk analysis with an account average of (4.04) and a standard deviation of (0.58), while customer privacy and data security came in last place with an account average of (4.02) and a standard deviation of (0.57), Hence, the interest of commercial banks in SUA is shown through their focus on adopting the absorptive capacities related to financial inclusion and improving their capabilities in maintaining the privacy of customers and the security of their data and information in complete confidentiality, which enhances customer loyalty and gaining their trust in the long term. Digital financial services also received great attention from commercial banks by obtaining an account average of (4.09) and a standard deviation of (0.52), which shows the interest of commercial banks in urging the adoption of new mechanisms to improve digital financial services through their focus on investing environmental opportunities related to SUA.

Table (5) Descriptive Analysis

NO.	S.D	Mean	NO.	S.D	Mean	NO.	S.D	Mean
SFA1	4.11	0.62	SRM1	4.11	0.64	DFS1	4.10	0.72
SFA2	4.02	0.65	SRM2	3.98	0.68	DFS2	4.08	0.72
SFA3	4.24	0.71	SRM3	4.06	0.66	DFS3	4.20	0.75
SFA4	4.01	0.64	SRM4	4.08	0.60	DFS4	4.01	0.68
SFA5	4.07	0.65	SRM5	4.19	0.65	DFS5	4.11	0.72
SFA	**4.09**	**0.47**	**SRM**	**4.08**	**0.46**	DFS6	3.90	0.55
SCD1	4.17	0.67	SEC1	4.04	0.66	DFS7	3.97	0.61

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SCD2	3.88	0.67	SEC2	4.11	0.64	DFS8	4.04	0.66
SCD	**4.02**	**0.57**	SEC3	4.20	0.67	DFS9	4.09	0.77
SMR1	3.95	0.62	SEC4	3.97	0.59	DFS10	4.19	0.69
SMR2	4.13	0.70	**SEC**	**4.08**	**0.49**	**DFS**	**4.09**	**0.52**
SMR	**4.04**	**0.58**	**SUA**	**4.06**	**0.46**			

Second: Hypothesis Testing

Table (6) shows a strong correlation between SUA and digital financial services of (0.879), as the strength of the correlation between the dimensions of SUA and digital financial services ranged between (0.657) for the dimension of managing the legal and regulatory environment (0.849) The dimension of risk factors (ESG) into the risk of credit, and from here the validity of the first hypothesis can be accepted with all its sub-hypotheses, and this highlights the interest of Iraqi commercial banks in the importance of improving the relationship between SUA and digital financial services.

Table (6) correlation matrix

	SFA (1)	SCD (2)	SMR (3)	SRM (4)	SEC (5)	SUA (6)	DFS (7)
1	1						
2	.787**	1					
3	.690**	.647**	1				
4	.840**	.776**	.678**	1			
5	.787**	.727**	.699**	.759**	1		
6	.917**	.889**	.846**	.904**	.890**	1	
7	.820**	.769**	.657**	.835**	.849**	.879**	1
****. Correlation is significant at the 0.01 level (2-tailed).**						**N=106**	

Hypothesis Two:

The results of Table 6 show that the more interest of banks in SUA by (0.905), the more this leads to improving their capabilities to process digital financial services by the same amount and with a standard error rate of (0.053) and by proving the value of (T) calculated by (17.076) and by comparing the calculated value of (F) which amounted to (354.498), which showed the significance of the regression model, and this means the more commercial banks realize their need for SUA and introduce it into their internal operations, the more they contribute to the processing of digital financial services. SUA plays a role in helping financial firms identify and assess the environmental and social risks associated with their digital financial services. This analysis can help identify future opportunities and challenges and develop strategies to effectively manage and reduce risks. The results of the responses of the study sample showed that SUA explains (0.773) of the squared variance in digital financial services in digital financial services, and this proves that SUA helps in improving digital financial services in commercial banks.

Table (6) final results of the impact of Sustainability Accounting in digital financial services

P	F	(R^2)	T	S.E.	Estimate	Path		
0.001	**354,498**	**0,773**	**17,076**	**0,053**	**0,905**	**Digital Financial Services**	**---<**	**Sustainability Accounting**

Figure (2) also illustrates the impact of sustainability accounting in digital financial services, which means that sustainability accounting positively affects digital financial services by enhancing transparency, developing sustainable financial products, assessing and managing risks, attracting sustainable investments, and promoting innovation and continuous improvement. Sustainability accounting also encourages digital financial companies to innovate and continuously improve. By understanding the impact of their business on sustainability, financial firms can identify areas that can be improved and developed more intensively. This could lead to the development of new technologies, such as blockchain technology and artificial intelligence, that can improve efficiency and offer more sustainable digital financial solutions.

