



## Sustainability strategy: Potential moderating role in the relationship between digital transformation and organizational performance among the Jordanian commercial banks

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### ABSTRACT

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#### Keywords

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This study explores the impact of digital transformation on the organizational performance of Jordanian commercial banks, specific focusing on the moderating role of sustainability strategies. A descriptive-analytical approach was employed to achieve the research objectives. A total of 434 valid responses were collected from 500 distributed questionnaires resulting in 87% response rate. The sample comprised employees from 12 commercial banks, representing a workforce of approximately 15,000 individuals. The study utilized various statistical methods to analyze the data, yielding several key findings. First, the results indicate a statistically significant positive effect of digital transformation in terms of managerial and operational capabilities on organizational performance ( $\alpha \leq 0.05$ ). Second, the study highlights that sustainability strategies significantly moderate the relationship between digital transformation and organizational performance. The study recommends that commercial banks enhance their digital services to streamline administrative processes, reduce operational inefficiencies, and promote long-term sustainability based on these findings.

**Contribution/Originality:** This paper provides new insights into studying various management topics and diagnosing the interaction of their variables and relationships which contributes to deducing new data for these effects and anticipating their future feasibility as it examines the impact of digital transformation on the organizational performance of Jordanian commercial banks with a specific focus on the moderating role of sustainability strategies.

### 1. INTRODUCTION

Jordanian banks form the foundation of economic activity and are essential in boosting the country's overall economic performance. The banking structure in Jordan consists of the Central Bank of Jordan (CBJ), commercial banks, Islamic banks, foreign banks, specialized lending institutions (both government-owned and jointly owned), money exchange businesses, and foreign bank branches. According to the Association of Banks and the Central Bank of Jordan (2022), there were 25 active banks in Jordan by the end of 2022, including twelve commercial banks, four Islamic banks, and nine foreign banks. These institutions are spread throughout the country with a banking

density index of 9,179 human per branch by the end of 2022. Additionally, 663 licensed bank branches were operating within Jordan (524 of them being commercial banks) and 81 representative offices. Outside Jordan, there were 153 branches for commercial banks and 13 for representative offices (Al-Ghalabi, Alsheikh, Al-Shamaileh, & Altarawneh, 2024; Almahadin, Al-Gasaymeh, Alrawashdeh, & Abu Siam, 2021).

The research focuses on the significance of implementing a digital transformation involving managerial and operational capabilities by Jordanian banks and examines how such strategies influence their performance in terms of the balanced scorecard framework (financial, customer, internal processes, and learning and innovation). Furthermore, it will investigate the role of sustainability strategy as a moderating factor in the link between digital transformation and organizational performance. Banks must evaluate their managerial and operational capabilities to enhance organizational performance and determine the path forward for adopting a digital transformation strategy to achieve their goals such as increasing profits, improving customer satisfaction, enhancing efficiency, and fostering knowledge and innovation within the organization (Al-Ghalabi et al., 2024; Alkhazali, Abu-Rumman, Khdour, & Al-Daoud, 2020; Do, Pham, Thalassinou, & Le, 2022).

Numerous studies and reports have suggested a relationship between digital transformation strategy and organizational performance but only if we consider how prepared a company is to implement its digitalization strategy in light of its managerial and operational capabilities as well as how this will be reflected in its revenue, market share, and efficiency, need to consider how digitalization and its effects affect a company's ability to remain sustainable (Guo & Xu, 2021; Helalat, Sharari, Qawasmeh, Bani-Mustafa, & Alkhazali, 2023; Sharari, Qawasmeh, Helalat, & Jahmani, 2024; Tsou & Chen, 2023; Wang, Feng, Zhang, & Li, 2020; Yu, Wang, & Moon, 2022). Therefore, the research confirms this by highlighting the impact of digital transformation on the organizational performance of the commercial banks in Jordan related to balanced scorecard elements and how these affect the sustainability of the bank sector in Jordan given that banks are the largest industry in Jordan that has an impact on the country's economy.

