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## **The Role of Digital Governance in Enhancing Regulatory Performance in Iraqi Banks: An Applied Study in the Banking Sector in Baghdad Governorate**

By

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### **ABSTRACT:**

The study aims to study the role that digital governance plays in improving the performance of banking supervision, specifically Iraqi banks, in addition to identifying the supervisory work that banks perform on their business mechanism in the Iraqi environment.

The research sample was represented by the Bank of Baghdad - Al-Rafidain Bank - the Iraqi Middle East Investment Bank - where the number of questionnaires distributed to banks reached (300) questionnaires, and we obtained (124) questionnaires only valid for statistical analysis, and thus, the response rate is (41%) of respondents. Total questionnaires sent to them via their email.

The study also recommends encouraging work with the principles of digital bank governance as the most important components of the immunity system in banks in terms of fighting corruption, achieving financial health and safety, and thus strengthening the principles of oversight.

### **KEYWORDS:**

**Digital governance - banking governance - banking supervision.**



## Introduction:

Digital governance is considered a crucial mechanism in banking supervision and improving regulatory performance. The world is witnessing a development and progress towards a virtual world governed by strong communication networks, sophisticated software, and computers in various fields and domains (Sayid, 2019), including management through the utilization of information and communication technology in administrative processes, known as e-governance. However, this hasn't exempted it from the spread of various risks within the banking administration entity. Therefore, the direction has shifted towards implementing what is known as digital governance as the latest mechanism to improve regulatory performance, which has become a global trend that all countries seek to benefit from in order to overcome the negatives of e-government by providing its requirements for optimal achievement of its objectives (Al-Khamesi, 2021).

In order to achieve accuracy and credibility in banking operations performance, digital governance mechanisms are one of the most important methods that support improving regulatory performance in banks, ensuring sound and stable bank management while avoiding many other negative effects. One of the important and decisive basic requirements to ensure quality is the digital governance of banks (Al-Dweikat, 2018).

The study holds importance in that the topic of digital governance and banking supervision in banks is considered vital and crucial in the economic environment due to its significant impact on meeting the needs of financial statement users and stakeholders dealing with these banks (Al-Salami, 2021). Moreover, it aims to identify the actual performance status of audit committees as part of governance, considering deficiencies in Iraqi legislation and laws (Al-Sisi, 2018) and professional guidelines recommending the formation of such committees, specifying criteria for selecting members, their authorities, and tasks, especially by the Central Bank of Iraq and the World Bank as they are responsible for supervising commercial banks operating in Iraq. Therefore, this study contributes to elucidating the role of digital governance in enhancing regulatory performance in Iraqi banks. Hence, this study sheds light on digital governance and its role in managing banking risks and improving regulatory performance in Iraqi banks.

## Study Problem

Digital governance is an innovative creation that facilitates and contributes to easing technological transactions in commercial private banks in Iraq. It is a crucial aspect of development and economic progress, as the public sector alone is no longer capable of undertaking this significant task. Banks constitute the infrastructure for any investment activity, whether domestic or foreign, while public banks in Iraq, due to their legislative, legal, and administrative legacy, are unable to keep pace with global developments in creating a suitable environment to attract investments to Iraq. Therefore, commercial banks play a vital role in attracting investment, and these banks must comply with the instructions and laws issued by the central bank to enhance regulatory work in these banks. Hence, there must be a specific mechanism in regulating these banks. As a result, the study problem is formulated with the following question: "Is there a correlation between the principles of digital governance and regulatory performance in banks?" This question branches into the following sub-questions:

- Is there a correlation between electronic transparency and regulatory performance in banks?
- Is there a correlation between electronic participation and regulatory performance in banks?
- Is there a correlation between accountability and regulatory performance in banks?

- Is there a correlation between responsibility and regulatory performance in banks?
  - Is there a correlation between equality and regulatory performance in banks?
- Importance of the Study:

The topic of digital governance and banking supervision in banks is crucial and vital in the economic environment due to its significant impact on meeting the needs of financial statement users and stakeholders dealing with these banks. Moreover, understanding the actual performance status of audit committees as part of governance is important, especially given deficiencies in Iraqi legislation, laws, and professional guidelines recommending the formation of such committees. This is particularly relevant for the Central Bank of Iraq and the World Bank, as they are responsible for supervising commercial banks operating in Iraq. Therefore, this study contributes to elucidating the role of digital governance in enhancing regulatory performance in Iraqi banks.

### Study Objectives

- The study aims to present conceptual frameworks of digital governance, including its definition, importance, objectives, and stakeholders involved in its implementation, along with its basic principles.
- It aims to provide conceptual frameworks of banking supervision, including its definition, importance, objectives, and its relationship with digital governance and improving regulatory performance in Iraqi banks.
- The study intends to present a detailed overview of banking performance and its relation to digital governance in Iraqi banks, emphasizing the importance of digital governance in enhancing regulatory work in Iraqi banks.
- It aims to introduce conceptual insights into banking performance, including its definition, importance, objectives, indicators, and associated relationships.
- The study seeks to identify the regulatory work carried out by banks in their operations within the Iraqi environment, including the opinions of external auditors on the banking sectors sampled in the study (clean report, qualified report, adverse report, disclaimer of opinion).

