

The Impact of Digital Transformation on the Relationship Between Commercial Bank Customers' Empowerment and Competitive Advantage

By

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Abstract: The article aimed to identify the impact of digital transformation as a modified variable on the relationship between commercial bank customers' empowerment and the competitive advantage of commercial banks. The analytical descriptive approach was adopted using a questionnaire distributed to a random sample of (284) employees in Iraqi commercial banks. Multiple regression equations and hierarchical regression equations were used. The results showed a statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital transformation as a modified variable on the relationship between the capabilities of commercial banks' customers and the competitive advantage of commercial banks. The impact of digital transformation as a modified variable on the relationship between customer empowerment and the competitive advantage of commercial banks.

Keywords: customers' empowerment; commercial banks; competitive advantage; digital transformation.

Introduction:

There has recently been clear and substantial progress in all aspects of economic, financial, and banking life because of the development of information and communication technology. This development has led to a change in the behavior of the economic units in the economic and financial institutions. Accordingly, most institutions hastened to keep pace with this development, perhaps the most prominent of which are the financial and banking sectors. Hence, the banking industry at the global and local levels witnessed a fundamental transformation that coincided with the emergence of financial technology, and it provided banks with new horizons towards digital transformation in banking products and services, so many banking services of a digital nature appeared to reach the desire of customers in the digital age.

Digital services depend on the application of developed ideas or methods that will meet the current or new needs in the market by changing the products and services it provides to meet the changing needs of the market and customers to win the satisfaction of new customers as well as the pride of existing customers in the services; Digital services do not necessarily mean that services are completed quickly, but rather that they are performed in a different and new way.

The competitive advantage of banks is one of the strengths that they have in dealing with the variables surrounding them and the competing banking institutions, as they depend on a set of features and characteristics of banks, which are the result of their experiences gained through their work, which can make them superior to other competing banking institutions, whether in operational processes, resources, prices, or the human element.

With the exacerbation of smartphone use and the steady increase in downloading commercial and service applications on the Internet, application development and adoption within marketing plans have become essential factors in promoting products and services electronically for many brands.

Therefore, banks have paid much attention to digital services and their uses to provide distinguished and fast services that mainly contribute to achieving competitive advantage. Electronic banking is one of the results of the tremendous technological development in communications. Manifestations of this development were the development of new payment methods that are appropriate to the nature and requirements of electronic commerce, and the customer can benefit from banking services such as paying invoices for goods and services through telephone and electronic communication.

This means that electronic banking transactions provided several customer advantages and led to new opportunities for banking businesses to achieve competitive advantages and profitability in the long term.

They also provided new marketing opportunities and widespread distribution to improve the quality of banking services.

Customer capabilities, in general, are a comprehensive strategy and an integrated system to identify the most profitable customers, understand their requirements, desires, and priorities, and work to satisfy them through effective communication and analyzing their data to increase their loyalty and profitability.

Customer capabilities are systems for attracting, acquiring, and retaining profitable customers by analyzing their information, understanding their requirements, establishing solid relationships with comfortable customers only and reducing the level of relationships with unprofitable customers. Customer capabilities strategically aim to create value for both the bank and its

customers through the appropriate use of technology, data, and knowledge of banks, which requires the bank to focus, train and invest in new technology and software to help develop the added value of customer capabilities, and thus combines customer capabilities between employees, technology and organizational capabilities to ensure Linking between the bank and its customers. Hence, this study came to identify the impact of digital transformation as a modified variable on the relationship between the capabilities of commercial bank customers and the competitive advantage of commercial banks.

The problem statement :

The current banking environment has become a competitive though complex risk environment. The Iraqi banking sector went through several stages of development until it became one of the most critical components of the financial system, but rather the main factor in the economy's stability. The qualitative development and maturity of banking systems have also led to increased competition among banks due to their similar services. Consequently, this maturity revealed new foundations for competition among banks, which means that bank customers tend to seek banking services not only for the marketing content that they get from that service but instead because of the symbolic values that characterize these contents that the customer is looking for, it constitutes a better quality for him from his point of view.

The difference among banks in Iraq in the level of interest directed to customers has motivated the researcher to research this subject as one of the essential topics. Moreover, based on the importance of the role of commercial banks and the services that they provide to customers, and based on the author's interests and his work in a sector that uses intelligent applications, and his research operations during personal interviews with some employees of commercial banks, as well as the lack of Arab studies about the impact of digital transformation as a modified variable on the relationship between commercial banks' customers' empowerment and the competitive advantage.

The aim :

The article aims to identify the impact of digital transformation as a modified variable on the relationship between commercial bank customers' empowerment and the competitive advantage of commercial banks.

The questions :

(1) Is there a statistically significant effect at ($\alpha \leq 0.05$) of commercial bank customers' empowerment on the competitive advantage?