Therefore, the study derives its importance by providing senior management and decision-makers in Jordanian commercial banks in particular, and in financial institutions in general with the information, they need about the impact of digital transformation on organizational performance. The study's importance also comes from the findings and recommendations that contribute to enhancing the overall performance of these banks, helping to find appropriate solutions for the implementation of digital transformation and how it will impact the sustainability strategy of these organizations. The importance of this study also stems from its ability to help decision-makers in assessing the results of implementing the digital transformation and how it will impact their internal process, knowledge and innovation, financial performance, and customer satisfaction. This study will add scientific rigour and provide a new level of quality to earlier studies that focused on the fundamental requirements for applying digital transformation which is one of the most crucial elements of organizational performance.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 2.1. Digital Transformation

Digital transformation has become a significant and widely debated subject in recent times. As the world continues to digitalize, organizations must embrace digital transformation to stay competitive. The research utilized a descriptive and analytical approach given the many advantages of digital transformation. The review of existing literature and studies revealed several challenges that impede the digital transformation process within organizations and businesses (Abu Rumman & Al-Abbadi, 2024; Ghanem, 2021).

Digital transformation is a critical requirement for organizations aiming to enhance their services and make them more accessible to beneficiaries. It goes beyond simply integrating technology into an organization. It represents a holistic program essential for improving internal operations and streamlining service delivery to the target audience, making these services faster and more efficient. Additionally, digital transformation facilitates

greater collaboration between the public and private sectors, promoting seamless and flexible cooperation. The need for digital transformation is now more pressing than ever due to the rapid evolution of information technology which impacts all areas of life from transactions with government and private sectors to interactions with individuals. As a result, there is significant pressure from society on institutions and companies to improve their services and ensure their availability across all digital platforms with effective governance of the transformation process (Jewer & Van Der Meulen, 2022; Yousef, AlKhazali, Qawasmeh, & Alshamayleh, 2023).

This digital age depends on employing data which today represents a major resource, and there are even those who call it the oil of the era or gold, and the main existing assets which are focused on to exchange, use, invest, and share. It also contributes to facilitating decision-making and must be addressed in a way that ensures equality, justice and transparency as it represents the main engine to advance sustainable development and support competitive advantage (Alrabghi, 2022; Helalat et al., 2023).

Digital transformation is a significant shift not only in developed countries but also in emerging and Arab nations. Some Arab countries have implemented clear strategies to achieve this transformation aiming to drive economic and social development while reducing the gap between developed and developing countries. Several Arab countries have demonstrated the effectiveness of their digital transformation efforts with some even rapidly advancing to become leaders in this field while others are on track to join the ranks of these leading countries. The impact of digital transformation has been particularly positive in these countries, especially during the COVID-19 pandemic which posed a serious threat to the global economy due to restrictions on movement and the need to stay at home. In this context, digital transformation served as a lifeline allowing economic activity to continue and preventing a rapid decline. On the contrary, it ensured the ongoing quality of life by advancing the achievement of sustainable development goals (Abu Rumman & Al-Abbadi, 2024; Shaaban, 2021).

Digital transformation refers to the process of shifting governmental or private companies to a business model that leverages digital technologies to innovate products and services while creating new revenue streams that enhance the value of their offerings (Ghanem, 2021). It is a dynamic, flexible process that encourages companies, organizations, and essential community institutions to adapt to the evolving needs of their beneficiaries. This is achieved by developing new business models and products that leverage digital technologies to enhance service delivery. The goal is to improve user experience, elevate performance quality, increase operational efficiency, and foster digital innovation (Alrabghi, 2022; Alsoud, Al-Muani, & Alkhazali, 2022).

Digital transformation in the banking sector is defined as a complex technical, regulatory and cultural development process undertaken by banks to meet the changing needs of their customers and adapt to the requirements of their employees by leveraging digital capabilities to build banking business models, innovate new banking services, improve user experiences and digitize operations to improve financial performance, reduce banking risks, support competitive advantage, and thus create value for construction (Khamis, 2021).

The researcher sees that the concept of digital transformation refers to the transition of the series of operations that take place within the organization from the traditional form to the digital form or the so-called digitization to save in cost, effort and human resources to reach the rationalization of performance and achieve high levels of achievement. On the other hand, the protection of information and data of organizations from hacking and piracy as well as giving a special character to the organization that makes it distinct from its competitors, forms part of its unique and distinctive identity and brand.