Study Hypotheses: In order to achieve the study objectives and address its problem, the following main hypothesis was adopted: There is a statistically significant relationship between the principles of digital governance and regulatory performance in banks at a significance level of 0.05. This main hypothesis branches into the following sub-hypotheses:

- First Hypothesis: There is a significant relationship between electronic transparency and regulatory performance in banks at a significance level of 0.05.
- Second Hypothesis: There is a significant relationship between electronic participation and regulatory performance in banks at a significance level of 0.05.
- Third Hypothesis: There is a significant relationship between accountability and regulatory performance in banks at a significance level of 0.05.
- Fourth Hypothesis: There is a significant relationship between responsibility and regulatory performance in banks at a significance level of 0.05.
- Fifth Hypothesis: There is a significant relationship between equality and regulatory performance in banks at a significance level of 0.05.

### Population and Sample

The field study was conducted on a sample of banks in Baghdad Governorate. These banks were selected purposively, and they include:

- Bank of Baghdad: The Bank of Baghdad is the first licensed bank in Iraq, commencing banking operations in 1992, prioritizing the needs of the national economy. It was established after amending Article 5 of the Iraqi Central Bank Law.
- Rafidain Bank: Rafidain Bank was established by Law No. 33 of 1941 and commenced operations on May 19, 1941, with a paid-up capital of 50,000 dinars. It has gone through various stages in its historical journey, including mergers, becoming the sole commercial bank in Iraq.
- Middle East Iraq Investment Bank: Established in 1993, the Middle East Iraq Investment Bank received its incorporation certificate from the Ministry of Commerce/Companies Registrar Department and banking approval from the Central Bank of Iraq. It started banking operations on May 8, 1994, with a capital of 400 million dinars. Currently, its registered and paid-up capital stands at 250 billion dinars, significantly higher than its initial capital.

### Validity and Reliability Testing for the Survey Study

In order to ensure the validity of the questionnaire, and prior to its distribution to the participant groups in the survey study, we consulted three experts specializing in the College of Economics and Business Administration at the Islamic University and Al-Janah University. Additionally, we conducted a Cronbach's alpha test for this survey study, and the results were as follows: Observing through Table 1, we note that the result related to the questionnaire directed towards administrative employees was as follows:

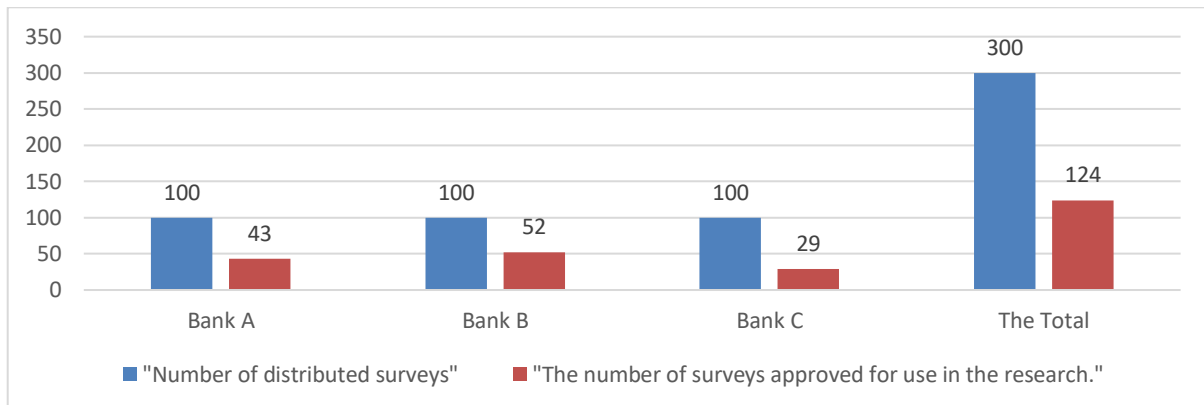
**Table 1: Cronbach's Alpha Coefficient Result for the Survey Study Regarding Employees**

Cronbach's Alpha	Numbers
0.74	40

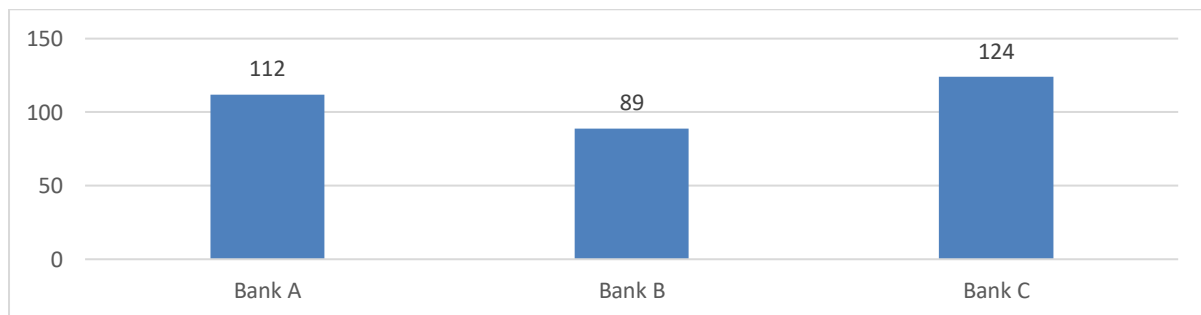
The previous table indicates that the number of items in the questionnaire for this study is 40 items, which were administered to the participants through several interviews to achieve the desired goal. The Cronbach's alpha coefficient was found to be 0.74, indicating the reliability and stability of the questionnaire items. After ensuring the face validity of the questionnaire and incorporating the feedback from business management specialists, as well as the comments obtained from the study group.

