





# “The impact of adopting the digital strategy on the competitive advantage: A moderating role of employee satisfaction in the Jordanian banking sector”

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# THE IMPACT OF ADOPTING THE DIGITAL STRATEGY ON THE COMPETITIVE ADVANTAGE: A MODERATING ROLE OF EMPLOYEE SATISFACTION IN THE JORDANIAN BANKING SECTOR

## Abstract

Digital strategy is one of the methods adopted by organizations to use digital technology to achieve business goals, improve performance, and enhance competitive advantage by significantly improving customer experience. Success in achieving competitive advantage requires implementing the digital strategy effectively. The study aims to determine the impact of adopting the digital strategy on the possession of competitive advantage with the moderating role of employee satisfaction in the Jordanian banking sector. Data were collected from 397 employees working in twelve Jordanian banks. The SPSS software was used to analyze the data and test the hypotheses. The results show that adopting digital strategy dimensions explains 55.6% of the variance of competitive advantage dimensions. Data, quality, and flexibility explain 45.8%, 44.8%, and 47.3% of the variance of competitive advantage, respectively. Also, the results show a positive impact of digital strategy dimensions (technologies, data, human resources, and operations) on competitive advantage dimensions (quality, flexibility, and cost). Moreover, the results also show that employee satisfaction moderates and enhances the relationship between adopting the digital strategy and possessing competitive advantages. The study recommended that decision-makers in commercial banks pay attention to applying digital technology because it enhances the speed and quality of providing services to customers.

## Keywords

digital technologies, operations, competitive advantage, quality, cost, employee satisfaction, banking sector

## JEL Classification

M10, M15

## INTRODUCTION

Digital technology has opened great horizons in how services are provided and has changed the mechanism of obtaining these services in many areas (Bovsh et al., 2020). The need to use technology has emerged in various sectors, especially the banking sector, as it plays an important role in industry and provides services such as ATMs, internet banks, electronic messages via smartphones, and banking services (Tunay et al., 2019). Therefore, adopting a digital strategy requires banks to increase their effectiveness and performance to maintain their position among competitors (Allam, 2022). Moreover, banks must develop their capabilities and keep abreast of technological developments that help bank ensure their competitive position among other banks (Baries & Jabr, 2020). On the other hand, Remondino and Zanin (2022) state that digitization should positively affect the creation of competitive value and sustainability in organizations. Moreover, using technology can significantly impact achieving com-



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petitive advantage by improving efficiency and productivity, such as automation, customer relationship management, enterprise resource planning systems, innovation and product development, and smart technology, such as the Internet of Things (IoT). These can further improve productivity and operation and enhance competitive advantages (Fannoush, 2022; Shbiei & Al-Olimat, 2016).

Banks have advantages achieved by using technology and digital strategy, such as reducing the cost of operations and waiting times for more convenient service. However, implementing the digital strategy would expose the work of banks to many risks, such as electronic theft, hacking, account hacking, money transfer risks, and many others, and thus this would affect the bank's reputation and competitive advantage. In addition, it puts additional pressure on employees to deal with digitization and take the necessary measures and exercises to protect data from these risks.

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## 1. LITERATURE REVIEW AND HYPOTHESES

Strategy is an action plan designed to achieve some long-term objectives and therefore requires that the organization have a vision for this (Mainardes et al., 2014). However, an essential part of strategic planning is the identification of general directions that may affect the work and performance of the organization, which is critical when formulating a digital strategy. Although recent studies have attempted to explore digital strategy, there is no clear, unique, and well-accepted definition (Madsen & Hurst, 2018). Turuk (2020) defined digital strategy as a pattern of competitive actions undertaken by the company while competing by providing digitally enabled products or services. According to Proksch et al. (2021), it is a set of permanent technologies such as mobile technologies, artificial intelligence, machine learning, the Internet, and robotics. It is also defined as a way of thinking that translates into a way of working that enables individuals or enterprises to innovate using technology, techniques, and modern systems (Abudaqa et al., 2022). Therefore, digital strategy is a long-term plan to transform the organization's work procedures into a digital style to keep pace with developments in the business environment and achieve the required competitive advantage.

The elements or aspects of the digital strategy have been multiplied by the diversity of opinions of researchers and scholars in this field. Among the most prominent elements of the digital strategy are technologies, data, HR, and operations, provided by S. Lee and D. Lee (2020). Technologies refer to all applications of information systems used in the organization (Taherdoost, 2023). It seeks to

simplify and facilitate activities and procedures within the organization and enhance its performance, thus achieving competitive advantage through the speed, accuracy, and high transparency this technology provides (Saura et al., 2022). While the data are the basis of all commercial banking systems, they are also the main component on which the rest of the operations are based.

On the other hand, HR is all the human cadres in the organization, from the employees to the heads, as these cadres employ their efforts and capacities to carry out the organization's work using modern technology. Finally, operations consist of the implemented activities that facilitate the achievement of organizational aims. Operational efficiency is critical for business organizations as it enables them to offer competitive prices to customers, making it an indispensable requirement for organizations to thrive in the intensely competitive business landscape (Habib et al., 2022).