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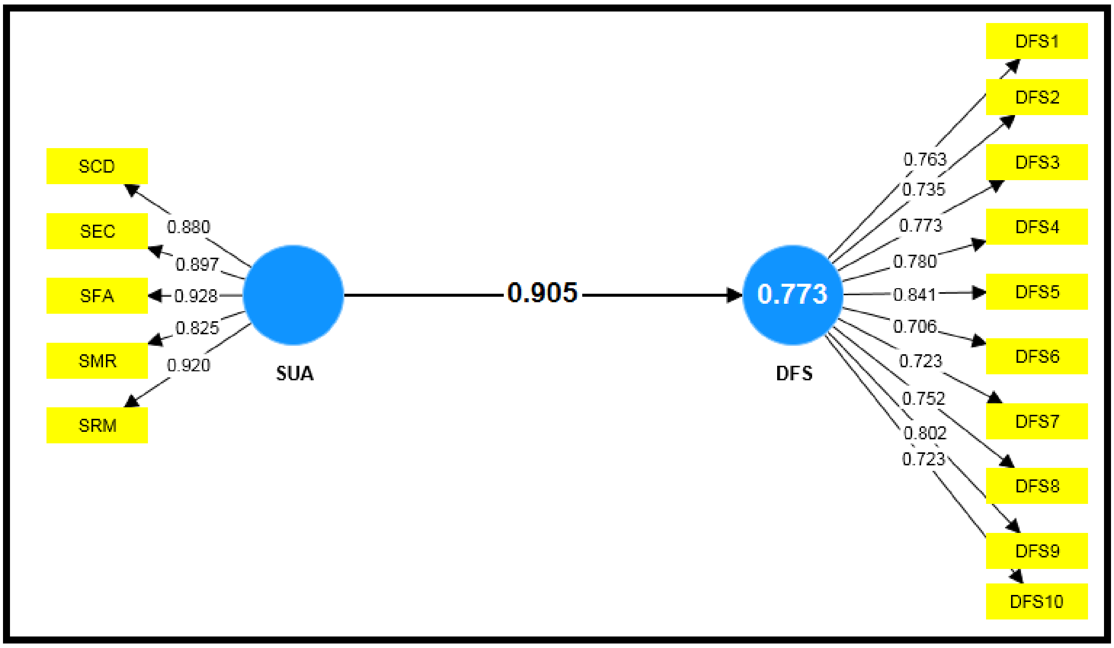

Figure (2) the impact of Sustainability Accounting in digital financial services

The implementation of sustainability accounting standards can help enhance the transparency of digital financial services. When clients have accurate and comprehensive information about the impact of financial companies' activities on the environment and society, they can make sustainable financial decisions and see if the financial services they use align with their values and goals. These products may include green loans for environmental projects, sustainable investments, and financial solutions that promote financial inclusion and support sustainable development.

Fourth Theme: Conclusions and Recommendations

First: Conclusions

The results of the study indicated in general the existence of a role for sustainability accounting in digital financial services for banks through the existence of a statistically significant correlation and impact between sustainability accounting (Absorptive capacity and financial inclusion, data security and customer privacy, managing the legal and regulatory environment, managing systemic risks, integrating risk factors (ESG) into credit risk analysis) digital financial services, and this contributed to clarifying how sustainability practices affect the development and delivery of digital financial services and enhance the social responsibility of banks. Reduce the environmental impact of its financial activities, enhancing confidence among consumers and investors. This can be a catalyst for innovation in the development of sustainable digital financial services. Thus, studying this relationship helps to identify the links and mutual influences between sustainability accounting and digital financial services, and enhances understanding of the role of banks in achieving sustainable development and financial innovation. The results also showed that sustainability accounting is concerned with assessing and estimating the impact of financial and economic activities on the environment and society. Adopting digital financial services can contribute to achieving sustainable goals, by reducing paper consumption and carbon emissions and promoting environmental awareness.

The study of the relationship between sustainability accounting and digital financial services reveals how sustainability practices affect the evolution of digital financial services and how to enhance the social responsibility of banks. It is noted that commercial banks focus on innovation and competitiveness by focusing on digital financial services as they represent an essential part of banks' strategy to innovate and improve the user experience. Sustainability accounting may be a catalyst for the development and delivery of sustainable and innovative digital financial services. Studying the relationship between them can help identify the links between sustainability practices and innovation in digital financial services, and their impact on competitiveness and banks' position in the market. As well as gaining the trust of consumers and investors through the growing interest in sustainability in the business sector reflects the trend of consumers And investors towards supporting companies

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and financial institutions that rely on environmental and social factors in their activities. Likewise, sustainability accounting can increase the confidence of customers and investors in banks and their attitudes towards using digital financial services.