### Distribution of the Research Tool (Questionnaire)

The questionnaire was distributed according to Chart 1 as follows:



**Chart 1:** Distribution of the Questionnaire to a Sample of Banks in Baghdad Governorate



**"Chart 2: Number of Employees in Each Bank"**

Through the above chart, the number of questionnaires distributed to the banks amounted to 300 questionnaires. However, we received only 124 valid questionnaires suitable for statistical analysis. This was due to incomplete responses to the remaining questionnaire questions, non-response, or random answering. Thus, the response rate was 41% of the total questionnaires sent to them via their email. It is worth noting that the questionnaire axes were formulated with clear expressions and vocabulary to cover all areas related to building competitive advantage.

It should be noted that the number of employees in each bank, as included in the sample in Karbala Governorate, according to the data published by the bank on its website, is as follows:

**Reliability (Cronbach's Alpha)**

**Table 2: Cronbach's Alpha Result Related to the Questionnaire**

N of Items	Cronbach's Alpha	The Axis
5	0.700	The First Axis: Electronic Transparency
5	0.712	The Second Axis: Electronic Participation
5	0.706	The Third Axis: Accountability
5	0.710	The Fourth Axis: Responsibility
5	0.705	The Fifth Axis: Equality
15	0.780	The Sixth Axis: The Role of Digital Governance in Regulatory Performance

**Construct Validity**

Construct validity is one of the measures of the validity of a tool to assess the extent to which the objectives intended by the questionnaire are achieved. It indicates the degree of correlation of each axis of the study with the overall degree of the questionnaire axes. The researcher conducted a Pearson correlation coefficient test to determine the degree of construct validity of the questionnaire.

**Table 3: Pearson Correlation Coefficients between Axes and the Questionnaire as a Whole**

The degree of correlation	Pearson Correlation	sig	The correlation of each axis with the questionnaire as a whole
Moderate positive	0.605	0.000	The First Axis: Electronic Transparency
Strong positive	0.885	0.000	The Second Axis: Electronic Participation
Strong positive	0.821	0.000	The Third Axis: Accountability
Strong positive	0.798	0.000	The Fourth Axis: Responsibility
Moderate positive	0.654	0.000	The Fifth Axis: Equality
Strong positive	0.882	0.000	The Sixth Axis: The Role of Digital Governance in Regulatory Performance

The results in the table above indicate that the correlation between the six axes and the overall degree of the axes ranges from moderate to strong positive. Specifically, the correlation between the first and second variables is strongly positive, indicating that the structural validity of the questionnaire is robust.

## Field Results

Descriptive statistics provide a summary of a specific dataset, representing either a complete or a sample representation of a population (Earl, R, 2009). Descriptive statistics include measures of central tendency and measures of variation (dispersion). Measures of central tendency include mean, median, and mode, while measures of variation include standard deviation, variance, minimum and maximum values, and skewness.

- Axis 1: Relationship Between Electronic Transparency and Improving Supervisory Level In this axis, we will study the relationship between electronic transparency and improving the supervisory level through employee performance.

**Table 4: Distribution of Axis 1 Statements by Frequencies and Percentages**

Phrase modifier	the total	Strongly Agree	OK	neutral	not agree	Strongly Disagree	Expressions of the first axis	#
84.2%	335	55	49	11	9	0	<b>Repetition</b> Municipalities implement applicable laws and regulations fully and accurately in order to enhance internal reviews.	1
	100%	44%	40%	9%	7%	0%	<b>The ratio</b>	
80.6%	335	43	43	14	18	4	<b>Repetition</b> The employee can claim his rights at any time because he is supported by fair systems and laws, and this enhances his self-confidence.	2
	100%	35%	35%	11%	14%	3%	<b>The ratio</b>	
86.4%	335	51	33	19	21	0%	<b>Repetition</b> Regulations and instructions are applied to all citizens without discrimination, which in turn enhances internal reviews.	3
	100%	41%	27%	15%	17%	0	<b>The ratio</b>	
	335	48	45	15	9	7	<b>Repetition</b> The integrity and moral values are ensured by the supervisory and executive authorities to carry out their duties objectively.	4
	100%	39%	36%	12%	7%	6%	<b>The ratio</b>	
88%	335	53	49	19	3	0	<b>Repetition</b> Jobs in the municipal sector are subject to the standard of efficiency, fairness, and justice, and not to a specific sectarian standard.	5
	100%	43%	40%	15%	2%	0%	<b>The ratio</b>	
84.3%	335	68	39	11	6	0	<b>Repetition</b> Employees are appointed to vacant administrative positions in the first and second categories according to the principle of the competent and appropriate person in the appropriate place.	6
	100%	55%	9%	9%	43%	0%	<b>The ratio</b>	
82%	2010	318	258	89	77	11	<b>Repetition</b>	The sum of the first axis
	100%	43%	35%	12%	2%	1.4%	<b>The ratio</b>	

The results presented in the tables above indicate the following:

- The outcome of the first axis is as follows: 43% strongly agree, 35% agree, 12% neutral, 2% disagree, and 1.4% strongly disagree, with an overall percentage of 82% for all axis questions.
- Statement number (5) ranked first, with an average score of 4.52 and a percentage of 88%. The statement is: "Banks transparently disclose the situations they face, causing their failure, inability to continue, or reducing profits, hindering economic growth."
- Statement number (2) ranked last, with an average score of 3.51 and a percentage of 80.6%. The statement is: "The bank discloses basic financial statements in detail with accompanying disclosures."