The digital strategy promotes exploiting technology trends in the performance and implementation of banks' organizational and operational processes. It provides the digital strategy with knowledge and tools to support banks during the rapid change required by the modern era. Digital technology facilitates access to all services banks provide to their customers (Afaishat et al., 2022). On the other hand, rapid technological development led to the opening of markets and the competition between economic and commercial enterprises, as each of them seeks to achieve excellence to ensure its survival and continuity in the market. It has become necessary for all kinds of these enterprises to achieve a competitive advantage over others in the same field. It is defined as a unique

position of the enterprise against its competitors, which comes from a set of unique features that allow it to perform better than competitors (Nzioka & Kariuki, 2021).

Alwafe and Megdadi (2020) emphasized that the competitive advantage represents the corporation's ability to provide customers with more modern, effective, efficient, and quality products and services than other competitors in the market. It is also achieving continuous success for this enterprise by raising the productivity of the production factors established in the production process: labor, capital, and technology. Kamau (2020) presented several aspects of competitive advantage, summarized as quality, flexibility, and cost. For quality, the bank's achievement of a high level of quality in its advanced and new services and products will increase the value of these services and products to its customers, enable it to be distinguished, excellent, perpetuate, and continue to achieve competitive advantage. Flexibility relates to the bank's operations and enables it to respond quickly and efficiently to client needs. Flexibility has become an influential aspect of the competition between banks, including a wide variety of services and products, continuously providing new services, and the speed in developing those existing services and responding to the clients' needs and desires. As for the cost, the bank operations department seeks to reduce production costs compared to other banks and reach competitive prices that strengthen the competitive advantage of its services and products in the market. In order to compete in these markets, banks must produce at the lowest possible cost.

According to Alomari et al. (2023), studying competitive advantage in organizations is important in directing them toward achieving their goals with high efficiency. Understanding competitive factors helps these organizations provide their services better and thus achieve excellence in performance. In the same context, some studies have linked adopting the digital strategy with a competitive advantage. Priyanto et al. (2023) showed that a competitive advantage for companies is influenced strongly by their digital strategy, represented by managerial skills, operational capabilities, and IT skills. Agustian et al. (2023) confirmed that the impact of digital strategy on business models and competi-

tive advantage is an aspect that cannot be ignored. This digital strategy changed the fundamentals of how organizations operate and interact with customers and how they can win the competition in the market. Also, Fannoush (2022), Remondino and Zanin (2022), and Zhang et al. (2023) showed that the use of IT in work, specifically in banks, has a major role in developing and improving banking services following the desires and aspirations of customers, thus achieving excellence in providing services and achieving the required competitive advantage. Shbiei and Al-Olimat (2016) showed that the banking sector essentially seeks to provide all customer requirements with high efficiency and reduce the cost of banking operations. Applying digital strategies and shifting to automating all banking operations and services, in turn, achieves a competitive advantage for banks. Fannoush (2022) showed that the use of information technology in work has a considerable role in quality as a main item of competitive advantage. According to Shbiei and Al-Olimat (2016), the advanced technologies used by Jordanian commercial banks will facilitate obtaining the required information and data with high accuracy and speed. This will positively impact the nature and quality of the services the bank provides to its customers. Strilets et al. (2022) emphasized that the digitization of business is considered a basis for achieving the success and distinction of the organization in the long term. Digitization strategies can contribute to the organization retaining its customers, increasing their number, and reducing the costs of operations and providing services, increasing its competitive ability compared to other organizations.

On the other hand, management would play an essential role in motivating employees and encouraging them to increase production and improve quality, just as the management's individual interests, dealings with them, and interests, feelings, and aspirations motivate it to deal efficiently and effectively with its tasks. Whereas organizations generally, in their success, rely on the extent of the effectiveness of individuals in their work, which in turn depends on the degree of their satisfaction and the level of their motivation (Ali & Anwar, 2021).

Employee satisfaction is defined as an indicator of the behavior and motivation of employees toward their work. An employee with a high employee satis-

faction rate has a greater motivation to work. In contrast, an employee who has a low rate of employee satisfaction has a negative and low rate of behavior and motivation to work (Akhter et al., 2021).

Given the preceding, the study also considers that employee satisfaction is not a goal. The reason for the increased interest of researchers and enterprise leaders in it is due to its great importance in promoting motivation among employees, as it constitutes a fundamental precedence for many behaviors within the enterprise, such as performance, organizational citizenship, handling customer complaints, and giving their best to provide services in the best way. Therefore, employee satisfaction plays a vital role in increasing their commitment to work and performing their job perfectly, contributing to the enterprise's progress and excellence compared to other competitors.

The use of digital strategies within work, specifically in the banking sector, would make work easier and more flexible, reduce the workload on employees, and reduce errors at work, in addition to speeding up service provision to customers, which would increase employee satisfaction and motivate them to work. Achievement and excellence in providing services contribute to the organization's competitive advantage. Cijan et al. (2019) confirmed a relationship between the use of digitization at work and job satisfaction, as introducing technology and digital services to work increased employee satisfaction. This ultimately leads to increased employee motivation to work and achieve, thus increasing the organization's competitive capabilities.

