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Analysis of the impact of digital governance on the quality of financial disclosure in Egyptian banks to achieve sustainable development goals

Sharkawy Abdelzaher Sharkawy[1]. Hassan Mounir El-Sady[2].A A Soliman[3]. Seif Elislam Mahmoud[4]

[1] sharqawe.abdELZAHER@env.aru.edu.eg , Egypt. [2] Professor- Cairo University, Egypt. [3]Department of Mathematics- Faculty of Science-Arish University- Arish, Egypt. [4] Assistant Professor- Cairo University- Seif_elislam_elabrk@foc.cuedu.eg , Egypt

Corresponding author: Sharkawy Abdelzaher Sharkawy **Ph.D.**

Arish University, Egypt

Email: sharqawe.abdELZAHER@env.aru.edu.eg

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Abstract: Background: Digital governance is one of the modern tools that plays an increasingly important role in enhancing transparency and financial disclosure in the banking sector. This research aims to analyze the impact of digital governance technologies on the quality of financial disclosure in Egyptian banks. It will study how these technologies are applied to improve the level of disclosure, enhance transparency, and ensure compliance with international financial standards. Through a case study of some Egyptian banks, the research will address the challenges and opportunities faced by banks in adopting these technologies, as well as their impact on achieving sustainable development in the banking sector. The research also aims to provide recommendations to improve the use of digital governance technologies in enhancing transparency and financial disclosure

Keywords: Digital governance, financial disclosure, Egyptian banking sector

Introduction

Interest in the subject of disclosure and transparency is increasing as one of the most important mechanisms and solutions that different parties resort to to achieve their interests, as the capital markets and their bodies see disclosure and transparency as two main pillars of enhancing the efficiency of the markets, and they are used to attract investors and impart confidence among dealers If the concerned authorities monitor the reports and financial statements issued by the companies whose shares are traded in the financial market, these authorities must intervene to remove fraud and prevent giving incorrect information to shareholders There is no doubt that any Deficiencies in disclosure and transparency requirements make the data and information contained in the financial statements misleading, which reflects negatively on the decisions of shareholders and investors interested in this information, and may lead in many cases to the bankruptcy of companies and the collapse of financial markets (Fateh and Bashir, 2006).

The use of information technology has affected the financial and accounting systems, the disclosure process and transparency in business organizations, which resulted in the mandatory entry of information technology in the performance of disclosure processes, and concepts related to digital governance have emerged that guide, guide and regulate ways of dealing with financial and accounting systems when demonstrating business results in the information technology environment (Deloitte, 2015).

Therefore, companies that want to improve the quality of their profits must have societal acceptance by disclosing sustainable development practices because of their positive effects on narrowing the information gap between management and investors, which in turn leads to attracting more investments, lowering the cost of capital and increasing the market value of the company's shares (Akl, 2010, Ibrahim 2014).

The growing interest in information technology and the spread of digital services have led to the development of disclosure methods and transparency in the presentation of corporate data and financial statements, more efficiently than the usual methods of traditional disclosure.

The problem with the study was that companies face many challenges, and the reason for this is the widespread spread of information technology and the increasing reliance on it in providing banking services on the digital aspects?

Here, the problem with this study is that this technological challenge needs to be met with digital governance, as an effective tool in order to ensure that targeted digital governance will raise performance to better levels than the current level. Therefore, this study will try to answer the following questions:

1. The first main question: Is there an impact of digital governance in enhancing transparency and disclosure in financial statements to achieve sustainable development in the Egyptian banking sector?

A number of sub-questions arise from this question, as follows:

1. The first sub-question: Is there an impact of the frameworks and laws that govern the design and launch of digital services in enhancing transparency and disclosure in the presentation of financial reports to achieve sustainable development in the Egyptian banking sector?
2. The second sub-question: Is there an impact of the commitment of departments and sections to the general directive plan issued by digital governance in enhancing transparency and disclosure in the presentation of financial statements to achieve sustainable development in the Egyptian banking sector?

The main objective of this study is to identify the impact of digital governance in enhancing transparency and disclosure in financial statements to achieve sustainable development in the Egyptian banking sector, by achieving the following sub-objectives:

1- Determining the impact of the frameworks and laws governing the design and launch of digital services in enhancing transparency and disclosure in the presentation of financial statements to achieve sustainable development in the Egyptian banking sector.

2- Determining the impact of the commitment of departments and sections to the general directive plan issued by digital governance in enhancing transparency and disclosure in the presentation of financial statements to achieve sustainable development in the Egyptian banking sector.

Research population and sample:

First: Research Community:

The research community in this study represents all banks operating in the Egyptian banking sector, which are subject to the supervision and control of the Central Bank of Egypt. This includes commercial banks, specialized banks, and branches of foreign banks.

Second: Research Sample:

In order for the results of the research to be closer to accuracy with a greater possibility of extrapolation and generalization, a study community has been selected to include financial managers in the Egyptian banks registered in the stock market, which are (39) banks, the researcher has developed a set of conditions that must be met in the bank to be selected within the research community as follows:

1. The bank must be listed on the stock market in Egypt.
2. The bank must disclose the financial statements for the year 2023.
3. The bank must disclose the number of branches and other information.