**Table 5: Mean, Standard Deviation, and Direction of Statements for Axis 1**

Answer score	standard deviation Std. Deviation	SMA Mean	Expressions of the first axis	#
OK Hardly	1.24	3.37	Municipalities implement applicable laws and regulations fully and accurately in order to enhance internal reviews.	1
OK	1.11	3.51	The employee can claim his rights at any time because he is supported by fair systems and laws, and this enhances his self-confidence.	2
OK	1.11	3.41	Regulations and instructions are applied to all citizens without discrimination, which in turn enhances internal reviews.	3
OK	1.12	3.42	The integrity and moral values are ensured by the supervisory and executive authorities to carry out their duties objectively.	4
Strongly Agree	1.15	4.52	Jobs in the municipal sector are subject to the standard of efficiency, fairness, and justice, and not to a specific sectarian standard.	5
Strongly Agree	1.02	4.5	Employees are appointed to vacant administrative positions in the first and second categories according to the principle of the competent and appropriate person in the appropriate place.	6
0.56	3.42	4.19	<b>The sum of the first axis</b>	

In the previous table, it is evident that the overall average for the mean score of this axis is (3.42), indicating that the adherence to organizational security policy is moderate. It's worth noting that an employee's sense of job security certainly has a positive impact on their performance due to its moral significance to them.

- Axis Two: The Relationship between Electronic Participation and Improving the Level of Supervisory Performance. This axis aims to study the relationship between electronic



participation and improving the level of supervisory performance in the banks sampled in Baghdad. Table 6 below illustrates the results of the second axis as follows:

**Table 6: Distribution of Statements for Axis Two by Frequencies and Percentages.**

Phrase modifier	the total	Strongly Agree	OK	neutral	not agree	Strongly Disagree	The phrases of the second axis		#
83.2%	335	47	33	14	28	2	<b>Repetition</b>	The laws, regulations, instructions, procedures, work methods and responsibilities in the municipal sector are clear.	1
	100%	38%	27%	11%	23%	1.6%	<b>The ratio</b>		
82.6%	335	64	31	9	12	8	<b>Repetition</b>	Administrative decisions and procedures are taken in accordance with applicable legislation so that they meet the expectations of relevant parties for transparency, integrity and accountability.	2
	100%	52%	25%	7%	10%	6%	<b>The ratio</b>		
88.2%	335	56	48	8	12	0	<b>Repetition</b>	Problems in the municipal sector are solved transparently.	3
	100%	45%	39%	6%	10%	0%	<b>The ratio</b>		
84.4%	335	60	45	14	5	0	<b>Repetition</b>	The draft budget is prepared on the basis of precise objective studies that reflect the necessary needs of institutions.	4
	100%	48%	36%	11%	4%	0%	<b>The ratio</b>		
80.7%	335	55	36	16	14	3	<b>Repetition</b>	Preparing the general budget is consistent with the government's goals of reducing public debt, stimulating economic growth, and combating poverty.	5
	100%	44%	29%	13%	11%	2%	<b>The ratio</b>		
87.6%	335	58	42	15	9	0	<b>Repetition</b>	The austerity policy is adopted in estimating expenditure allocations and limiting them to what is necessary and productive.	6
	100%	47%	43%	12%	7%	0%	<b>The ratio</b>		
85.2%	2010	349	235	76	80	11	<b>Repetition</b>	<b>The sum of the second axis</b>	
	100%	47%	32%	10%	11%	1.4%	<b>The ratio</b>		

The results from the tables above indicate the following:

- The outcome of the second axis is as follows: 47% strongly agree, 32% agree, 10% neutral, 11% disagree, and 1.4% strongly disagree, with an overall average of 85.2% for all axis questions.

- Statement number (4), "The bank works on developing ideas that come through electronic participation into actual services for citizens and stakeholders," ranked first with an average score of 4.54, representing 84.4%.
- Statement number (2), "Electronic participation provides the structural basis for more active and expansive citizen participation," ranked last with an average score of 3.22, representing 80.6%.

**Table 7: Mean Score, Standard Deviation, and Direction of Statements for Axis Two.**

Answer score	standard deviation Std. Deviation	SMA Mean	The phrases of the second axis	#
OK	1.12	3.83	The laws, regulations, instructions, procedures, work methods and responsibilities in the municipal sector are clear.	1
OK	1.02	3.22	Administrative decisions and procedures are taken in accordance with applicable legislation so that they meet the expectations of relevant parties for transparency, integrity and accountability.	2
OK	1.13	3.26	Problems in the municipal sector are solved transparently.	3
Strongly Agree	1.17	4.54	The draft budget is prepared on the basis of precise objective studies that reflect the necessary needs of institutions.	4
OK	1.10	3.32	Preparing the general budget is consistent with the government's goals of reducing public debt, stimulating economic growth, and combating poverty.	5
OK	1.01	3.45	The austerity policy is adopted in estimating expenditure allocations and limiting them to what is necessary and productive.	6
OK	1.09	3.45	<b>The sum of the second axis</b>	

The second axis focused on the role of electronic participation in improving the level of supervisory performance, with an overall mean score of 3.45, indicating a moderate level.