Second: Recommendations

Based on the results of the study, a set of recommendations were proposed that can benefit the surveyed commercial banks, as follows:

1. The need to develop training and awareness programs for bank employees, with the aim of developing the necessary skills to assess and analyze the social and environmental impact of digital financial services and raise awareness of sustainability accounting and its impact on digital financial services

2. Banks should be transparent in presenting information on sustainability practices and their impact on digital financial services by providing periodic and transparent reports on the bank's social and environmental performance.

3. Sustainability accounting should be an essential part of banks' strategy and operational decisions and the need to define environmental and social objectives and standards that they must follow in the development and delivery of digital financial services. We need strong corporate standards that are enforced and taught to accountants to be able to achieve sustainability for future generations.

4. The need to integrate sustainability accounting into digital financial services to enhance the social and environmental responsibility of the banking sector to meet customer expectations Increasing sustainability and transparency, by developing innovative technologies and solutions that integrate the concepts of sustainability In providing and designing digital financial services,, such as providing sustainable investment options and enabling customers to monitor and analyze the environmental and social impact.

SOURCES

1. Abdel Maqsoud, S. (2022). The impact of adopting sustainability accounting on improving the quality of accounting profits (an applied study on companies listed on the Egyptian stock market). *Journal of Accounting and Auditing of the Union of Arab Universities*, 11(3), 1-32.
2. Abdel Rayat, A. & Khalawi, s. (2020). The role of sustainability accounting and its standards in improving the information content of the accounting system outputs in health units. *Al Kut Journal of Economics and Administrative Sciences*, *12*(37), 41-83.
3. Al-Awwad, A. M. A. W. & Al-Ibrahimi, H. A. (2021). Employing sustainability accounting standards "FNO101 standard in commercial banks" to enhance investor confidence. *Namaa Journal of Economics and Trade*, 5(1), 1-32.
4. Al-Awwad, A. M. A. W., & Al-Ibrahimi, H. A. K. (2021). Employing Sustainability Accounting Standards FNO101 in Commercial Banks to Enhance Investor Confidence. Namaa Journal of Economics and Trade, 5(01).
5. Al-Duraie, A. W. A. & Al-Manna, O. M. F. (2022). Sustainability accounting reports and their role in achieving transparency in financial performance in Iraqi banks. *Al Kut Journal of Economics and Administrative Sciences*, *14*(45).
6. Amneh, Kharafi,2022, The impact of digital financial service on customer satisfaction during the Covid-19 pandemic: a field study, Master's thesis, Kasdi Merbah Ouargla University, Faculty of Economic, Commercial and Management Sciences.
7. Angelova, D., Bosello, F., Bigano, A., & Giove, S. (2021). Sovereign rating methodologies, ESG and climate change risk: an overview. ESG and climate change risk: an overview.
8. Arora, R., Ujakpa, M. M., Matias, M. T., Domingos, A., Adorsu, N., & Mutalya, A. N. (2021). An Exploratory Study of Financial Inclusion of Rural Communities through Digital Financial Services: Case Study of Mpungu Constituency, Kavango West Region, Namibia. International Journal of Business Research and Management (IJBRM), 12(S1), 14-23.
9. Berksoy, B. (2018)*. Comparative evaluation of sustainability and integrated reporting methodology on a sectoral basis (Master's thesis, Işık University).*
10. Buallay, A. (2020). Sustainability reporting and firm's performance: Comparative study between manufacturing and banking sectors. *International Journal of Productivity and Performance Management*, *69*(3), 431-445.