(2) What is the impact of digital transformation as a modified variable on the relationship between commercial bank customers' empowerment and competitive advantage?

Hypotheses :

The following hypotheses have been put forward:

H01: There is no statistically significant effect on the competitive advantage at the significance level ($\alpha \leq 0.05$) of commercial bank customers' empowerment.

H02: There is no effect of digital transformation as a modified variable on the relationship between commercial banks' customer empowerment and competitive advantage.

The importance :

The article's topic is theoretically vital because it consolidates the realization of theoretical concepts about commercial bank customer empowerment, competitive advantage, and digital transformation. Hopefully, this will lead to a starting point for future studies regarding previous concepts, especially in banking and other business sectors.

In practice, the importance of the topic stems from the nature of the study community, represented by commercial banks in which the study was conducted. The current article also presents a clear vision for officials in banking institutions in general and Iraqi commercial banks in particular about the impact of customer empowerment on the competitive advantage in commercial banks with digital transformation as a modified variable. Through the results, some proposals that banks can invest in can be reached.

Terminology :

* *Competitive advantage*: The bank's ability to innovate and develop banking services gives it resources and build capabilities that are unavailable to competitors(Al Karim et al., 2023).

* *Customer empowerment*: transferring power and control over values, capabilities, and choices from banks to customers, motivating engagement, and achieving more excellent status and success for the customer(Al-Masry, 2018).

* *Customer contribution*: developing new products and services that meet their needs and desires through periodic meetings, market assessment meetings, and special meetings between the bank and customers. The customer usually contributes to this process by providing information related to technical support and market needs, which leads to a better understanding of new customer requirements and needs(Al-Masry, 2018).

* *Technological technology*: The customer capabilities system is based on modern technology and uses effective methods to facilitate the various activities of the customer capabilities system. It helps the customer in many aspects, including data storage and search and providing software related to customer capabilities(Al-Masry, 2018).

* *Digital Transformation*: The process of integrating digital technology with all areas of business and all aspects of human life and society to improve operating efficiency, reduce errors, increase productivity, improve product quality, create new products, and provide the best services to the public and customers(Hashem, 2019).

Literature review

The digital transformation

In recent years, the term "digital transformation" has become popular among managers and experts because of its great importance in organizational changes due to technological developments. Some authors indicated that digital transformation is mainly related to media. So, they considered the digital environment an appropriate environment to promote the values of love and peace through different media (Aleessawi, 2022). So, digital transformation refers to using digital technologies to create value and change the work style and model, as it works on a fundamental change in the business within the organization, such as creating new products and its strategy (Berghaus & Back, 2020).

Conversely, digital transformation produces large amounts of new information, which can contribute to decision-making and strategic planning (Lorenz et al., 2020). To get an accurate understanding of the concept of digital transformation, the author reviewed the relevant theoretical literature and previous studies and extracted the following definitions of digital transformation:

- **The process of improving entities and organizations through significant changes in their characteristics and using combinations of information, computing, and communication technologies (Vial, 2019).**
- **A process implemented by organizations using digital innovations, upgraded and developed through a global network by changing various work standards and procedures, including the work model, customer treatment, and the tasks to be accomplished in the organization (Ashmarina et al., 2020).**
- **A qualitative way to review the completion of business electronically with the required speed, accuracy and quality (Udovita, 2020).**
- **An electronic work system that aims to transform administrative work and provide services to auditors from the traditional method to the electronic method through means of communication and modern technology based on information systems that help achieve the required quickly and with minimal effort and costs (Korachi & Bounabat, 2020).**
- **A continuous process during which all technology elements and new electronic means are introduced into all work policies and procedures to provide high-quality services commensurate with international standards in this field (Saqqat & Rahman, 2022).**

From the above, the author defines "digital transformation" as using information and communication technology to develop institutional performance and increase effectiveness and efficiency in service delivery using modern and renewable technologies.

Stages of digital transformation :

Digital transformation has gone through three stages, each with a set of characteristics, as follows (Q. Li et al., 2020; Muehlburger et al., 2019; Verhoef et al., 2021):

- **Digitization: The process of converting analog information from its sources (text files, audio files, images, etc.) into a digital format so that computers can store, process, and transmit this information. This stage involves converting analog tasks into digital tasks by integrating information technology with existing tasks and obtaining valuable information to help decision-making.**
- **Digitalization: The use of digital technology and digital files to transfer a specific activity, procedure, service, or protocol from the tangible real world to the world of computers, the Internet and electronic devices, such as converting registration processes from filling out paper forms to registration through websites or replacing the process of paying money. These transformations enabled all customers to communicate with institutions easily and changed the traditional interactions between institutions and customers.**
- **Digital Transformation: The most widespread stage, as it shows the change at the level of the organization that leads to the development of its business models. It includes all aspects of business, such as using modern digital processes and technologies to create new applications. It is used in business to achieve competitive advantage by using developed business models based on digital technologies and creating interactive websites and platforms that contribute to providing added value to customers. Hence, it can be emphasized that digital transformation provides new business models using technological methods and their various applications to create economic and social added value and maintain it sustainably.**

Implications of digital transformation:

It is noted that the research of modern administrative thought in digital transformation has increased, and solutions have been presented to a set of problems associated with it using modern technologies and information technology. These tools include data entry, processing, information transfer units, operational software, and techniques for saving outputs and inputs.