- Axis Three: The Relationship Between Accountability and Improving Supervisory Performance. Through this axis, we will shed light on the principle of accountability, which is one of the most important aspects of safeguarding the rights of others. It results from the responsibility and authority that enable individuals to assume power or work to make decisions that affect others' lives. Human values that characterize civilized and transparent societies remain essential for protecting public rights, motivating individuals to succeed beyond conflicting interests, and working for the benefit of a limited group or personal gain at the expense of others. We will study this variable in the banks included in the sample through the following table:

**Table 8: Distribution of Statements for Axis Three According to Frequencies and Percentage Ratios.**

Phrase modifier	the total	Strongly Agree	OK	neutral	not agree	Strongly Disagree	Expressions of the third axis	#
84.2%	335	63	32	11	18	0	<b>Repetition</b> There are specific standards for reward and punishment.	1
	100%	51%	26%	9%	15%	0%	<b>The ratio</b>	
82.7%	335	51	29	9	21	14	<b>Repetition</b> Penalties and judicial rulings are proportional to the extent of the violation.	2
	100%	41%	23%	7%	17%	11%	<b>The ratio</b>	
81.6%	335	37	42	12	18	15	<b>Repetition</b> The specific mechanisms of accountability apply to everyone without discrimination or favouritism.	3
	100%	30%	34%	10%	15%	12%	<b>The ratio</b>	
80.9%	335	55	48	12	9	0	<b>Repetition</b> Implementing laws and regulations reduces crises, problems, waste, and corruption.	4
	100%	44%	39%	10%	7%	%	<b>The ratio</b>	
88.7%	335	73	38	8	5	0	<b>Repetition</b> The systems in place in the municipal sector enjoy the principle of accountability, which means that the actions of individual rulers and institutions are subject to the oversight of the competent authorities.	5
	100%	59%	31%	6%	4%	0%	<b>The ratio</b>	
84.3%	335	61	39	15	9	0	<b>Repetition</b> Accountability or oversight in the municipal sector is real and not subject to any kind of pressure.	6
	100%	49%	31%	12%	7%	0%	<b>The ratio</b>	
86.2%	2010	340	228	67	80	29	<b>Repetition</b> <b>The sum of the third axis</b>	
	100%	46%	31%	9%	11%	4%	<b>The ratio</b>	

- The results of the third axis are as follows: 46% strongly agree, 31% agree, 9% neutral, 11% disagree, and 4% strongly disagree, with an overall average of 85.2% for all axis questions.
- Statement number (5) ranked first: "The board of directors works to mitigate conflicts of interest among parties by providing good and necessary information to everyone." The average score was 4.50, with a percentage of 88.7%.
- Statement number (4) ranked last: "The board of directors ensures the accuracy of financial statements by supervising the enhancement of disclosure and the quality of financial information provided." The average score was 3.38, with a percentage of 80.9%.

**Table 9: Mean, Standard Deviation, and Direction of Statements in the Third Axis.**

Answer score	standard deviation Std. Deviation	SMA Mean	Expressions of the third axis	#
OK	1.04	3.78	There are specific standards for reward and punishment.	1
OK	1.19	3.80	Penalties and judicial rulings are proportional to the extent of the violation.	2
OK	1.06	3.45	The specific mechanisms of accountability apply to everyone without discrimination or favouritism.	3
Strongly Agree	1.08	3.38	Implementing laws and regulations reduces crises, problems, waste, and corruption.	4
Strongly Agree	1.21	4.50	The systems in place in the municipal sector enjoy the principle of accountability, which means that the actions of individual rulers and institutions are subject to the oversight of the competent authorities.	5
OK	1.14	3.88	Accountability or oversight in the municipal sector is real and not subject to any kind of pressure.	6
OK	1.12	3.79	<b>The sum of the third axis</b>	

The third axis focused on the role of implementing the principle of accountability in achieving continuous improvement in supervisory performance, with an overall mean score of 3.79, indicating a moderate level.

- Axis Four: The Relationship Between Responsibility and Achieving Continuous Improvement in Supervisory Performance. Through this axis, we will study the relationship between these two variables, especially since defining employee responsibilities is essential in organizational work, leading to the preservation of both employee and organizational rights simultaneously. We will study this variable in the banks included in the sample through the following table:

**Table 10: Distribution of Statements for Axis Four According to Frequencies and Percentage Ratios.**

Phrase modifier	the total	Strongly Agree	OK	neutral	not agree	Strongly Disagree	Expressions of the fourth axis	#
81.2%	335	46	39	8	15	16	<b>Repetition</b> There are multiple mechanisms for parties to participate in developing policies and decisions to develop the rules of good governance.	1
	100%	37%	31%	6%	12%	13%	<b>The ratio</b>	
84.6%	335	45	42	11	14	12	<b>Repetition</b> The municipal municipality participates	2