Given the importance of achieving a competitive advantage for financial institutions and commercial banks, banks seek to provide the best services to their customers in light of the spread of modern applications and digital technologies to gain a competitive advantage that distinguishes them from the rest of the banks.

This study aims to determine the impact of adopting the digital strategy on the competitive advantage through employee satisfaction as a moderating variable in the Jordanian banking sector. Therefore, this study developed the following hypotheses:

*H01: Adoption of digital strategy (techniques, data, HR, operations) affects the competitive advantage (quality, flexibility, and cost) of Jordanian commercial banks.*

*H01.1: Adoption of digital strategy (technologies, data, HR, operations) affects the quality of Jordanian commercial banks.*

*H01.2: Adoption of digital strategy (technologies, data, HR, operations) affects the flexibility of Jordanian commercial banks.*

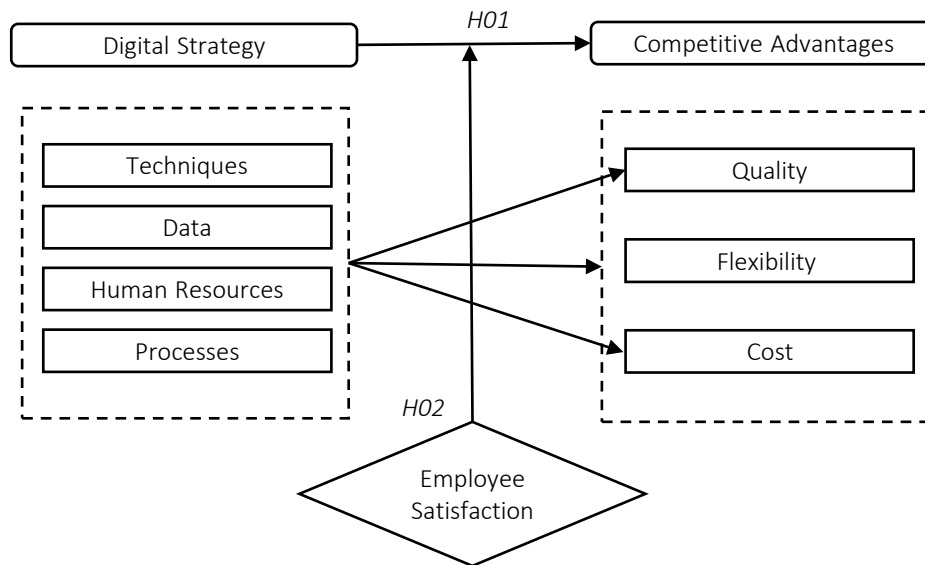
*H01.3: Adoption of digital strategy (technologies, data, HR, operations) affects the costs in Jordanian commercial banks.*

*H02: Adoption of digital strategy (technologies, data, HR, operations) affects competitive advantage (quality, flexibility, cost) moderated by employee satisfaction in Jordanian commercial banks.*

## 2. METHODS

The conceptual framework presented in Figure 1 shows the relationships between the study variables; there are three relationships between digital strategy and competitive advantage.

Quantitative techniques are more suitable according to the components assessed and the study's objectives. Quantitative study methods are frequently used on a sizable number of respondents, as this will increase the likelihood of result generalization. Participation of sample respondents in survey research can improve the model's capacity to evaluate using multivariate statistical tools (Sekaran & Bougie, 2019). The analysis depended on the descriptive and analytical approaches, where the descriptive approach represents a set of procedures followed integrally to describe the phenomenon or problem discussed depending on facts and data and their classification. The analytical approach is an approach that is based on analyzing data and drawing conclusions for dissemination. The descriptive approach was represented in describing the main variables of the study and their sub-dimensions. The analytical approach was represented by clarifying the effect of adopting the digital



**Figure 1.** Conceptual framework

strategy on having a competitive advantage in Jordanian banks and identifying the role of employee satisfaction in this impact.

The study adopted two types of data; the first type is primary data obtained by reviewing previous relevant studies, while secondary data were collected using the questionnaire tool from the study sample members. The study population includes all twelve Jordanian commercial banks, while the study sample comprises all the employees in those banks, whose number is about 15,881. The sampling units were selected in a random manner, where 450 questionnaires were distributed to the individuals. 397 questionnaires were retrieved and declared valid for analysis. Table 1 shows the distribution of sampling units.

**Table 1.** Sample distribution

No.	Jordanian bank	Sampled members
1	Arab Bank	87
2	The Housing Bank For Trade & Finance	71
3	Jordan Commercial Bank	22
4	Cairo Amman Bank	48
5	Bank Al Etihad	12
6	Jordan Ahli Bank	16
7	Arab Banking Corporation	19
8	Jordan Kuwait Bank	18
9	Arab Jordan Investment Bank	20
10	Capital Bank of Jordan	26
11	Bank of Jordan	44
12	Invest Bank	14
Total		397

Due to the nature of the data, the use of a questionnaire is considered the most appropriate tool for this type of study due to the approach adopted, the time available for its completion, and the available financial capabilities. Therefore, the questionnaire included three parts. The first part consisted of 14 items to measure the competitive advantage distributed to four dimensions, and the second part consisted of 12 items to measure competitive advantage with three dimensions. The third part consisted of 10 items to measure employee satisfaction. A 5-point Likert scale was used to provide five degrees of approval ranging from strongly agree (5) to strongly disagree (1). The measure used to determine the sample estimate level was as follows: 1-2.33 (low), 2.34-3.67 (medium), 3.68-5 (high).