There are significant benefits of digital transformation, most notably saving time, cost and effort, improving and organizing the operational efficiency of organizations, as well as facilitating procedures to obtain more excellent value for services provided to customers and increase their satisfaction, which contributes to creating opportunities to provide innovative and creative services away from traditional methods of service delivery. Also, digital transformation helps organizations expand on a larger scale by reaching global markets and more significant categories of customers. It helps them obtain data and information that help monitor performance and improve the quality of services, in addition to analysis that facilitates decision-making and goal setting (Ghareeb & Duraid, 2021).

The importance of digital transformation is that it contributes to solving human problems on the one hand and promoting and activating the sustainability of development on the other hand, and this includes economic, social, environmental and even cultural aspects as well, as well as the development of new information-enabled ecosystems and revenue streams that lead to business model transformations (Ibrahim & Al-Haddad, 2018). (Al Karim et al., 2023) stated that customer orientation and technical ability positively affect competitive advantage, and customer loyalty significantly mediates the relationship between customer orientation and technical ability with competitive advantage.

Competitive advantage :

Competitive advantage has emerged as one of the most promising theoretical structures in management studies, especially in strategic management and marketing. Competitive advantage is "the organization's ability to devise new, more effective ways of carrying out its activity and thus its superiority over its competitors, which made it a better position and status than other institutions (Al'uss, 2019). The competitive advantage is the ability to obtain a superior position in the market compared to its competitors operating in the same industry (S. Li et al., 2006; Munas & Arun, 2020). Competitive advantage can also be defined as "a policy and tool for improving performance, managing and organizing the organizational structure in the company, which in turn is reflected in the quality of the services provided, so that it excels and distinguishes itself from its counterparts, increases the market share in the company, and maximizes its profits (Ejrami et al., 2016). Therefore, the competitive advantage is considered a strategy based on developing the company's business model, driving growth and development in it, and allowing the company the opportunity to produce and provide services, goods, and benefits to customers in which it outperforms its competitors in the market, and achieves more profits for the company, and improves its reputation in the market (Ranjith, 2016). Competitive advantage can be maintained by monitoring customer loyalty and positive customer perception (Kurniawan et al., 2022).

The importance of competitive advantage :

Competitive advantage is the most important goal for organizations due to the repercussions of achieving it. Competitive advantage is the fundamental basis on which the performance of organizations is based. The researchers have highlighted this concept as one of the options that the organization resorts to adapting to competition requirements. The competition aims scientifically to meet the needs and desires of the beneficiaries (Ridhwan & Omri, 2020). The competitive advantage includes an internal dimension represented by a good knowledge of capabilities and capabilities and investments in them to achieve the organization's competitive advantage. Competitive advantage is also a critical strategic component that provides an excellent opportunity for the organization to achieve consistent profitability compared to its competitors. In addition, the competitive advantage is a motivation and a catalyst for organizations to develop and strengthen their resources and capabilities and follow research and development methods to maintain and enhance this advantage.

In addition, it is a guide for institutions that enable them to survive and continue, achieve their goals, and increase their value in the external community (Mostafa, 2019).

Accordingly, the competitive advantage allows companies to protect their market position and competitive position among their competitors, enhancing the company's capabilities and marketing production capabilities, strengthening its relations with customers, and improving administrative decisions. The competitive advantage also makes the organization's unique resources appropriate to the opportunities available in the external environment. In other words, the competitive advantage indicates the organization's position in a highly competitive environment.

Customers empowerment :

Customers are the source of the bank's profitability and value and the primary source of cash flows, as they are among its most important assets. Analyze the value of customers as assets that generate future profits through investment and business actions in competitive markets. The bank must manage its customer base by protecting and developing the most profitable and influential customers to achieve competitive advantages. Customer empowerment has been used broadly in employee and customer empowerment. The common idea in both contexts is transferring power or control from higher levels to individuals (Al-Masry, 2018). Customer empowerment is defined as providing increasingly more control to customers for competitive reasons (Rajab & Almasry, 2019). Singh et al. (2014) indicate that customer empowerment is essential in facing future competition, as it is the growing force in marketing. Empowering customers includes enabling them to choose what they want when they want it and the way they prefer (Al-Masry, 2018).