	100%	36%	34%	9%	11%	10%	<b>The ratio</b>	with specialized representatives in preparing the draft general budget for the state.	
85.3%	335	40	48	12	16	8	<b>Repetition</b>	Employees can express their opinion and participate in decision-making.	3
	100%	32%	39%	10%	13%	6%	<b>The ratio</b>		
83.6%	335	53	48	14	9	0	<b>Repetition</b>	Citizens and civil society organizations in the country participate in the governance and decision-making process.	4
	100%	43%	39%	11%	7%	0%	<b>The ratio</b>		
86.9%	335	64	46	9	5	0	<b>Repetition</b>	Contractors are involved in tenders in accordance with the Public Accounting Law and applicable laws and regulations.	5
	100%	52%	37%	7%	4%	0%	<b>The ratio</b>		
84.9%	335	45	59	14	6	0	<b>Repetition</b>	Draft budgets are reinforced with documents, statistics, clarifications, and financial information necessary for their study.	6
	100%	36%	48%	11%	5%	0%	<b>The ratio</b>		
85.4%	2010	293	282	68	65	36	<b>Repetition</b>	<b>The sum of the fourth axis</b>	
	100%	39%	38%	9%	8%	4%	<b>The ratio</b>		

The results from the tables above indicate the following:

- The fourth axis yielded the following results: 39% strongly agree, 38% agree, 9% neutral, 8% disagree, and 4% strongly disagree, with an overall percentage of 85.4% for all axis questions.
- Statement number (5), "The board of directors is responsible for monitoring the performance of the executive management and enhancing its performance to achieve the bank's interests and objectives," ranked first, with an average score of 4.56, representing 86.9%.
- Statement number (1), "The bank prepares economic feasibility studies by resorting to economic consultants before making changes or launching new projects," ranked last, with an average score of 3.42, representing 81.2%.

**Table 11: Average, Standard Deviation, and Direction of Statements for Axis Four.**

Answer score	standard deviation Std. Deviation	SMA Mean	Expressions of the fourth axis	#
OK	1.11	3.42	There are multiple mechanisms for parties to participate in developing policies and decisions to develop the rules of good governance.	1
OK	1.08	3.79	The municipal municipality participates with specialized representatives in preparing the draft general budget for the	2

			state.	
OK	1.21	3.88	Employees can express their opinion and participate in decision-making.	3
OK	1.09	3.87	Citizens and civil society organizations in the country participate in the governance and decision-making process.	4
Strongly Agree	1.14	4.56	Contractors are involved in tenders in accordance with the Public Accounting Law and applicable laws and regulations.	5
OK	1.06	3.62	Draft budgets are reinforced with documents, statistics, clarifications, and financial information necessary for their study.	6
OK	1.11	3.85	<b>The sum of the fourth axis</b>	

The overall average for the mean score was (3.85), indicating a moderate level. Particularly, clear distribution of responsibilities enables effective monitoring and supervision of performance levels, mitigating instances of evasion of responsibility and accountability. During the typically high-pressure periods of voting operations, it becomes easy to overlook or neglect tasks that may seem less significant because they belong to lower levels of the job hierarchy. Therefore, it is essential to clearly identify individuals responsible for each task and ensure their understanding of and commitment to their responsibilities in completing those tasks. Moreover, many tasks related to voting processes come with legal responsibilities concerning their fulfillment. It is crucial to verify the full awareness of individuals responsible for each task of their individual responsibilities, as well as the relationship linking those responsibilities to the rest of the tasks and activities of the voting process. Providing employees with clear copies of laws, regulations, procedures, and instructions, along with guiding evidence and inventory lists, assists them in this regard. Focusing on the personal and positive aspects of responsibility distribution contributes to improving performance levels. Enhancing employees' sense of responsibility and accountability raises their commitment to achieving results and automatically improves their performance.

- **Axis Five: The Relationship between Equality and Improving Regulatory Performance.** Through this axis, we will shed light on the importance of equality in the workplace, especially since equality in work life is enshrined in the Equality Law and in the Employment Contract Law. According to it, employees must be treated equally in terms of recruitment, work conditions, terms of employment, employee training, and promotion. The following table will illustrate this relationship as follows:

**Table No. 13: Distribution of Axis Five Phrases by Frequencies and Percentages.**

Phrase modifier	the total	Strongly Agree	OK	neutral	not agree	Strongly Disagree	Expressions of the fifth axis	#
87.2%	335	71	38	9	6	0	<b>Repetition</b>	1
	100%	57%	31%	7%	5%	0%	<b>The ratio</b>	
84.5%	335	67	41	11	5	0	<b>Repetition</b>	2
	100%	54%	33%	9%	4%	0%	<b>The ratio</b>	
83.7%	335	59	46	12	7	0	<b>Repetition</b>	3
	100%	48%	37%	10%	6%	0%	<b>The ratio</b>	
80.9%	335	59	43	8	9	5	<b>Repetition</b>	4
	100%	48%	35%	6%	7%	4%	<b>The ratio</b>	
82.7%	335	68	36	12	8	0	<b>Repetition</b>	5
	100%	55%	29%	10%	6%	0%	<b>The ratio</b>	
83.6%	335	61	52	6	5	0	<b>Repetition</b>	6
	100%	49%	50%	5%	4%	0%	<b>The ratio</b>	
84.9%	2010	358	256	58	48	5	<b>Repetition</b>	The sum of the fifth axis
	100%	32%	34%	7.8%	6.4%	0.6%	<b>The ratio</b>	