### *2.1.1. Dimensions of Digital Transformation*

Digital transformation is based on several basic dimensions that support this process and by reviewing many relevant literature and studies, several dimensions of digital transformation have been extracted as each dimension represents a pillar and an essential element affecting digital transformation in banks. The current study addresses the following dimensions of digital transformation:

*Managerial Capability:* Digital transformation has become one of the necessities that organizations aspire to develop their services and continue them in a way that ensures the maximum satisfaction of all relevant parties, and this means the need to adopt an integrated program within the organization that addresses the method of management inside and outside the organization, the style of work and how to deal with beneficiaries. This program also aims to provide service to the targeted people easily and with less time and effort (Al-Mutairi, Wahdan, & Abdul Rahman, 2022).

*Operational Capability:* Digital transformation contributes to linking organizations together so that shared services can be achieved transparently, advanced investment in information technology means and tools, and increased interest in developing methods of dealing and performing the services received through the speed of completing transactions and the availability of digital innovations through the use of all digital channels, websites and smart phone applications, reaching all relevant parties (Assaliya, 2021).

## 2.2. Organizational Performance

Organizational performance is represented by its ability to achieve its objectives which is the main pillar in supporting the various businesses practiced by the company and expresses the organizational performance of the company through financial indicators such as profit, liquidity and others (Alkhazali, Aldabbagh, & Abu-Rumman, 2019; Nur'ainy, Nurcahyo, Sri Kurniasih, & Sugiharti, 2013). Organizational performance is a complex and multifaceted concept that overlaps with human resources management policies and innovative work practices. These practices form an integrated set of strategies, including systems for evaluating, developing, motivating, and retaining qualified, efficient human resources, all aimed at achieving the organization's strategic goals. This integration of creative management practices is designed to manage, engage, and empower employees, ensuring alignment between employees and their work environment. Ultimately, this fosters employee commitment to the organization enabling it to maintain high performance and sustain a competitive advantage (Said Alhadrami, Rateb Darawsheh, Sadu Al-Shaar, & Alshurideh, 2023).

Škrinjar, Bosilj-Vukšić, and Indihar-Štemberger (2008) pointed out that organizational performance is a set of financial and non-financial indicators that provide information on the degree to which the goals and results that the company aspires to be achieved and that it is dynamic performance that requires judgment, analysis and correct interpretation, and can be illustrated through the use of a causal model that describes how current actions may affect future production.

### 2.2.1. Dimensions of Organizational Performance

*Knowledge and Innovation:* This aspect focuses on the capabilities an organization must develop to achieve high-level internal processes that create value for customers and shareholders. The growth and learning aspects highlight three key areas: employee capabilities and reorientation (including employee education and development, measuring satisfaction, fulfillment, and productivity), the effectiveness of information systems, and the motivation and responsibility of employees (Asiaei, Bontis, Barani, & Jusoh, 2021; Haralayya & Aithal, 2022; Hariyati, Tjahjadi, & Soewarno, 2019; Mary, Sharma, Malviya, Hamida, & Zala, 2023; Prentice, 2016). These factors suggest that a company's innovative capacity and its ability to learn can enhance its overall value and foster growth. The learning and growth perspective emphasize the role of individuals and managers in continuously developing employees' skills and capabilities.

*Internal process:* The dimension of internal processes in the balanced scorecard refers to a combination of functional and managerial activities and processes that take place within the organization to be the result of the effective and efficient use of inputs to achieve a desired level of output (Hariyati et al., 2019).

The goal from an internal business perspective is to identify and improve critical internal processes that give a competitive advantage and lead to increased customer satisfaction. The organization needs to break down

processes into measurable components and link them to employee procedures and skills (Alafi, Ismaeel, Almarshad, Al-Habash, & Al-Aqgrabawi, 2023; Asiaei et al., 2021; Hariyati et al., 2019).

**Financial perspective:** The financial perspective tends to represent the direct relationship between actions and results as it mainly refers to whether the implementation of a company's strategy has helped improve its profits (Ittner, Larcker, & Randall, 2003). A balanced scorecard from a financial perspective considers that properly designed financial measures can provide a comprehensive view of the success of an organization. Financial performance measures can be considered a common language for analyzing and comparing organizations (Prentice, 2016).

Financial organizations and shareholders generally rely heavily on financial performance metrics in deciding whether to lend to a company or invest in its stock, so a well-designed balanced scorecard evaluation can provide a comprehensive view of how successful an organization is (Haralayya & Aithal, 2022).