### 3. RESULTS

Before analyzing the data and arriving at the results, the stability was verified, which means the extent of consensus and consistency in the questionnaire results and the stability of the results over time. The stability test gives the same results if applied to the same group of individuals again and at another time with the same conditions remaining. The result is statistically acceptable if its value is greater than 0.60; the closer the value to 1 (Sekaran & Bougie, 2019), the higher the degrees of stability. Table 2 shows the result of Cronbach's alpha for the final sample, all higher than 0.60. Therefore, the tool of this study is stable.

**Table 2.** Stability of the study tool

Variables	Paragraph No.	Cronbach's alpha
Techniques	4	0.824
Data	4	0.861
Human resources	4	0.792
Processes	4	0.890
<b>Independent variable: Digital strategy</b>	<b>16</b>	<b>0.934</b>
Quality	4	0.809
Flexibility	4	0.763
Cost	4	0.833
<b>Dependent variable: Competitive advantage</b>	<b>12</b>	<b>0.895</b>
<b>Moderating variable: Employee satisfaction</b>	<b>10</b>	<b>0.908</b>

Also, the absence of a multicollinearity problem between independent variables has been confirmed by measuring the Variance Inflation Factor (VIF). Myers and Myers (1990) indicated that the values of the VIF test shall not exceed 5. Linearity between two independent variables is so high that they can act as an alternative to each other, and the tolerance test for each variable of the independent study, and the values shall be greater than 0.05 (Field, 2013). It was confirmed that the data follow a normal distribution, based on calculating the value of the skewness, considering that the data follow a normal distribution if the skewness value is  $1 \pm$ ; Table 3 shows the results.

**Table 3.** Variance inflation coefficient, tolerance variance, and skewness test

Independent variables	Tolerance	VIF	(Skewness)
Techniques	.681	1.468	0.102
Data	.485	2.063	0.065
Human resources	.405	2.468	0.409
Processes	.444	2.253	0.836
Quality	–	–	0.110
Flexibility	–	–	0.293
Cost	–	–	0.415
Employee satisfaction	–	–	0.162

The VIF values ranged between 1.468 and 2.468, all less than 5. This indicates the absence of multiple linear overlaps between the dimensions of the digital strategy. The tolerance test values ranged between 0.405 and 0.681, greater than 0.05; this indicates no high correlation between the independent study variables, indicating the data suitability for the regression analysis test. Table 3 shows that the skewness values for all study variables were  $\pm 1$ . Therefore, the data of this study are naturally distributed and valid for conducting all statistical scientific tests that the study needs.

As for the results of the data analysis, the statistical description (arithmetic mean and standard deviation) of study variables was first determined, and then the hypotheses were tested. Table 4 shows the results of the statistical description.

Table 4 shows that the mean of the independent variable dimensions (adopting digital strategy) in Jordanian commercial banks was 3.70; the techniques dimension had the highest arithmetic mean, reaching 3.80 with an SD of 0.79. The data dimension had an arithmetic mean of 3.55 with an SD of 0.87. The general arithmetic mean for the dimensions of the dependent variable (competi-

**Table 4.** Arithmetic mean and standard deviations

Dimension	Arithmetic mean	Standard deviations	Grade	level
Techniques	3.80	0.79	1	High level
Data	3.55	0.87	4	Medium level
Human resources	3.74	0.89	2	High level
Processes	3.71	0.82	3	High level
<b>Independent variable: Adopting digital strategy</b>	<b>3.70</b>	<b>0.70</b>	–	<b>High level</b>
Quality	3.60	0.87	2	Medium level
Flexibility	3.62	0.90	1	Medium level
Cost	3.55	0.84	3	Medium level
<b>Dependent variable: Competitive advantage</b>	<b>3.59</b>	<b>0.78</b>	–	<b>Medium level</b>
<b>Moderating variable: Employee satisfaction</b>	<b>3.51</b>	<b>0.77</b>	–	<b>Medium level</b>

**Table 5.** Multiple linear regression for the first hypothesis

Dependent variable	Model summary			ANOVA		
	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	DF	F Calculated	Sig F
Competitive advantage	0.746	0.556	0.552	4	128,221	0.000*

Note: \* Statistically significant at ( $\alpha \leq 0.05$ ).

**Table 6.** Regression coefficients for the first hypothesis

Dimension	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	.652	.147	–	4.421	.000
Techniques	.086	.041	.087	2.130	.034
Data	.333	.044	.367	7.604	.000
HR	.171	.047	.194	3.671	.000
Operations	.213	.048	.223	4.418	.000

tive advantage) in Jordanian commercial banks was 3.59, at medium level. The flexibility dimension had the highest arithmetic mean (3.62) with an SD of 0.90, which is medium level. At the same time, it came in third and last place after the cost dimension (with an arithmetic mean of 3.55 and SD of 0.84, medium level). Regarding the moderating variable, employee satisfaction showed an arithmetic mean of 3.51 and an SD of 0.77.