"Customer Empowerment" increases the customer's confidence in the bank's services, as the customer believes other customers feel satisfied with the bank's services and continue to obtain more. They go to the bank to express their sincere thanks and not to submit their complaints, and the bank chooses its customers carefully, which reflects positively on customer loyalty and affiliation with the bank (Khalil, 2017).

Customer empowerment is essential due to the bank's culture and customer-oriented strategy. So, it is natural to constantly strive to build a long-term relationship, work to satisfy them, and meet all their needs to reach customer retention (Woodside & Davenport, 1974). Customer Empowerment contributes to the bank's publicity by constantly talking to others about their experiences with the bank, whether positive or negative, in the sense that they may advise other customers to either deal with the bank or stay away. Customers who feel satisfied with the bank's services act as advertisers for a bank that empowers its customers and helps them overcome problems (Khalil, 2017). Enabling customers makes the bank and its services preferable to the customer, enhancing satisfaction with the various service sectors. In other words, customer empowerment is an effective way to improve the relationship between the customer and the service provider (Rajab & Almasry, 2019).

Empowering customers, meeting their needs, and providing them with added value enables the bank to identify groups of customers and their essential needs that must be met. Banks must consider that marketing through the relationship with customers is not limited to programs compatible with the nature of the relationship between customers and the bank but rather to marketing implemented in the short and long term (Khalil, 2017).

A positive and significant relationship exists between empowerment, organizational learning, and competitive advantage. Furthermore, the current study found a significant relationship between empowerment strategy and organizational learning. Moreover, organizational learning was the main factor contributing to empowerment strategy and competitive advantage in organizations. Also, they stated that the empowerment strategy contributes to competitive advantage (Kadhim et al., 2018).

Qassem et al. (2022) revealed that the requirements of electronic banking services are well available in Syrian private commercial banks. They also indicated that they achieve an excellent competitive advantage concerning the dimensions of excellence, lower cost, appropriate time, innovation, and essential competencies, indicating an excellent direct relationship between the availability of requirements, The success of electronic banking services and the achievement of competitive advantage. In a survey study, Shehadeh highlighted Islamic banks' digital transformation in Jordan. It was found that there is a statistically significant relationship between the level of digital maturity and the dimensions of digital transformation (digital technology, digital strategy, and digital maturity) (Shehadeh, 2021). (Wadee & Mitwelli, 2020) emphasized that digital products affect banks' competitive position.

Promoting measurements like quality services, Co-creation, transparency, personalized communication, problem management, client education, customer participation, and technology ought to be taken into genuine thought by banks to engage the clients and empower them, which thus improves consumer satisfaction and degree of consistency (Chatterjee & Kamesh, 2020). Some researchers have shown that electronic banking statistically affects commercial banks' competitive advantage (Mukhramesh, 2018). In the same direction, Khalil (Khalil, 2017) revealed that the capabilities of commercial bank clients impact the attraction of new accounts.

Methodology:

Method:

The descriptive approach was used as it helps give a clear explanation of the phenomenon to be studied, the nature of the relationship, and the impact among its variables (customer empowerment, digital transformation, competitive advantage), and thus describes the impact of customer empowerment on the competitive advantage in the presence of digital transformation as a modified variable.

Population and Sample

According to the commercial banks' website, the population is all the employees of the Iraqi commercial banks, whose number exceeds 1000 employees. 284 of them were chosen by the

random sample method to present the study sample. The following table shows the demographics of the sample:

Table 1: demographics of the sample

Variable		Responses	Ratio
Gender	male	181	63.7
	female	103	36.3
	Total	284	100.0
Age	Less than 30 years	77	27.1
	30- less 40	115	40.5
	40- less than 50	71	25.0
	50 and more	21	7.4
	Total	284	100.0
Experience	Less 5 years	104	36.6
	5- less 10	89	31.3
	10 and more	91	32.1
	Total	284	100.0
Qualification	Diploma or less	80	28.2
	Bachelor	154	54.2
	High studies	50	17.6
	Total	284	100.0

Data Collection :

A questionnaire was designed as the primary tool for the study, consisting of 45 items. The questionnaire included demographic questions to measure the study variables (customer capabilities, competitive advantage, and digital transformation). The five-point Likert scale was adopted in answering the questions according to the following options: (1) - strongly disagree, (2) - disagree, (3) - neutral, (4) - agree, (5) - strongly agree. Then, the author transformed the fifth level into three ones to be suitable for three estimations of the sample's answers:

Length of category (higher level- lesser level) / number of levels
 $1.33 = (5-1)/5$

The mean values are as follows: low, 1.0 – 2.33; middle, 2.34- 3.66; high, 3.67-5.