**Customer satisfaction:** The organization must focus on meeting the needs and desires of its customers, as these customers are the ones who generate revenue to cover costs and drive profits. Indicators are developed to assess the customer's relationship with the organization such as customer satisfaction, market share, customer loyalty, retention ability, customer acquisition, and customer profitability through this perspective (Mary et al., 2023).

### *2.3. Sustainability Strategy*

The sustainability strategy in organizations is one of the most important administrative fields that have received special attention from organizations that think about long-term survival (Asiaei et al., 2021; Helalat et al., 2023; Sharari et al., 2024). The sustainability strategy depends on internal and external characteristics. These characteristics must correspond to each other to maintain a coherent system. Therefore, the sustainability strategy is a fundamental concept for many practitioners and researchers in the field of management strategies to ensure the survival of organizations (Rodrigues & Franco, 2019).

The concept of sustainability strategy has received a lot of attention in recent years due to its ambiguity in terms of how organizations can be sustained and how to achieve it better due to its association with many variables (Radomska, 2015). Some organizations support their sustainability through management information systems. Organizations that seek to reach a sustainability strategy can innovate and differentiate compared to competitors. Innovation gives organizations a great opportunity in the long-term. When organizations reach a sustainability strategy, they can add new value to their business by seizing opportunities and reducing risk. The sustainability strategy also contributes to meeting the needs of the client, so the sustainability strategy has been the most important focus of the strategies of the organization that seeks to survive sustainably in a highly competitive market (Hussain, Rasheed, & Rehman, 2024).

#### *2.3.1. Dimensions of Sustainability Strategy*

The sustainability strategy in organizations includes several integrated and overlapping dimensions, so they are viewed in an integrated rather than separatist manner.

**Economic Sustainability Strategy:** The sustainability strategy in economic organizations is defined as the impact of organizations on the economic conditions of stakeholders and on the national and global economic system which is reflected in society and resources is spent among all stakeholders. Profits are the results of financial operations. In the form of annual or semi-annual reports, they serve as an important tool for understanding organizations and understanding their financial operations (Al-Abbadi & Abu Rumman, 2023; Spangenberg, 2005).

One of the requirements of the economic sustainability strategy is the management of organizations for several types of economic capital, including high-debt capital, property rights, fixed capital (land and machinery), intangible capital (goodwill and patent). Organizations must conduct activities in a recognized manner while achieving economic and social benefits for those interested in them For the sake of economic sustainability strategy

(Ruggerio, 2021). Forid, Hafez, and Khan (2022) define that according to the economic dimension, sustainability strategy is the protection, provision and guarantee of productive capacities from one generation to another. Through it, any society can continuously acquire development, both technically and in terms of its ability to ensure growing income levels from one generation to another. The economic dimension focuses on the long- and short-term value generated by organizations and is linked to the sustainability strategy of organizations and is measured based on economic wealth and the progress of social and environmental sustainability strategy equally.

Social sustainability strategy expresses awareness of the responsibility of organizations for their actions and the real and reliable long-term commitment of organizations to all commercial activities to remain in the markets successfully and for a long period of time. The social sustainability strategy aims to positively affect all current and future relationships with stakeholders by focusing on meeting their needs to enhance loyalty to the organization (Allam, Sharifi, Bibri, Jones, & Krogstie, 2022).

Interest in the social sustainability of organizations has recently increased. The focus has increased on the social role that organizations must play towards society and in the work environment. Opinions about responsibility have varied in terms of its obligation, and the importance of social responsibility emerges as mentioned (Allam et al., 2022; Helalat et al., 2023; Sharari et al., 2024) in their study. Social stability is due to the availability of a kind of social justice and the prevalence of the principle of equal opportunities which is the essence of social responsibility and economic units.

Environmental sustainability strategy refers to the preservation of all practices and factors that contribute to environmental quality on a long-term basis. It includes ecosystems and biodiversity capacity (Juma-Michilena, Ruiz-Molina, Gil-Saura, & Belda-Miquel, 2023) and requires the preservation of natural capital as a source of economic inputs and also includes the environmental impacts that result from the activity of organizations, such as the effects of the use of resources and gases emitted into the air, water or land as well as hazardous waste and the effects of biodiversity and environmental issues over the life cycle of the product (Centobelli, Cerchione, Esposito, & Shashi, 2020).