11. Daboush, A. & Berry, N. (2022).The Role of Digital Financial Services in Enhancing Financial Inclusion, Al-Manhal Economic Journal, 6 (1), 143-158.
12. Diener, A., & Špacek, M. (2019). The Awareness of Digitisation in Strategic Sustainability Reporting in Banking. In *the 7th International Conference of Innovation Management, Entrepreneurship and Sustainability, Prague, Czech Republic* (pp. 137-150).
13. Doğu, F. U., & Aras, L. (2019). Measuring social sustainability with the developed MCSA model: Güzelyurt case. *Sustainability*, 11(9), 2503. https://doi.org/10.3390/su11092503.
14. Eskens, S. (2020). The personal information sphere: An integral approach to privacy and related information and communication rights. Journal of the Association for Information Science and Technology, 71(9), 1116-1128.
15. Fernandes , C., Borges, M. R., & Caiado, J. (2021). The contribution of digital financial services to financial inclusion in Mozambique: an ARDL model approach. Applied Economics, 53(3), 400-409.
16. Hussein, H. M. M. M. (2023). The Role of Digital Financial Services in Economic Empowerment of Women Breadwinner (A Field Study on a Sample of Women Breadwinner in Egyptian Society). *Journal of Scientific Research in Arts*, *24*(2), 195-242.
17. Hyršlová, J., Becková, H., & Kubáňková, M. (2015). Sustainability accounting: brief history and perspectives. In *The 9th International Days of Statistics and Economics: Conference Proceedings*. Melandrium.
18. Isa-Olatinwo, A., Uwaleke, U., & Ibrahim, U. A. (2022). Impact of digital financial services on financial performance of commercial banks in Nigeria. International Journal of Economics and Management Systems, 7.
19. Joyce, A.& Paquin, R.2016. The triple layered business model canvas: A tool to design more sustainable business models. J. Clean. Prod, 135, 1474–1486.
20. kharfi, A. (2022). The impact of digital financial service on customer satisfaction during the Covid-19 pandemic (Field study of a sample of customers of the Bank of Algeria abroad - Touggourt branch), College of Economics, Master’s thesis submitted to Commercial Sciences and Management Sciences, Kasdi Merbah University, Ouargla, Algeria.
21. Klymenko, O., Lillebrygfjeld Halse, L., & Jæger, B. (2021). The enabling role of digital technologies in sustainability accounting: Findings from Norwegian manufacturing companies. *Systems*, *9*(2), 33.
22. Liu, X., Schraven, D., de Bruijne, M., de Jong, M., & Hertogh, M. (2019). Navigating transitions for sustainable infrastructures—The case of a new high-speed railway station in jingmen, China. *Sustainability*, *11*(15), 4197.
23. Majouri, N. & Nasr A. A. (2022), Digital financial services as a mechanism to promote financial inclusion: a case study, Master's thesis, Shahid Hamma Lakhdar University, Faculty of Economic, Commercial and Management Sciences.
24. Monciardini, D., Bernaz, N., & Andhov, A. (2021). The organizational dynamics of compliance with the UK Modern Slavery Act in the food and tobacco sector. Business & Society, 60(2), 288-340.
25. Ngau, C. M. (2020). Digital Financial Services Acceptance Among Low-Income Households in Miri, Sarawak: A Perspective from the Cultural Dimensions Theory (Doctoral dissertation, Curtin University).
26. Palit, S. (2018). Emerging Significance of Sustainability Accounting and Reporting In India-A Conceptual Study. *International Journal of Accounting and Financial Management Research*, *8*(4), 1-6.
27. Popovich, N. D., Rajagopal, D., Tasar, E., & Phadke, A. (2021). Economic, environmental and grid-resilience benefits of converting diesel trains to battery-electric. Nature Energy, 6(11), 1017-1025.
28. Qwaider, B. 2020, The Role of Digital Financial Services in Solving the Liquidity Crisis: A Case Study, Master Thesis, Mohamed Khider University, Faculty of Economic, Commercial and Management Sciences.
29. Sankar, J. G., David, A., & Valan, P. (2023). Examining User Understanding and Perceptions of E-Commerce Data Privacy, Security, and Protection. In Confronting Security and Privacy Challenges in Digital Marketing (pp. 159-185). IGI Global.
30. Shahzad, M., Qu, Y., Zafar, A. U., & Appolloni, A. (2021). Does the interaction between the knowledge management process and sustainable development practices boost corporate green innovation?. Business Strategy and the Environment, 30(8), 4206-4222.

31. Singhal, N. S., & Dev, A. (2016). Global Reporting Initiative, Sustainability Reporting. In *Proceedings of the 6th International Conference on Operation and Technology of Offshore Support Vessels*.
32. Sisaye, S. (2021). The influence of non-governmental organizations (NGOs) on the development of voluntary sustainability accounting reporting rules. Journal of Business and Socio-economic Development, 1(1), 5-23.
33. Tommasetti, A., Mussari, R., Maione, G., & Sorrentino, D. (2020). Sustainability accounting and reporting in the public sector: towards public value co-creation?. *Sustainability*, *12*(5), 1909.
34. Velashani, M. A. B., Sallal, F. F. J., & Salehi, M. (2022). COVID-19 Pandemic and Fraudulent Financial Reporting Motives in Emerging Markets: A Comparative Study. *International Journal of Business & Development Studies*, *14*(1).
35. Vintilă, G., Gherghina, Ş. C., & Toader, D. A. (2019). Exploring the determinants of financial structure in the technology industry: Panel data evidence from the New York Stock Exchange listed companies. *Journal of Risk and Financial Management*, *12*(4), 163.