Validity and Reliability :

The validity of the study tool was verified during its arbitration by a group of arbitrators of university professors with experience in the subject of the study. Then, the arbitrators' notes and suggestions were taken into account, and amendments were made to the paragraphs of the questionnaire.

To find out the tool's stability, Cronbach's Alpha coefficient was used to verify the internal consistency of the questionnaire items, which is the most common measure among researchers to achieve this purpose. The results found that the Cronbach alpha coefficients for the fields of study are good as they are more significant than (0.80), which are acceptable values for application purposes.

Table 2: Cronbach's Alpha coefficient

Field	Dimension	Cronbach alpha
Costumers' empowerment	Sharing information	0.801
	Customer Involvement	0.854
	Long term partnership	0.809
	problem-solving participation	0.841
	Use of technology	0.822
	Total Costumers' empowerment	0.911
Competitive advantage		0.909
Digital transformation		0.887

Results and discussion

The customer's empowerment

To identify customer empowerment in Iraqi commercial banks, the means and standard deviations of the sample's responses were extracted on the dimensions of customers' empowerment as shown in the following table:

Table 3: The sample's responses on the dimensions of customers' empowerment

Dimension	mean	s. deviations	evaluation
Use of technology	4.06	0.69	high
Customer Involvement	3.81	0.80	high
Sharing information	3.80	0.74	high
problem-solving participation	3.80	0.75	high
Long term partnership	3.52	0.75	middle
Total Costumers' empowerment	3.80	0.55	high

The table above shows that the level of customer empowerment in Iraqi commercial banks is high, as the means for the dimensions of the field ranged (from 3.52 to 4.06), and the total mean for the field is (3.80) with a high evaluation score. The dimension "using technological technology" has come first with a mean (4.06) and a high evaluation score, followed by the "customer involvement" dimension with a mean (3.81) and a high evaluation score. Both dimensions, "sharing information" and "participating in solving problems," ranked second with a mean (of 3.80) and a high evaluation score. In the last rank, the "long-term partnership" dimension comes with a mean (of 3.52) and a middle evaluation score. This result can be attributed to the fact that customer empowerment leads banks to identify and distribute responsibilities between the various supervisory, regulatory, and executive bodies, which was reflected in the ability of banks to achieve added value. The result also confirms the realization of commercial banks' management of the importance of customer empowerment dimensions, which is reflected in an enhanced competitive advantage.

The competitive advantage

To identify competitive advantage in Iraqi commercial banks, the means and standard deviations of the sample's responses were extracted as shown in the following table:

Table 4: The sample's responses on the dimensions of competitive advantage

Dimension	mean	s. deviations	evaluation
The bank is constantly striving to reduce and manage cost sources.	4.42	0.83	high
The bank is keen to reduce the service cycle over time.	4.41	0.83	high
The bank provides satisfactory services to its customers.	4.27	0.95	high
The bank develops new services	4.24	0.98	high
The bank offers innovative application services at no cost.	4.19	1.01	high
The Bank schedules plans for services to improve.	4.14	0.99	high
The bank provides high-quality services that are superior to competitors.	4.11	1.08	high
The Bank pays attention to the opinions of customers when providing new services or making improvements to the services provided	3.98	1.20	high
The bank provides various and adequate services.	3.93	1.16	high
The bank provides a system through which the customer evaluates the service provided.	3.78	1.26	high
total competitive advantage	4.15	0.73	high

The table above shows that the level of competitive advantage in Iraqi commercial banks is high, as the mean for the field is (4.15) with a high evaluation score. It also appears that the means of items of the competitive advantage field range between (3.78-4.42) with a high evaluation score for all items. The item "The bank is constantly striving to reduce and manage cost sources" came in the first place, while the item "The bank provides a system through which the customer evaluates the service provided" came in the last place. This result can be because banks seek to develop procedures for the continuous improvement of services provided to customers and to expand the provision of services in an advanced and purposeful way.

The digital transformation :

To identify the effectiveness of digital transformation in Iraqi commercial banks, the means and standard deviations of the sample's responses were extracted as shown in the following table:

Table 5: The sample's responses on the dimensions of digital transformation

Dimension	mean	s. deviations	evaluation
The current digital skills (in the bank) lead to effective oversight and obtaining results that meet set standards.	3.72	1.22	High
The bank provides modern devices and equipment to carry out its work.	3.62	1.10	Middle
The bank provides a qualified human cadre with experience.	3.58	1.20	Middle
The bank adopts modern applications to facilitate customers' access	3.57	1.25	Middle
The bank provides plans that are flexible enough to accommodate any changes required by the application of electronic management	3.56	1.18	Middle
The Bank provides consultants in the field of e-government to assist employees.	3.55	1.26	Middle
The Bank employs trained technical competencies	3.51	1.25	Middle
The bank provides administrators with electronic administrative expertise	3.50	1.20	Middle
The bank's digital skills contribute to organizing and coordinating material and human resources.	3.48	1.22	Middle
Total digital transformation	3.57	0.92	Middle