After applying the above conditions to Egyptian banks, (37) banks were excluded, so that the number of remaining banks is two banks, namely (National Bank and Egypt Bank, Commercial International Bank, National Qatar Bank, Egyptian Gulf Bank), and the researcher calculated the number of financial managers in there are many banks that meet these conditions through personal visits and interviewed a group of them in the period (from 7 to 11) of October 2023, As well as through telephone contact and official websites, the number of financial managers in these two banks with their branches throughout the country (417) financial managers and this number represents the vocabulary of the research community, and the researcher relied on the law of the statistical sample to determine the size of the research sample to be withdrawn in the research community, which is (384) single, and the researcher distributed (400) questionnaire form to financial managers working in the two banks, and the forms were distributed through personal interviews and (390) questionnaire form was recovered valid and ready for statistical analysis With a response rate of (97%), which is acceptable for scientific research purposes. Table (1) shows the number of forms distributed and received from the members of the research sample.

Table (1): Number of questionnaire forms distributed and received from the members of the research sample

Total	statement
400	***Number of forms distributed***
390	***Number of forms received valid for analysis***
97%	***Percentage of valid forms for analysis***

Sample size:

Determining the appropriate sample size depends on several factors, including the size of the research population, the level of accuracy required, and the desired level of statistical confidence. Statistical methods can be used to determine the appropriate sample size that balances accuracy and efficiency.

Data sources:

Data needed for the study will be collected from multiple sources, including:

- Banks' annual financial statements: which provide information about financial performance, transparency and disclosure.
- Annual Reports of Banks: which include information on digital governance practices and sustainable development efforts.
- Banks' websites: which provide information about the digital services provided and digital transformation initiatives.
- Central Bank of Egypt: which provides statistical data and regulatory information about the banking sector.
- Literature and Previous Studies: which provide a theoretical framework for the study and help formulate hypotheses and interpret the results.

Study Tools:

A range of statistical and analytical tools will be used to analyze the data collected, including:

- Descriptive methods: to calculate averages, standard deviations and percentages to describe the characteristics of the sample.
- Regression Analysis: To measure the relationship between digital governance and transparency and disclosure in financial statements.
- Analysis of variance: Compare the averages of different groups based on certain variables.
- Content Analysis: To analyze banks' annual reports and extract qualitative information on digital governance practices and sustainable development efforts.

2- Measuring variables:

The research included two main variables, namely digital banking governance as an independent variable, and financial performance as a dependent variable, and the first independent variable of digital banking governance and its dimensions were measured through the questionnaire form method that was distributed to the sample and the research community (represented by financial managers in the two banks) in agreement with studies (Salle, 2014), (Abu musa, 2019), (Zyoud et al., 2019), (Al hila, et al., 2019).

While the second dependent variable of financial performance and its dimensions was measured through the same questionnaire that was distributed to the sample and the research community, in agreement with the study (Issa, 2018), (Ali and Al-Jawhar, 2017).

3- Testing the validity and stability of the study tool:

The researcher conducted a test of honesty and reliability for the questionnaire form, as follows:

First: Authenticity of the questionnaire:

The researcher has verified the validity of the resolution by calculating the self-honesty by finding the square root of the stability coefficient Cronbach's Alpha Coefficient. As shown in Table 2.

Second: Stability of the resolution:

The stability of the questionnaire is intended to give the scale the same results if it is used more than once under similar conditions, and the researcher has verified the stability of the questionnaire statements through the Cronbach alpha coefficient, as its value ranges between (zero – 1) and that the statistically acceptable value of the alpha coefficient (60%) or more to be a good scale and the researcher calculated the value of the alpha coefficient for all statements, as shown in the following table (2):

Table 2: Cronbach alpha coefficient value

Honesty coefficient	**Cronbach's alpha coefficient**	**Number of ferries**
0,969	0.940	45

Source: Table prepared by the researcher based on the results of statistical analysis.

Table (2) shows that the value of the Cronbach alpha coefficient is 0.940 and this value is acceptable in a way that reflects the availability of reliability, confidence in research variables, and confirms its validity for the following stages of analysis.

The findings indicate that the majority agrees that digital banking governance in Egypt is effective in many aspects. The data showed that a large percentage of respondents believe that digital governance contributes to the development of financial policy architecture (75% fully agree or agree), the fight against corruption (80% fully agree or agree), and ensuring integrity (80% fully agree or agree). However, there are some neutrality and skepticism regarding the periodic modernization of the system and the effects of privatization and globalization. Items have lower percentages than full approval.