Every natural system has borders that are difficult to cross in terms of exploitation and overexploitation which means the degradation of the ecosystem. The only way to protect the ecosystem lies in reducing the consequences of poor production and consumption such as groundwater and surface water and logging. The environmental sustainability strategy means that natural resources are protected from human pressures. Environmental indicators are concerned with the impact of organizations on the living and non-living natural system which includes land, air and water. These indicators help vital ecosystems to determine the most important environmental impacts and link the goals of the environment to the development of workers (Asiaei et al., 2021). The concept of sustainability strategy has urged organizations to adopt an environmental comparison that ensures the conservation of natural resources and the reduction of their waste by achieving a set of goals as stated in the study (Hussain et al., 2024). Today's organizations need to set goals beyond efficiency and adopt sustainability and innovation strategies as organizational criteria.

#### 2.4. Hypotheses

*H<sub>0.1</sub>: There is no statistically significant impact at the level of the significance ( $\alpha \leq 0.05$ ) of applying a digital transformation (managerial capability and operational capability) on organizational performance in Jordanian commercial banks.*

*H<sub>0.2</sub>: There is no statistically significant impact at the level of the significance ( $\alpha \leq 0.05$ ) of applying managerial capability on organizational performance in Jordanian commercial banks.*

*H<sub>0.3</sub>: There is no statistically significant impact at the level of the significance ( $\alpha \leq 0.05$ ) of applying operational capability on organizational performance in Jordanian commercial banks.*



*H<sub>02</sub>*: There is no statistically significant impact at the level of the significance ( $\alpha \leq 0.05$ ) of applying digital transformation on organizational performance in Jordanian commercial banks through the moderating variable sustainability strategy.

### 3. DATA AND METHODOLOGY

The researcher relied on the descriptive-quantitative method by identifying the impact of independent variables based on data provided through a specially designed resolution to achieve the objectives of the study and test its hypotheses despite the multiplicity of scientific approaches that can be used in scientific research and studies.

#### 3.1. Population and Sample Size

Population size refers to the total number of individuals, items, or elements within a specific group or population under consideration in a research study or statistical analysis. In the context of research and statistics, it represents the entire set of units or entities that share a common characteristic or are subject to investigation.

The study was conducted on employees of Jordanian commercial banks. The number of Jordanian commercial banks are 12 banks with approximately 15,327 employees working in them based on the report of the Association of Commercial Banks issued in the year 2023 (Association of Commercial Banks, 2023). The total number of employees in the banks was used to determine the study sample size. Table 1 shows the study population size for commercial banks.

**Table 1.** Numbers of employees in Jordanian commercial banks.

Name of banks	Number of employees
Arab bank	3244
Housing bank	2417
Cairo Amman bank	1562
Jordan bank	1497
Jordan Kuwait bank	1253
Etihad bank	1198
Ahli bank	1144
Arab Jordan investment bank	750
Commercial bank	703
Capital bank	617
ABC bank	509
Investment bank	433
Total	15327

Sample size refers to the number of individual subjects or units selected from a larger population for inclusion in a research study or survey. It is a critical aspect of research design and statistical analysis because the size of the sample can influence the reliability and validity of the study's findings.

The researcher employed the sample size table provided by Bougie and Sekaran (2019) to determine the sample size in this study. Considering the population size, it was essential to have a representative sample of at least 375 participants out of a total of 15,327. To ensure precision, the researcher adopted an appropriate sampling approach, distributing 500 questionnaires to employees. The researcher relied on Google Forms to distribute the questionnaire to the sample. Unfortunately, 66 questionnaires were not returned, constituting 13% of the total questionnaires. However, 87% of the distributed questionnaires were valid for actual analysis resulting in a sample size of 434 respondents which surpasses the sample size indicated in Sekaran's table. You can find the distributions of questionnaires that were distributed for banks in Table 2.

**Table 2.** Number of questionnaires that were distributed.

The number of questionnaires was distributed.	Number of valid questionnaires	Number of unreturned questionnaires	Percentage of returned questionnaires	Percentage of unreturned questionnaires
500	434	66	87%	13%

### 3.2. Data Collection Methods

In this study, the researcher utilized two types of data sources which are as follows: primary and secondary as described below.