The table above shows that the effectiveness of digital transformation in Iraqi commercial banks is in the middle, with a mean for the field of 3.57. It also appears that the means of items of the digital transformation field range between (3.72-3.48). The item "The current digital skills (in the bank) lead to effective oversight and obtaining results that meet set standards" came in the first place with a mean (3.72), followed by "The bank provides modern devices and equipment to carry out its work" with a mean (3.62). In contrast, "The bank's digital skills contribute to organizing and coordinating material and human resources" came last with a mean (3.48).

Digital transformation helps banks plan, monitor and document all electronic work and exploit modern technology to ensure that financial data is entered, processed, and presented correctly. This enhances and supports the audit function in auditing financial operations and managing their associated risks. Also, digital transformation is no longer an option but an essential requirement for every organization that wants to continue being effective.

Hypotheses test results :**Hypothesis1:**

There is no statistically significant effect on the competitive advantage at the significance level ($\alpha \leq 0.05$) of commercial bank customers' empowerment.

To test the validity of this hypothesis, the multiple regression equation was applied to discover the impact of commercial banks' customers' empowerment on the competitive advantage, as shown in the following table:

Table 6: The results of the multiple regression equation reveal the impact of commercial bank customers' empowerment on the competitive advantage of commercial banks.

customers' empowerment Dimensions	beta	T	Sig.	R	R ²	R ² modified	F	Sig.
Sharing information	0.240	3.838	0.000	0.763	0.582	0.574	77.366	0.000
Customer Involvement	0.149	2.346	0.020					
Long term partnership	0.250	3.731	0.000					
problem-solving participation	0.219	2.979	0.003					
Use of technology	0.168	3.508	0.001					

It appears from the data in the table above that there is a statistically significant effect at the level of significance ($\alpha \leq 0.05$) of commercial bank customers' empowerment to have a competitive advantage, as the value of the correlation coefficient (R) is (0.763), which is a statistically significant value and indicates the degree of a statistically significant correlation between the independent variable and the dependent variable. The value of (R-square) is (0.582), a statistically significant value that explains the customers' empowerment in influencing the competitive advantage. Therefore, the hypothesis is accepted in the alternative form, i.e., there is a statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the capabilities of commercial bank customers (sharing information, customer involvement, long-term partnership, problem-solving participation, and use of technological) on the competitive advantage of commercial banks.

This result can be explained by the fact that banks seek the perceived benefit they will obtain by identifying customers' capabilities. It is of greater importance than the technologies that preceded it, and this result can also be explained by the fact that commercial banks' use of customer empowerment achieves a high level of product information exchange between them and their customers.

Hypothesis2:

There is no impact of digital transformation as a modified variable on the relationship between commercial banks' customers' empowerment and competitive advantage.

To test the validity of the hypothesis, a hierarchical regression test was applied to reveal the impact of digital transformation as a modified variable on the relationship between the empowerment of commercial bank customers and the competitive advantage of commercial banks, as shown in the following table:

Table 7: the results of hierarchical regression analysis to reveal the impact of digital transformation as a modifier variable on the relationship between the commercial bank customers' empowerment and the competitive advantage

Independent variable	variable	First model			Second model		
		Beta	T	Sig.	Beta	T	Sig.
competitive advantage	sharing information	0.240	3.838	0.000	0.258	4.388	0.000
	customer involvement	0.149	2.346	0.020	0.146	2.451	0.015
	long-term partnership	0.250	3.731	0.000	0.245	3.884	0.000
	problem-solving participation	0.219	2.979	0.003	0.177	2.552	0.011
	use of technological	0.168	3.508	0.001	0.157	3.480	0.001
	digital transformation	-	-	-	0.229	6.135	0.000
	R	0.763			0.795		
	The coefficient of determination R ²	0.582			0.632		
	F	77.366			79.242		
	ΔR ²	-			0.050		
	ΔF	-			37.640		
Sig.	0.000			0.000			

The above table shows the results of hierarchical regression on two models. The first model's results represented the impact of customer empowerment on competitive advantage, as the value of F is (77.366), which is statistically significant. The value of the determination coefficient R², which is (0.582), indicates that the customers' empowerment can justify (58.2%) the change in the competitive advantage.

In the second model, the modified variable (digital transformation) was added to the regression model, so the value of the coefficient of determination R² increased by (5%), which is statistically significant, as the value of ΔF reached (37.640) at a significant level (Sig FΔ=0.000), which is Less than 0.05; therefore the hypothesis is accepted with the alternative formula: "There is an impact of digital transformation as a modified variable on the relationship between the commercial banks' customers' empowerment and the competitive advantage of commercial banks.