The results of this theme show that the majority of respondents believe that digital governance contributes to improving the financial performance of banks. Data indicates that financial control and clarity of responsibility are the most important elements of digital governance (80% fully agree or agree with both control and responsibility). The results also show that improvement in financial efficiency and internal audit play a major role in measuring financial performance (75% fully agree or agree with both internal audit and financial efficiency)

The results of this pillar show that there is a strong consensus that digital governance contributes to enhancing transparency and disclosure in banking operations, which contributes to achieving sustainable development in the Egyptian banking sector. The data showed that a large percentage of respondents fully agree that electronic disclosure facilitates access to financial information (80% fully agree or agree) and that digital governance increases the efficiency of managing banking operations (85% fully agree or agree)

The use of technology to reduce human error and enhance transparency are key aspects supported (80% fully agree or agree with each). However, there is some neutrality regarding the ability of AI to improve the quality of financial data analysis and decision-making, suggesting some reservations or lack of awareness of these technologies.

Analytics indicate that digital banking governance plays a vital role in improving financial performance, enhancing transparency, and ensuring integrity in the Egyptian banking sector. However, there is a need to promote awareness of advanced technology such as artificial intelligence and its potential impact on improving financial and banking efficiency. These results are positive and indicate a general acceptance of the importance of digital governance as a tool for growth and sustainability in this vital sector.

From the previous results, it is clear that the validity of the first sub-hypothesis is not proven , and accordingly, the null hypothesis is rejected and the alternative hypothesis is accepted, as it can be said that the principle of ensuring an effective framework for digital banking governance has a statistically significant impact on improving the financial performance of the two banks.

The relationship between the independent variable and the dependent variable can be formulated in the following equation, which is called the equation of the line of regression*Y *over* 1 X*:

Y = α + b X1 + e

Whereas:

X1: The principle of ensuring an effective digital banking governance framework

Y: Improving the financial performance of the two banks

b: regression coefficient, which represents the slope of the straight line, and in this equation it takes a positive sign, which means that the relationship between the two variables is positive (positive effect of the independent variable on the dependent variable)

α: The constant of the regression equation

e: random error, which expresses changes that occur in the dependent variable Y (improving the financial performance of the two banks) that are not due to the independent variable X1 (the principle of ensuring an effective banking governance framework)

The second sub-hypothesis, which states, "There is no statistically significant effect at the level of morality of the principle of protecting the rights of shareholders and investors on improving the financial performance of the two banks" (A≤ 0.05).

Results:

1. The effectiveness of digital governance: The data showed that the vast majority of respondents believe that digital banking governance in Egypt is effective in many key aspects. It was pointed out that this governance contributes to the development of financial policies, the fight against corruption, and ensuring integrity among employees in the banking sector.
2. Improving financial performance: The results showed that digital governance plays an important role in improving the financial efficiency of Egyptian banks. Financial control, clarity of responsibility, and internal audit management have been identified as key elements in enhancing financial performance.
3. Enhancing transparency and disclosure: The results showed that digital governance contributes significantly to enhancing transparency in banking operations. Electronic disclosure and the use of modern technology, such as artificial intelligence, have been important elements in improving the credibility of financial information and reducing human errors.

4. Advanced Technology Challenges: Despite the positive trend towards the use of technology in digital governance, there are some neutrality and reservations regarding the impact of artificial intelligence and massive data analysis on improving efficiency and analyzing financial data.

Recommendations:

1- The need for senior management in banks to pay attention to applying the principles of digital banking governance and making it a tool for follow-up and control.

2- The need for the senior management of banks to pay attention to their investment funds and to appoint distinguished competencies in the stock exchange investments to protect the rights of shareholders in investment fund witnesses.

3- Trying to unify banking procedures in application of the principles of fair and equal treatment among all bank customers.

4- The need to pay attention to all stakeholders, shareholders and investors alike, without discrimination.

5- The need to pay attention to banks' bulletins on credit and banking developments by strictly applying the principles of disclosure and transparency.

6- Adding the responsibilities of full digital transformation and transactions through modern social media among the main responsibilities of the boards of directors of banks.

7- **Promoting the modernization of digital governance: It** is recommended to develop and update digital governance systems periodically to keep pace with technological developments and economic changes, in order to ensure the effectiveness and sustainability of governance in the face of future challenges.

8- **Raising awareness of the importance of advanced technology:** Awareness should be promoted among banking professionals of the importance of artificial intelligence and massive data analysis in improving the quality of financial data analysis and decision-making, through specialized training programs and workshops.

9- **Strengthening financial control and responsibility:** It is recommended to strengthen financial control mechanisms within banks and clarify the responsibilities of different departments further, which will contribute to achieving more efficient and stable financial performance.

10- **Enhancing transparency and financial disclosure:** Banks should continue to promote the use of electronic disclosure and provide financial information easily to investors, which will increase confidence in the banking sector and promote its sustainable growth.

11- **Adopt advanced data analytics methodologies: It** is recommended to adopt quantitative and bulk data analysis methodologies to reveal future economic and financial trends, which helps banks make strategic decisions based on accurate information.

Conclusion:

The research emphasizes the critical importance of digital governance in the development of the Egyptian banking sector, and points to the need to continue to improve and modernize these systems to ensure sustainability and growth. It also highlights the importance of advanced technology in achieving transparency and financial efficiency, which requires more attention and development in this field.

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