The first hypothesis was formulated to determine the effect of adopting the digital strategy in having a competitive advantage in Jordanian commercial banks. This hypothesis was tested using multiple regression analysis. For the first main hypothesis, the results of multiple linear regression are shown in Table 5.

As seen from Table 5, the validity of the MR test model points out the phenomenon where the coefficient of relationship (R) was 0.746. It refers to an average and acceptable relationship, and the value of R<sup>2</sup> reached 0.556; that is, the independent variables could point out 55.6% of the changes in the dependent variable, and the rest is due to other variables. Table 6 shows the value and statistical significance of F for the dimensions together, which amounted to 122.828 higher than its tabular value (2.26) at the significance level of 0.000 less than 0.05, signifying the validity of the MR test model.

As can be seen from Table 6, by reviewing the impact values of each dimension of the independent variable, it turns out that all dimensions (techniques, data, HR, operations) have a statistically

significant positive effect individually on quality at the significance level ( $0.05 \geq \alpha$ ), where the non-standard values of Beta were 0.086, 0.333, 0.171, and 0.213. The t-values were 4.418, 3.671, 7.604, and 2.130, respectively, which is higher than its tabular value (1.96), with a significance level of 0.034, 0.000, 0.000, and 0.000, less than 0.05. The prediction equation is as follows:

$$\text{Competitive advantage} = .652 + (0.086)X_1 + (0.333)X_2 + (.171)X_3 + (0.213)X_4 \quad (1)$$

An increase of one unit in techniques, data, human resources, and operations leads to an increase of 8.6%, 33.3%, 17.1%, and 21.3% units in competitive advantage. Therefore, the first hypothesis is accepted.

Sub-hypotheses were formulated to determine the effect of adopting the digital strategy on competitive advantage dimensions individually (quality, flexibility, and cost) in Jordanian commercial banks. The results of testing of sub-hypotheses are shown in Table 7.

The first sub-hypothesis was formulated to determine how adopting the digital strategy affects quality in Jordanian commercial banks. As seen from Table 7, the validity of the MR test model points out the phenomenon where the coefficient of relationship (R) was 0.677. It refers to an average and acceptable relationship, and the value of R<sup>2</sup> reached 0.458; that is, the independent variables could point out 45.8% of the changes in the dependent variable, and the rest is due to other variables. Table 7 shows the value and statistical significance



**Table 7.** Simple linear regression for the sub-hypotheses

Dependent variables	Model Summary			ANOVA		
	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	DF	F Calculated	Sig F
Quality	0.677	0.458	0.453	4	428.28	0.000*
Flexibility	0.669	0.448	0.442	4	255.97	0.000*
Cost	0.688	0.473	0.467	4	548.78	0.000*

Note: \* Statistically significant at  $\alpha \leq 0.05$ .

of F for the dimensions together, which amounted to 82.824, higher than its tabular value of 2.26 at the significance level of 0.000, less than 0.05, signifying the validity of the MR test model. Therefore, the first sub-hypothesis is accepted.

The second sub-hypothesis was formulated to determine the effect of adopting the digital strategy on the flexibility of Jordanian commercial banks. Table shows 7 the validity of the MR test model to point out the phenomenon, where the coefficient of relationship (R) was 0.669. It refers to an average and acceptable relationship, and the value of R<sup>2</sup> reached 0.448; that is, the independent variables were able to point out 44.8% of the changes in the dependent variable, and the rest is due to other variables. Table 7 shows the value and statistical significance of F for the dimensions together, which amounted to 79.552 higher than its tabular value (2.26) at the level of significance 0.000, less than 0.05, signifying the validity of the MR test model. Therefore, the second sub-hypothesis is accepted.

The third sub-hypothesis was formulated to determine the effect of adopting the digital strategy on costs in Jordanian commercial banks. As seen in Table ,7 the validity of the MR test model to point out the phenomenon where the coefficient of relationship (R) was 0.688. It refers to an average and acceptable relationship, and the value of R<sup>2</sup> reached 0.473; that is, the independent variables

could point out 47.3% of changes in the dependent variable, and the rest is due to other variables. Table 7 also shows the value and statistical significance of F for the dimensions together, which amounted to 87.845, higher than its tabular value (2.26) at the level of significance 0.000, less than 0.05, signifying the validity of the MR test model. Therefore, the third sub-hypothesis is accepted.

To test the main second hypothesis, the study conducted a hierarchical multiple regression analysis to specify the impact of adopting the digital strategy in owning competitive advantage with employee satisfaction as a moderating variable in Jordanian commercial banks.