The results presented in the tables above indicate the following:

- The outcome of the fifth axis is as follows: 32% strongly agree, 34% agree, 7.8% neutral, 6.4% disagree, and 0.6% strongly disagree, with an overall percentage of 84% for all axis questions.
- Phrase number (1) ranked first: "Shareholders have the right to participate in making crucial decisions for the bank and vote on them at the general assembly, such as amending the articles of incorporation or modifying its capital." It scored a mean average of 4.62, with a rate of 87.2%.
- Phrase number (4) ranked last: "The company has a compensation system for shareholders in case their rights are violated." It scored a mean average of 3.54, with a rate of 80.9%.

**Table No. 14: Mean Average, Standard Deviation, and Direction of Phrases for the Fifth Axis.**

Answer score	standard deviation Std. Deviation	SMA Mean	Expressions of the fifth axis	#
Very agree	1.09	4.62	All employees are aware of the roles assigned to them (responsibilities and powers).	1
OK	1.11	3.89	There is a performance evaluation system.	2
OK	1.08	3.88	There are periodic reports on employee performance.	3
OK	1.12	3.54	The results of performance evaluation are studied and analyzed periodically.	4
OK	1.21	3.56	Employees are appointed to vacant administrative positions after evaluating their performance and productivity at work.	5
OK	1.06	3.80	Employees are promoted from one category to another after evaluating their performance and productivity at work and subjecting them to competency competitions.	6
OK	1.11	3.88	<b>The sum of the fifth axis</b>	

The sixth axis focused on the role of developing human capabilities in creating competitive advantage, with a statistical overall average of (3.88) indicating a strong correlation. Training programs have helped improve employees' knowledge and skills to adapt to various changes in the workplace. These improvements positively impact workers' productivity and efficiency, potentially increasing company profits and efficiency. Some things employees may learn through training include work ethics, human relations, and safety.

6.1. The Sixth Axis: The Role of Digital Governance Principles in Improving Oversight Performance. Through this axis, we shed light on the role of digital governance principles in enhancing oversight performance. Currently, implementing digital governance has become a requirement for countries to develop their operations in line with technological advancements and enhance administrative oversight, particularly internal control, which is crucial for their safety. Applying digital governance works to improve oversight and administrative work using the latest technologies. It facilitates quick interaction between government units, linking them as a single unit, and innovating new methods to enhance the efficiency of internal control systems in banks. Therefore, continuous updating and monitoring of digital governance programs and addressing them are necessary. Additionally, efforts should focus on increasing the effectiveness of their application to develop internal control systems. The following table illustrates this relationship:



**Table No. 15: Distribution of Phrases for the Sixth Axis According to Percentages and Ratios.**

The results provided in the tables above indicate the following:

Phrase modifier	the total	Strongly Agree	OK	neutral	not agree	Strongly Disagree	Sixth axis phrases		#
88.2%	335	93	58	11	9	7	<b>Repetition</b>	The principles of good governance are established in the steps taken in internal audits.	1
	100%	75%	47%	9%	7%	6%	<b>The ratio</b>		
84.6%	335	54	43	8	14	5	<b>Repetition</b>	Principles of good governance are established to ensure proper guidance and rationalization of public funds.	2
	100%	44%	35%	6%	11%	4%	<b>The ratio</b>		
82.7%	335	46	58	9	11	0	<b>Repetition</b>	Programs are managed and services and instructions are provided with high efficiency and effectiveness.	3
	100%	37%	47%	7%	9%	0%	<b>The ratio</b>		
82.9%	335	68	35	15	6	0	<b>Repetition</b>	The municipal sector employs regulations and instructions to achieve effectiveness in the public interest.	4
	100%	55%	28%	12%	5%	0%	<b>The ratio</b>		
84.6%	335	42	56	8	7	11	<b>Repetition</b>	There are strategic plans to develop the municipal sector's resources, especially financial ones.	5
	100%	34%	45%	6%	6%	9%	<b>The ratio</b>		
85.3%	335	75	42	4	3	0	<b>Repetition</b>	The volume of spending is proportional to the activities of the municipal sector.	6
	100%	60%	34%	3%	2%	0%	<b>The ratio</b>		
80.9%	335	74	38	6	6	0	<b>Repetition</b>	The municipal sector works to attract employees with distinguished competencies.	7
	100%	60%	31%	5%	5%	0%	<b>The ratio</b>		
81.7%	335	68	30	12	14	0	<b>Repetition</b>	The municipal sector seeks to develop regulations and	8

	100%	55%	24%	10%	11%	0%	<b>The ratio</b>	laws according to the requirements of the times, improve its level and raise its reputation.	
84.2%	335	63	47	9	5	0	<b>Repetition</b>	Work is being done to implement governance requirements to develop the municipal sector.	9
	100%	51%	38%	7%	4%	0%	<b>The ratio</b>		
86.7%	335	41	28	18	22	15	<b>Repetition</b>	Parties and popular organizations play a positive role in implementing governance requirements.	10
	100%	33%	23%	14%	18%	12%	<b>The ratio</b>		
85.6%	3350	843	546	140	145	58	<b>Repetition</b>	<b>The sum of the sixth axis</b>	
	100%	49%	31%	8%	8%	3%	<b>The ratio</b>		

- The outcome of the sixth axis is as follows: 49% strongly agree, 31% agree, 8% neutral, 8% disagree, and 3% strongly disagree, with an overall average of 85.6% for all axis questions.
- Phrase number (1) ranked first: "The bank relies on electronic survey procedures to provide its services electronically." The average score was 4.58, with a percentage of 88.2%.
- Phrase number (13) ranked last: "Employees in monitoring departments have good scientific qualifications and experience." The average score was 3.58, with a percentage of 79.5%.