This result can be attributed to commercial banks' keenness to adopt digital transformation to provide the best benefits and offers, win the most significant number of customers, and invest in competitive opportunities.

It can also be said that banks are aware of the importance of preserving their prevailing image in the minds of the masses, adopting policies and setting plans to ensure the formation and promotion of a positive image by customers' empowerment, especially with the high level of competitiveness in the banking sector.

Conclusion:

The article attempted to explore the modulating effect of digital transformation on the relationship between the commercial banks' customers' empowerment and competitive advantage. The results showed that the levels of customer empowerment and competitive advantage in Iraqi commercial banks were high and that the level of digital transformation was middle. The results also showed a statistically significant effect of commercial bank customers' empowerment (sharing information, customer involvement, long-term partnership, participation in solving problems, using technological technology) on the competitive advantage of commercial banks. In addition to the impact of digital transformation as a modified variable on the relationship between customer empowerment and the competitive advantage of commercial banks.

Recommendations:

The authors recommend that commercial banks provide a system of prediction models to support the generation and development of information sources according to customers' actual needs and conduct studies on the development of banking services.

References:

- Al Karim, R., Alam, M. M. D., & Al Balushi, M. K. (2023). The nexus between CRM and competitive advantage: the mediating role of customer loyalty. *Nankai Business Review International*. <https://doi.org/10.1108/NBRI-04-2022-0040>
- Aleessawi, N. A. K. A. (2022). Using the Digital Platforms by Journalists of the Middle East and North Africa (MENA) in Promoting Common Human Values. *Dirasat: Human and Social Sciences*, 49(5), 454–465. <https://doi.org/doi.org/10.35516/hum.v49i5.3494>
- Al-Masry, M. B. A. (2018). The impact of customer empowerment on the quality of the relationship between the customer and the organization: An applied study on cellular companies in Syria. *Scientific Journal of Economics and Trade*, 4, 51–84.
- Al'uss, J. (2019). the role of knowledge management in achieving the competitive advantage in The Syrian Public Universities. *Tartous University Journal for Research and Scientific Studies*, 3(1), 1–27.
- Ashmarina, S. I., Vochozka, M., & Mantulenko, V. V. (2020). Digital Age: Chances, Challenges and Future. In S. I. Ashmarina, M. Vochozka, & V. V. Mantulenko (Eds.), *the VII International Scientific Conference Digital Transformation of the Economy: Challenges, Trends and New Opportunities*. Springer International Publishing.