Table 8 shows the results of the hierarchical multiple regression test built on two models. The results of the first model showed that the value of the degree of effect ( $\beta$ ) was 0.825, and the value of R<sup>2</sup> was the interpretation coefficient (0.538). That is, the adoption of the digital strategy pointed out 53.8% of the change in competitive advantage at the significance level 0.000. In the second model, the moderating variable of employee satisfaction had the value of the degree of effect ( $\beta$ ) 0.340, 0.620; the results showed that the value of R<sup>2</sup> increased by 0.182 to 0.721. The magnitude of the change in the value of F (257.273) at the significance level of this model is 0.000. This confirms the moral role of employee satisfaction in improving the impact of adopting the digital strategy (technologies, data,

**Table 8.** Hierarchical multiple regression analysis of the second main hypothesis

Dependent variable	Independent variables	First model			Second model		
		$\beta$	T	Sig.	$\beta$	T	Sig.
Competitive advantage	Digital Strategy	.825	21.450	0.000	-	-	-
	Digital Strategy	-	-	-	.340	7.977	.000
	X Employee satisfaction	-	-	-	.620	16.040	.000
	R	-	.734	-	-	.849	-
	R <sup>2</sup>	-	.538	-	-	.721	-
	$\Delta R^2$	-	.538	-	-	.182	-
	$\Delta F$	-	460.092	-	-	257.273	-
	Sig $\Delta F$	-	0.000	-	-	0.000	-

HR, processes) in acquiring competitive advantage (quality, flexibility, cost). Therefore, the study accepts the second hypothesis.

## 4. DISCUSSION

The findings revealed that adopting a digital strategy affects Jordanian banks' competitive advantage. This is explained by the fact that a strategy depends on following new plans or methods in implementing organizational operations, procedures, activities, and practices in banks using a set of constantly evolving technologies that improve business performance. Therefore, this enables banks to excel and innovate in the services they deliver to customers, giving them a distinguished and reputable position among competitors. The use of the digital strategy of applying digital transformation systems and technologies, which consists of building a technology-based strategy and providing human, technical, and procedural requirements, positively affects the enhancement of the competitive advantage of banking services. The reason may be that many customers and beneficiaries of services provided by commercial banks are very keen on the security of their data, as it includes all information related to their banking procedures and transactions. The operations dimension also got a second degree in terms of impact on achieving the competitive advantage of commercial banks. This era is considered the era of development and technological progress.

With the use of digital strategies that contribute to improving the quality of operations carried out by commercial banks in the performance of their activities and services, this is an opportunity to attract customers in terms of their interest in all the features of commercial banks. This result agreed with Rashwan and Kassem (2021), who confirmed the positive impact of the digital trans-

formation strategy in increasing the efficiency of banks' performance to enhance the competitive advantage. Hadi and Hmood (2020) indicated the role of digital transformation strategies in achieving a competitive advantage at commercial banks. This is also confirmed by Pristiyono et al. (2022), who indicated great confidence among customers in the digital banking business, which is considered a competitive advantage. In addition, the results of the current study agreed with the results of Shbiei and Al-Olimat (2016), who found an impact of information technology on competitive advantage and the impact of accounting information system effectiveness on competitive advantage in Jordanian commercial banks.

Secondly, the results showed an effect of adopting the digital strategy on owning a competitive advantage with employee satisfaction as a moderating variable in Jordanian commercial banks. This result showed that employee satisfaction has also contributed to developing a positive impact on adopting the digital strategy and its role in the banks' competitive advantage. Whereas employee satisfaction has improved and enhanced the positive trend toward adopting this strategy, it plays an important role in increasing the level of bank activities. It is also considered an indicator of effectiveness and efficiency in raising customer expectations for banking services by allowing employees to use new technology to improve work quality, flow, and functioning. It also helps employees use different methods and ways of dealing with customers and earning their trust and loyalty; this makes them feel good about what they are doing at the bank. In light of the above, the continuous development in technology, systems, and work technology provided by this strategy creates employee satisfaction, which strengthens and improves the level of excellence and innovation of banks among their competitors.

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## CONCLUSION

The study examined the moderating role of employee satisfaction in the relationship between digital strategy and competitive advantage. The results show a positive relationship between adopting digital strategy and competitive advantage, and employee satisfaction moderates the mentioned relationship. Improving employee satisfaction is crucial in strengthening the relationship between digital strategies and achieving competitive advantage in commercial banks. Satisfied employees are more motivated

and creative. When they have high satisfaction with the work environment, they are creative in using digital tools in new ways and provide innovative solutions that enhance the bank's digital strategy. By investing banks in developing employees' skills in digital technology, employees become more able to adopt and understand the digital strategy, which enhances the ability to use technology effectively to achieve competitive goals. Banks can enhance organizational culture by building an innovative and technology-adopting organizational culture that makes employees more responsive to implementing digital strategies in a way that enhances competitive advantage. In addition, when employees are familiar with technology and feel confident in using it, they can improve their work efficiency and increase productivity, which benefits the bank's performance and ability to compete. Based on the results, commercial banks should pay greater attention to applying the best and latest digital technology in their various branches, as the availability of modern digital technology would enhance the speed and quality of providing services to customers. This increases employee motivation to work and thus increases employee satisfaction, contributing to the bank's competitive advantage.