#### 3.2.1. Primary Data Collection

The employed a questionnaire to gather primary data from the study participants. This questionnaire was tailored for the study with careful consideration given to its design to ensure it accurately collects the necessary data for drawing conclusions and testing the study's hypotheses. The data gathered will form the basis for analyzing the research questions and investigating the relationship between the variables.

#### 3.2.2. Secondary Data Collection

The obtained secondary data from diverse sources, including books, academic journals, research reports, newsletters, and online publications. These sources provided essential background information and insights into the field of organizational learning, its processes and its influence on various organizational performance aspects. The secondary data helped to contextualize the primary data and strengthened the overall research framework.

### 3.3. Questionnaire Design

The questionnaire was divided into four sections. The first section was designed to gather general demographic information about the sample participants. The second section consisted of 10 statements measuring the dimensions of the independent variable. The third section included 20 statements aimed at assessing the dimensions of the dependent variable. The fourth section contained 6 statements designed to evaluate the dimensions of the moderating variable. [Table 3](#) outlines the content of the questionnaire.

**Table 3.** Parts of the questionnaire.

Characteristics	Paragraphs	
	Statement	Number of statements
Gender	2	
Age group	4	
Educational level	4	
Job position	4	
Number of years of experience	4	
Variables	Statement	Number of statements
Digital transformation dimensions: (Independent variable)		
Managerial capability	Q1-Q5	5
Operational capability	Q6-Q10	5
Organizational performance dimensions (Dependent variable)		
Customer satisfaction	Q11-Q15	5
Internal process	Q16-Q20	5
Knowledge and innovation	Q21-Q25	5
Financial performance	Q26-Q30	5
Sustainability strategy dimension (Moderating variable)		
Sustainability strategy	Q31-Q36	6



## 4. RESULTS AND DISCUSSION

### 4.1. Test of Hypotheses

#### 4.1.1. Test of First-Main Hypothesis

$H_{01}$ : There is no statistically significant impact at the level of the significance ( $\alpha \leq 0.05$ ) of applying a digital transformation (managerial capability and operational capability) on organizational performance in Jordanian commercial banks.

Multiple linear regressions were used to test the main hypothesis at the significance level ( $\alpha \leq 0.05$ ).

**Table 4.** Results of the test of the first main hypothesis.

Model summary			ANOVA			Independent variable	Coefficient		
R	R <sup>2</sup>	R <sup>2</sup> adjust	F	DF	P-value		B	T	P-value
0.234	0.055	0.050	12.450	2	0.000	Managerial capability	0.028	0.641	0.522
				431		Operational capability	0.131	3.397	0.001
				433					

Table 4 presents the results related to the independent variable dimensions (managerial capability and operational capability) and their impact on the dependent variable (organizational performance). The data shows a significant effect as indicated by a p-value of (0.000) which is less than the threshold of (0.05) and a calculated f-value of (12.450), which is greater than the critical f-value of (3.00) from the table. This leads to the rejection of the null hypothesis and the acceptance of the alternative hypothesis which asserts that there is a statistically significant impact at the 0.05 significance level of applying digital transformation (managerial and operational capability) on organizational performance in Jordanian commercial banks.

Table 4 further indicates a positive relationship between the dimensions of the independent and the dependent variables demonstrated by an R-value of ( $R = 0.234$ ). Additionally, the R<sup>2</sup>-value is 0.055 and the adjusted R<sup>2</sup>-value is 0.050 after excluding the error from the R<sup>2</sup> calculation. This reveals that the dimensions of digital transformation contribute approximately 5.5% to organizational performance with the remaining 94.5% attributed to other external or unmeasured factors.

In more specific terms, the t-value for the operational capability dimension is 3.397 which exceeds the critical t-value of 1.986 from the table with a p-value of 0.001 that is significantly less than 0.05. This suggests that operational capability has a statistically significant impact on organizational performance. Conversely, the t-value for managerial capability is 0.641, which is below the critical t-value of 1.986 and the associated p-value is 0.522 which is greater than 0.05. Therefore, the data indicates that managerial capability does not have a significant impact on organizational performance.

#### 4.1.1.1. Test of First- Sub Hypothesis

$H_{01a}$ : There is no statistically significant impact at the level of the significance ( $\alpha \leq 0.05$ ) of applying managerial capability on organizational performance in Jordanian commercial banks.