- Berghaus, S., & Back, A. (2020). Stages in Digital Business Transformation: Results of an Empirical Maturity Study. *Mediterranean Conference on Information Systems (MCIS)*, 7(Paper 22), 1–17.
- Chatterjee, D., & Kamesh, A. V. S. (2020). Significance of relationship marketing in banks in terms of customer empowerment and satisfaction. *European Journal of Molecular and Clinical Medicine*, 7(4), 999–1009.
- Ejrami, M., Salehi, N., & Ahmadian, S. (2016). The Effect of Marketing Capabilities on Competitive Advantage and Performance with Moderating Role of Risk Management in Importation Companies. *Procedia Economics and Finance*, 36, 22–28. [https://doi.org/10.1016/s2212-5671\(16\)30012-0](https://doi.org/10.1016/s2212-5671(16)30012-0)
- Ghareeb, A., & Duraid, H. (2021). E-Agriculture as a strategic direction for the agricultural sector in light of the digital transformation. *Economic Dimensions Journal*, 11(1), 69–93.
- Hashem, Z. (2019, March 13). Digital transformation and its role in innovation and development. *Language of the Age Magazine*.
- Ibrahim, M., & Al-Haddad, B. (2018). Business facilities and digital transformation. *Egyptian Journal of Information, Computer*, 21, 25–32.
- Kadhim, R. I., Mohammed, M. A., & Gremikh, H. G. (2018). Empowerment as a strategy to achieve the competitive advantage of organizations: A mediating role of organizational learning. *Management Science Letters*, 8(9), 903–912. <https://doi.org/10.5267/j.msl.2018.6.008>
- Khalil, A. M. A. A. (2017). The effect of commercial banks clients' loyalty on attracting new account. *The Scientific Journal for Commercial and Environmental Studies*, 8(2), 499–528. <https://doi.org/10.21608/jces.2017.50766>
- Korachi, Z., & Bounabat, B. (2020). General approach for formulating a digital transformation strategy. *Journal of Computer Science*, 16(4), 493–507. <https://doi.org/10.3844/JCSSP.2020.493.507>
- Kurniawan, F., Febrian, E., & Wibisono, A. (2022). Influence of Rivalry Merger, Bank Financial Health Rating, and Customer Loyalty to the Competitive Advantage. *Indonesian Interdisciplinary Journal of Sharia Economics (IJSE)*, 5(1), 276–299. <https://doi.org/10.31538/ijse.v5i1.1720>
- Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., Ren, R., Leung, K. S. M., Lau, E. H. Y., Wong, J. Y., Xing, X., Xiang, N., Wu, Y., Li, C., Chen, Q., Li, D., Liu, T., Zhao, J., Liu, M., ... Feng, Z. (2020). Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia. *New England Journal of Medicine*, 382(13), 1199–1207. <https://doi.org/10.1056/NEJMoa2001316>
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Subba Rao, S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, 34(2), 107–124. <https://doi.org/https://doi.org/10.1016/j.omega.2004.08.002>
- Lorenz, A., Miron-spektor, E., Schilling, M., Solinas, G., & Christopher, L. (2020). Digital Transformation : What Is New If Anything? Emerging Patterns and Management Research. *Academy of Management Discoveries*, 6(3), 341–350.
- Mostafa, O. H. (2019). A proposed vision to achieve the competitive advantage of Tanta University in the light of the strategic planning approach. *Journal of Education-Tanta University*, 73(1).
- Muehlburger, M., Rueckel, D., & Koch, S. (2019). A framework of factors enabling digital transformation. 25th Americas Conference on Information Systems, AMCIS 2019.
- Mukhramesh, H. (2018). The role of electronic banking in achieving the competitive advantage of commercial banks: a case study of a group of banking agencies in the state of Ouargla. *Université Kasdi Merbah - Ouargla*.
- Munas, M., & Arun, K. C. (2020). Porter's Five Forces in Achieving Competitive Advantage by Improving the Organizational Knowledge and Innovative Services in Srilank's Tourism Industry. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(7 SE-), 5209–5220.
- Qassem, S., Maa-Albared, B., & Al-Sukkari, A. (2022). Requirements for the success of electronic banking services and their role in achieving competitive advantage: a field study on Syrian private commercial banks. *Tishreen University Journal for Research and Scientific Studies*, 44(1), 263–284.
- Rajab, J., & Almasry, M. (2019). The Role Of Customer Empowerment In Development His Equity For The Firm Through Of Mediating Relationship Quality: Empirical Study On Customers Of Mobile Telecommunications Firms In Syria. *Arab Journal of Administration*, 39(1), 165–190. <https://doi.org/10.21608/aja.2019.27780>
- Ranjith, V. K. (2016). Business Models and Competitive Advantage. *Procedia Economics and Finance*, 37, 203–207. [https://doi.org/10.1016/s2212-5671\(16\)30114-9](https://doi.org/10.1016/s2212-5671(16)30114-9)
- Ridhwan, W. W., & Omri, A. A. (2020). The leadership skills as an-entrance to achieve competitive advantage in pre-university education institutions. *The Educational Journal-Sohaj University*, 74(74), 1131–1176. <https://doi.org/10.21608/edusohag.2020.90488>
- Saqqat, A. A., & Rahman, R. A. A. (2022). Digital transformation in government institutions according to Vision 2030. *Journal of Economic, Administrative and Legal Sciences*, 6(25), 94–127. <https://doi.org/10.26389/AJSRP.Q200722>
- Shehadeh, M. K. (2021). The Digital Transformation in Islamic Banks Operating in Jordan: An Analytical Study from an Islamic Perspective. *Yarmouk University*.
- Singh, S. A., Anusha, Mrs. B., & Raghuvardhan, M. (2014). Impact of Banking Services on Customer Empowerment, Overall Performance and Customer Satisfaction: Empirical Evidence. *IOSR Journal of Business and Management*, 16(1), 17–24. <https://doi.org/10.9790/487X-16121724>

- Udovita, P. V. M. V. D. (2020). Conceptual Review on Dimensions of Digital Transformation in Modern Era. *International Journal of Scientific and Research Publications (IJSRP)*, 10(2), p9873. <https://doi.org/10.29322/ijsrp.10.02.2020.p9873>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. In *Journal of Strategic Information Systems* (Vol. 28, Issue 2, pp. 118–144). <https://doi.org/10.1016/j.jsis.2019.01.003>
- Wadee, O. W., & Mitwelli, M. M. (2020). Digital banks: products and transformation requirements and their implications for the competitive position. *Scientific Journal of Financial and Administrative Studies and Research*, 7(2), 213–266. <https://doi.org/10.21608/masf.2020.161258>
- Woodside, A. G., & Davenport, J. W. (1974). The Effect of Salesman Similarity and Expertise on Consumer Purchasing Behavior. *Journal of Marketing Research*, 11(2), 198–202. <https://doi.org/10.1177/002224377401100212>