## AUTHOR CONTRIBUTIONS

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## REFERENCES

- Abudaqa, A., Alzhami, R. A., Almujaeni, H., & Ahmed, G. (2022). Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE? *International Journal of Entrepreneurial Venturing*, 14(3), 330-350. <https://dx.doi.org/10.1504/IJEV.2022.124964>
- Afaishat, T. A., Khraim, H., & Al-Maadhede, M. (2022). Effect of network strategic capabilities on digital transformation in Jordanian universities. *Problems and Perspectives in Management*, 20(3), 247-257. [http://dx.doi.org/10.21511/ppm.20\(3\).2022.20](http://dx.doi.org/10.21511/ppm.20(3).2022.20)
- Afaishat, T., & Khraim, H. (2021). Investigating the impact of e-services quality management on decision-making agility. *Uncertain Supply Chain Management*, 9(4), 1061-1070. Retrieved from <https://growingscience.com/beta/uscm/5326-investigating-the-impact-of-e-services-quality-management-on-decision-making-agility.html>
- Agustian, K., Mubarak, E. S., Zen, A., Wiwin, W., & Malik, A. J. (2023). The impact of digital transformation on business models and competitive advantage. *Technology and Society Perspectives*, 1(2), 79-93. <http://dx.doi.org/10.61100/tacit.v1i2.55>
- Akhter, A., Karim, M. M., & Islam, K. M. A. (2021). The impact of emotional intelligence, employee empowerment and cultural intelligence on commercial bank employees' job satisfaction. *Banks and Bank Systems*, 16(4), 11-21. [http://dx.doi.org/10.21511/bbs.16\(4\).2021.02](http://dx.doi.org/10.21511/bbs.16(4).2021.02)
- Ali, B. J., & Anwar, G. (2021). An empirical study of employees' motivation and its influence job satisfaction. *International Journal of Engineering, Business and Management*, 5(2), 21-30. <https://doi.org/10.22161/ijebm.5.2.3>
- Allam, W. (2022). Digital Transformation and Its Impact on Competitive Advantage. *Scientific Journal of Economics and Commerce*, 52(1), 159-220. <http://dx.doi.org/10.21608/JSEC.2022.226811>
- Alomari, K., Farajat, J., & Alao-dat, H. (2023). Organizational competitiveness in NGOs: An empirical study of Jordan. *Problems and Perspectives in Management*, 21(2), 781-795. [http://dx.doi.org/10.21511/ppm.21\(2\).2023.69](http://dx.doi.org/10.21511/ppm.21(2).2023.69)
- Alwafe, S., & Megdadi, Y. A. (2020). The impact of using