Simple linear regression was used to test the first-sub hypothesis at the significance level ( $\alpha \leq 0.05$ ).

**Table 5.** Result of the first-sub hypothesis.

Independent variables	R	R <sup>2</sup>	R <sup>2</sup> adjust	B	Dependent variable	T- table value	T – calculated value	SIG
Managerial capability	0.171	0.029	0.027	0.124	Organizational performance	1.986	3.612	0.000

Table 5 shows that the calculated t-value of 3.612 is higher than the critical t-value of 1.986 indicating that there is a statistically significant effect of the independent variable dimension, managerial capability, on the

dependent variable, organizational performance. Additionally, the significance value of t is less than 0.05 which further supports the rejection of the null hypothesis and the acceptance of the alternative hypothesis. This means that there is a statistically significant impact at the 0.05 significance level of applying managerial capability on organizational performance in Jordanian commercial banks.

Moreover, Table 5 reveals a positive correlation between managerial capability and organizational performance as shown by the R-value (R = 0.171). This suggests that there is a moderate positive relationship between the two variables. The managerial capability dimension contributes approximately 2.9% to organizational performance with the remaining 97.1% being attributed to other factors as indicated by the R<sup>2</sup> value of 0.029. This finding suggests that although managerial capability plays a role, other external or unmeasured factors contribute more significantly to organizational performance.

In addition, the B- value of 0.124 indicates that for every unit increase in managerial capability, organizational performance increases by 0.124 units. This further emphasizes the direct positive effect that managerial capability has on organizational performance, though the effect is relatively modest based on the R<sup>2</sup> value.

4.1.1.2. Test of Second-Sub Hypothesis

H<sub>01s</sub>: There is no statistically significant impact at the level of the significance ( $\alpha \leq 0.05$ ) of applying operational capability on organizational performance in Jordanian commercial banks. Simple linear regression was used to test the second-sub hypothesis at the significance level ( $\alpha \leq 0.05$ ).

Table 6. Result of the second-sub hypothesis.

Independent variable	R	R <sup>2</sup>	R <sup>2</sup> adjust	B	Dependent variable	t- table value	t – calculated value	SIG
Operational capability	0.232	0.054	0.052	0.147	Organizational performance	1.986	4.952	0.000

Table 6 presents the results regarding the impact of the independent variable dimension, operational capability, on the dependent variable, organizational performance. The calculated t-value of 4.952 is significantly higher than the critical t-value of 1.986 suggesting a strong statistically significant relationship between operational capability and organizational performance. Additionally, the significance value of t is less than 0.05 further confirming the rejection of the null hypothesis and the acceptance of the alternative hypothesis. This finding clearly indicates that there is a statistically significant impact at the 0.05 significance level of applying operational capability on organizational performance in Jordanian commercial banks.

Moreover, Table 6 highlights the positive correlation between the dimension of operational capability and organizational performance as indicated by the R-value (R = 0.232). This R-value suggests a moderate positive relationship, meaning that as operational capability improves, so does organizational performance, but the relationship is not extremely strong. The contribution of operational capability to organizational performance is measured at 5.4%, with an R<sup>2</sup> value of 0.054 indicating that while operational capability does have an effect, there are other unmeasured or external factors that contribute to the remaining 94.6% of organizational performance.

In addition, the B-value of 0.147 provides further insight as it indicates that for every unit increase in operational capability. Organizational performance is expected to increase by 0.147 units. This suggests that improving operational capability leads to measurable improvements in performance, though the effect is relatively moderate. The contribution of operational capability to organizational performance as indicated by the modest R<sup>2</sup> value shows that other organizational factors in combination with operational capability influence overall performance outcomes.

4.1.2. Test of Second-Main Hypothesis

*H<sub>02</sub>: There is no statistically significant impact at the level of significance ( $\alpha \leq 0.05$ ) of applying digital transformation on organizational performance in Jordanian commercial banks through the moderating variable sustainability strategy.*

The researcher employed path analysis to assess the mediator role of sustainability strategy between digital transformation and organizational performance. Therefore, before conducting the path analysis and analysis of the fourth main hypothesis, Table 7 illustrates the result for each path in the model, the standard error, the critical ratio, and the p-values.

Table 7. Results of the test of the fourth main hypothesis.