**Table No. 16: Average, Standard Deviation, and Direction of Phrases for the Sixth Axis.**

Answer score	standard deviation Std. Deviation	SMA Mean	Sixth axis phrases	#
Strongly Agree	1.09	4.58	The principles of good governance are established in the steps taken in internal audits.	1
Strongly Agree	1.07	4.50	Principles of good governance are established to ensure proper guidance and rationalization of public funds.	2
Strongly Agree	1.12	4.52	Programs are managed and services and instructions are provided with high efficiency and effectiveness.	3
Strongly Agree	1.21	4.53	The municipal sector employs regulations and instructions to achieve effectiveness in the public interest.	4

OK	1.09	3.88	There are strategic plans to develop the municipal sector's resources, especially financial ones.	5
Strongly Agree	1.05	4.55	The volume of spending is proportional to the activities of the municipal sector.	6
Strongly Agree	1.02	4.05	The municipal sector works to attract employees with distinguished competencies.	7
Strongly Agree	1.14	4.06	The municipal sector seeks to develop regulations and laws according to the requirements of the times, improve its level and raise its reputation.	8
OK	1.06	3.89	Work is being done to implement governance requirements to develop the municipal sector.	9
OK	1.08	3.45	Parties and popular organizations play a positive role in implementing governance requirements.	10
Strongly Agree	1.09	4.08	<b>The sum of the sixth axis</b>	

The sixth axis revolved around the variable of creating competitive advantage, with the overall statistical average for this axis being 4.08 with a strong correlation.

### Study Results

Based on the overall research findings and the specific survey results, despite the obstacles faced by the researcher, especially in obtaining responses from the respondents included in the sample, the following conclusions can be drawn:

- The experience of digital governance in the banking sector can be considered average and not effectively implemented, requiring further development and effective work to achieve it properly.
- The application of digital governance in the banking sector requires defining the appropriate scope for conducting open dialogue at the right time to solve problems, which prevent functional corruption, conflicts of interest, and leakage of customer data. This aspect is crucial in building the institutional governance framework as it deals with the bright side of human nature and covers possibilities of circumventing professional and social norms.
- An effective framework for financial reporting must be established to complete effective control provisions over bank performance, provided that this system is characterized by transparency, disclosure, and provides appropriate information.
- Governance is not only internal (systems and laws) or external (external auditors), but there are other frameworks that contribute significantly to the control process, including the central bank, chambers of commerce, stock exchanges, and the financial market authority.

- The development of the banking system in the early 1980s led banks to be exposed to high levels of risk, necessitating the establishment of risk management, which is one of the most important pillars of banking governance. Risk reduction is considered one of the main objectives of governance.
- Digital governance consists of a set of laws, regulations, and decisions aimed at achieving quality and excellence in performance by selecting appropriate and effective methods to achieve the plans and goals of companies.
- Digital governance balances between the management's powers and protecting the rights of shareholders and other stakeholders, so it focuses on two main elements: sound management and transparency.
- There is a strong correlation between digital banking governance and the country's economic system. Improving digital governance represents a gain by improving performance and reducing the costs of capital access. It is a gain for shareholders by maximizing long-term value, and it is a gain for the national economy through stable, continuous, and more efficient activity.

## Recommendations

Regarding the recommendations issued by the study, we hope for the following:

- The senior management of banks should prioritize the application of digital banking governance principles and make them tools for monitoring and control.
- The senior management of banks should pay attention to their investment funds and appoint distinguished competencies in stock investments to protect the rights of shareholders in investment fund certificates.
- Attempt to unify banking transaction procedures in line with the principles of fair and equal treatment for all bank stakeholders.
- It is essential to pay attention to all stakeholders, including shareholders and investors alike, without discrimination.
- Banks should disseminate bulletins on credit and banking developments by accurately applying the principles of disclosure and transparency.
- Full digital transformation responsibilities and transactions via modern social media platforms should be added to the key responsibilities of bank boards of directors.
- Following sound principles of digital governance creates necessary precautions against corruption and mismanagement, encourages transparency in business organizations, and combats resistance to reform.
- Encouraging the implementation of digital banking governance principles as the most important components of the immune system in banks in terms of combating corruption, achieving financial health and safety, thereby reinforcing control principles through clear objectives and banking strategies, setting clear standards for implementation, ensuring the efficiency and independence of board members, and ensuring they are not subject to internal and external influences through the application of the principle of disclosing and transparent data. Therefore, economic policymakers should define the rules and laws that activate digital governance.

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