- e-services application by mobile phones in achieving competitive advantage in the Jordanian commercial banks. *International Journal of Research in Business & Management*, 2(1), 20-28. Retrieved from <https://ijrbmnet.com/wp-content/uploads/2023/02/3-6.pdf>
10. Baries, A. K., & Jabr, W. Q. (2020). Digital transformation technology and its impact on improving the bank's strategic performance (Analytical research of the views of a sample of managers working in the private commercial banking sector in Karbala). *Iraqi Journal of Administrative Sciences*, 16(65), 201-227. Retrieved from <https://www.iasj.net/iasj/article/190676>
  11. Bolli, T., & Pusterla, F. (2022). Decomposing the effects of digitalization on workers' job satisfaction. *International Review of Economics*, 69, 263-300. <https://doi.org/10.1007/s12232-022-00392-6>
  12. Bovsh, L., Rasulova, A., Bosovska, M., Boiko, M., & Okhrimenko, A. (2020). Digital distribution of hospitality services in the context of the COVID-19 pandemic. *Tourism and Travelling*, 3(1), 34-44. [http://dx.doi.org/10.21511/tt.3\(1\).2022.05](http://dx.doi.org/10.21511/tt.3(1).2022.05)
  13. Cijan, A., Jenic, L., Lamovsek, A., & Stemberger, J. (2019). How digitalization changes the workplace. *Dynamic Relationships Management Journal*, 8(1), 3-12. <http://dx.doi.org/10.17708/DRMJ.2019.v08n01a01>
  14. Fannoush, T. I. (2022). *The impact of bank's mobile application on competitive advantage of Jordanian commercial banks* (Master's Thesis). MEU University.
  15. Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
  16. Habib, S. M., Hussain, H., Al-Faryan, M. A. S., & Hussain, R. Y. (2022). Impact of firm characteristics and ownership structure on firm efficiency: Evidence from nonfinancial firms of Pakistan. *Cogent Economics & Finance*, 10(1), 2106628. <https://doi.org/10.1080/23322039.2022.2106628>
  17. Hadi, A. M., & Hmood, S. J. (2020). Analysis of the role of digital transformation strategies in achieving the edge of financial competition. *International Journal of Innovation, Creativity, and Change*, 10(11), 19-40. Retrieved from [https://www.ijicc.net/images/vol10iss11/101102\\_hadi\\_2020\\_E\\_R.pdf](https://www.ijicc.net/images/vol10iss11/101102_hadi_2020_E_R.pdf)
  18. Kamau, J. G. (2020). *Organizational strategic capabilities, compliance with regulations and competitive advantage of commercial banks in Kenya* (Doctoral Thesis). Kenya Methodist University (KeMU). Retrieved from <http://repository.kemu.ac.ke/handle/123456789/853>
  19. Lee, S. M., & Lee, D. (2020). "Untact": A new customer service strategy in the digital age. *Service Business*, 14(1), 1-22. <https://doi.org/10.1007/s11628-019-00408-2>
  20. Madsen, C., & Hurst, M. (2018). *Digital strategy environmental scan for the Concordia University Digital Strategy Committee*. Concordia University. Retrieved from <https://www.concordia.ca/content/dam/concordia/docs/strategic-directions/Concordia-University-Digital-Strategy-Environmental-Scan.pdf>
  21. Mainardes, E. W., Ferreira, J. J., & Raposo, M. L. (2014). Strategy and strategic management concepts: Are they recognized by management students? *Business Administration and Management*, 1(XVII), 43-61. <https://doi.org/10.15240/tul/001/2014-1-004>
  22. Myers, R. H., & Myers, R. H. (1990). *Classical and modern regression with applications* (Vol. 2, p. 488). Belmont, CA: Duxbury Press.
  23. Nzioka, C., & Kariuki, P. (2021). Influence of strategic internal factors on competitive advantage of commercial banks in Nairobi County, Kenya. *Journal of International Business and Management*, 4(7), 1-16. <https://doi.org/10.37227/JIBM-2021-05-836>
  24. Pristiyono, P., Juliana, J., & Prayoga, Y. (2022). Measuring customer trust through digital transformation of banking as a competitive advantage. *Journal Ekonomi Bisnis Dan Kewirausahaan*, 11(2), 214-229. Retrieved from <https://jurnal.untan.ac.id/index.php/JJ/article/view/51986>
  25. Priyanto, P., Murwaningsari, E., & Augustine, Y. (2023). Impact digital business strategy on competitive advantage in the banking sector. *European Journal of Business and Management Research*, 8(2), 65-70. <https://doi.org/10.24018/ejbm.2023.8.2.1875>
  26. Proksch, D., Rosin, A. F., Stubner, S., & Pinkwart, A. (2021). The influence of a digital strategy on the digitalization of new ventures: The mediating effect of digital capabilities and a digital culture. *Journal of Small Business Management*. <https://doi.org/10.1080/00472778.2021.1883036>
  27. Rashwan, A. R. M. S., & Kassem, Z. A. E. A. (2021). The role of digital transformation in increasing the efficiency of banks' performance to enhance competitive advantage. In A. M. A. Musleh Al-Sartawi (Ed.), *The Big Data-Driven Digital Economy: Artificial and Computational Intelligence* (pp. 325-335). Cham: Springer International Publishing. [https://doi.org/10.1007/978-3-030-73057-4\\_25](https://doi.org/10.1007/978-3-030-73057-4_25)
  28. Remondino, M., & Zanin, A. (2022). Logistics and agri-food: Digitization to increase competitive advantage and sustainability. *Literature Review and the Case of Italy. Sustainability*, 14(2), 787. <https://doi.org/10.3390/su14020787>
  29. Saura, J., R., Skare, M., & Riberio-Navarrete, S. (2022). How does technology enable competitive advantage? Reviewing state of the art and outlining future directions. *Journal of Competitiveness*, 14(4), 172-188. <https://doi.org/10.7441/joc.2022.04.10>
  30. Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill building approach*. New York: John Wiley & Sons.
  31. Shbiei, S. O., & Al-Olimat, N. H. (2016). Impact of information technology on competitive advantage in Jordanian Commercial Banks. Accounting information system effectiveness as a mediating variable. *International Journal of Academic Research in Accounting Finance and Management*

- Sciences*, 6(3), 202-211. <http://dx.doi.org/10.6007/IJARAFMS/v6-i3/2255>
32. Strilets, V., Frolov, S., Datsenko, V., Tymoshenko, O., & Yatsko, M. (2022). State support for the digitalization of SMEs in European countries. *Problems and Perspectives in Management*, 20(4), 290-305. [http://dx.doi.org/10.21511/ppm.20\(4\).2022.22](http://dx.doi.org/10.21511/ppm.20(4).2022.22)
33. Taherdoost, H. (2023). The role of different types of management information system applications in business development: Concepts, and limitations. *Cloud Computing and Data Science*, 4(1), 31-48. <https://doi.org/10.37256/ccds.4120231959>
34. Tunay, N., Yüksel, S., & Tunay, K. B. (2019). The effects of technology on bank performance in advanced and emerging economies: An empirical analysis. In H. Dinçer & S. Yüksel (Eds.), *Handbook of Research on Managerial Thinking in Global Business Economics* (pp. 263-280). IGI Global. [dx.doi.org/10.4018/978-1-5225-7180-3.ch015](http://dx.doi.org/10.4018/978-1-5225-7180-3.ch015)
35. Turuk, M. (2020). Digital strategy. *International Journal of Contemporary Business and Entrepreneurship*, 1(1), 62-76. Retrieved from <https://hrcak.srce.hr/file/356366>
36. Zhang, Y., Liu, H., Li, S., & Xing, C. (2023). The digital transformation effect in trade credit uptake: The buyer perspective. *Emerging Markets Finance and Trade*, 59(7), 2056-2078. <https://doi.org/10.1080/1540496X.2023.2172319>