Path	Estimate	Standard error	Critical ratio	P-value
Digital transformation – Organizational performance	0.211	0.016	3.666	0.000
Digital transformation – Sustainability strategy	0.536	0.085	6.319	0.000
Sustainability strategy – Organizational performance	0.249	0.050	4.938	0.000

The results presented in Table 7 provide strong evidence of a statistically significant impact of the digital transformation variable on organizational performance and sustainability strategy variables. The impact values for these relationships are 0.211 for organizational performance and 0.536 for sustainability strategy. These values suggest that digital transformation has a moderate to strong effect on both outcomes. Moreover, both impact values are statistically significant at the 0.05 significance level as the p-values for the tests are 0.000 for both relationships. Since these p-values are significantly lower than the 0.05 threshold, this indicates that the observed effects are unlikely to have occurred by chance, reinforcing the robustness of the results.

Table 7 demonstrates a statistically significant relationship between sustainability strategy and organizational performance with an impact value of 0.249. This indicates a moderate positive effect of sustainability strategy on performance outcomes. Additionally, the p-value for this relationship is 0.000 which is less than the 0.05 significance level. This further reinforces the conclusion that sustainability strategy significantly influences organizational performance. Together, these findings highlight the critical roles that both digital transformation and sustainability strategies play in enhancing organizational performance. The positive impacts of these variables emphasize their relevance in today's business environment, particularly for organizations aiming to improve performance while integrating innovative and sustainable practices. Ultimately, these results suggest that digital transformation and sustainability are key drivers of success in an era where technological advancements and sustainability efforts are essential for growth and competitiveness.

The results show that the sustainability strategy plays a significant role as a moderator between digital transformation and organizational performance. Therefore, the direct and indirect effects in the model were analyzed to identify the size of the effects and their sources. Table 8 illustrates the results.

Table 8. Result of the direct and indirect effect.

Variables	Direct impact		Indirect impact		Total impact	
	Sustainability strategy	Digital transformation	Sustainability strategy	Digital transformation	Sustainability strategy	Digital transformation
Digital transformation	0.536	0.000	0.000	0.000	0.536	0.000
Organizational performance	0.211	0.249	0.000	0.333	0.211	0.582

Based on Table 8, only one indirect impact appears. This indirect impact is 0.333 and belongs to the digital transformation indirect impact on organizational performance through a sustainability strategy. This result increases the total impact of digital transformation on organizational performance (0.582).

## 5. RECOMMENDATIONS AND CONCLUSION

The findings of this study indicate a statistically significant impact at the 0.05 significance level ( $\alpha \leq 0.05$ ) of applying digital transformation encompassing managerial capability and operational capability on organizational performance in Jordanian commercial banks. The results reveal that managerial and operational capabilities, when enhanced through digital transformation initiatives can significantly contribute to improving the overall performance and operational efficiency of banks. This finding highlights the critical role of embracing digital technologies and adopting a comprehensive transformation strategy to achieve higher performance levels in the banking sector.

The study also discovered that digital transformation significantly influences organizational performance through the moderating role of sustainability strategy. This finding highlights the importance of incorporating sustainability initiatives alongside digital transformation efforts. Sustainability strategies not only align with global trends toward environmental responsibility but also contribute to enhancing the long-term competitiveness and resilience of organizations. In the context of Jordanian commercial banks, sustainability strategies play a vital role in improving the effectiveness of digital transformation in boosting organizational performance. This reinforces the notion that modern banking institutions should adopt an integrated approach where sustainability and digitalization are not separate efforts but work together to reinforce each other.

### 5.1. Recommendations

- Strengthening digital infrastructure and services.
- Raising awareness of digital transformation and sustainability.
- Expanding research on customer satisfaction and loyalty.
- Adopting a holistic approach to digital transformation.
- Enhancing collaboration between digital and sustainability initiatives.

### 5.2. Conclusion

To conclude, the study emphasizes the crucial impact of digital transformation, managerial and operational capabilities, and sustainability strategies on the performance of Jordanian commercial banks. The recommendations offered aim to assist these banks in overcoming the challenges of the digital age while aligning their operations with sustainability objectives. Jordanian commercial banks can stay competitive, adapt to customer needs, and contribute to long-term social and economic growth by investing in digital infrastructure, nurturing a culture of innovation, and consistently enhancing customer experiences.

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**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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