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THE ROLE OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN DIGITAL BANKING TECHNOLOGY

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ABSTRACT

This research paper aims to know modern technology and digital transformation and use it to attract and attract new skills and competencies to banks and train workers in the banking sector to use technology in order to facilitate services for customers and provide technological services that lead to attracting new customers. Therefore, it was necessary to know what artificial intelligence is. And machine learning and modern technologies and how to train workers in the banking sectors and develop their competence and skills, as well as the opportunities and challenges presented by this technology in order to develop a proposed business model that helps overcome the obstacles and difficulty of attracting talent in the workplace at the present time, as well as relying appropriately on What is called competency planning and developing plans to train employees on this technology to raise the level of competencies in banks and thus provide better services to customers. A set of questions were prepared and directed in the form of a personal interview to the selected study sample of 50 employees from different banks in Baghdad Governorate. The data was analyzed, and it indicated The results of the study indicate that the percentage of males in the study sample compared to males is a large percentage of 70%. We see that females have more interest in development and use of modern technology, training and career development, and that training and learning increases loyalty and belonging to the banking institution.

KEYWORDS

Introduction

The banking sector is considered a major party in any economy, as it works to facilitate the movement of money in a way that provides sufficient financing for various investments, in order to achieve economic development and increase its growth rates. On the other hand, the banking environment has witnessed during recent decades a kind of dynamism and complexity, and this is due to the waves of globalization and the acceleration of innovations, which has placed banks in various countries before many challenges to keep pace with the transformations taking place in order to maintain the market share in financial companies and expand further into new markets. Many fields have emerged that are concerned, in different ways, with financial services and their development, such as financial

technology and artificial intelligence. This is in order to move more towards simulating human intelligence, which is considered one of the most prominent technologies produced in the world, and which banks seek to adopt, in order to reduce operational costs, increase their performance, and get closer to customers. [1−3].

1.1Research objective

Banks at the global level have begun to pay great attention to technology at the expense of developing their human resources, which has had a negative impact on their performance, since the use of technology alone does not result in any competitive advantage for the bank. Rather, it is only an import of technology, unlike banks that improve the skills of their workers. Through training and training, they provide more quality services and thus gain a competitive advantage and make them more innovative. Therefore, banks today must pay attention to their human resources along with technology in order to meet the increasing requirements in the banking arena and in order to reach effective and distinguished management of human cadres in Iraqi banks. [4].

1.2 The importance of the research

Since the technological development in banks has accelerated the pace of completing operations, it was necessary for Iraqi banks to keep pace with this acceleration in the speed of processing and sending information, in addition to the ability to deliver service faster to customers anywhere in the world, and the speed and ease of electronic marketing of banking products by increasing Banks interact with the information network on a large scale. The banking sector plays a major role in economic development, and in order for this to be achieved, the banking sector must play many roles as follows: [5−8].

1 -Focus and great and continuous interest in the future competencies and talents of human cadres in the Egyptian banking sector, and exploiting technological development in the banking work environment to confront successive challenges, save time and effort, improve the quality of financial services provided, improve the image of Iraqi banks, increase the customer base, and remove geographic obstacles.

2-Technical and technological development represents a major source for feeding the various operations and activities of the Egyptian banking system with information, which enables it to collect, store, classify, disseminate and benefit from information according to scientific and objective foundations.

3- This study came as a call to develop the capabilities, capabilities and skills of the human element in the Egyptian banking sector to interact with developments and not wait to learn the results of the performance of others to imitate them, but rather to strive for leadership and learn about everything that is new, in order to achieve precedence, survival, growth and continuity in the conduct of its business.

4-This study enhances the performance efficiency of employees in the Egyptian banking sector to be compatible with modern technology and the digital age, which reflects positively on the economic sector as a whole. This necessitates Iraqi banks to strive towards innovation and innovation by opening new horizons for e-learning and developing new services using advanced methods, such as education. Remotely, which ultimately improves the level of service provided to the community

The importance of this research for the Egyptian banking sector stems from the fact that it sheds light on the impact of optimal investment by Iraqi banks in future talents, competencies and experiences in order to catch up with the train of tremendous technological developments in the banking work environment in an era whose variables have become greater than its constants on the performance of these banks, and as a result of the rapid technological developments in Nowadays, it has become necessary for Iraqi banks to qualify and train employees in the banking sector in their various activities in order to keep pace with developments and modernize their working methods. Hence, the research gains and derives its importance because:

➢ It contributes to shedding light on the reality of Iraqi banks' use of technological and technological developments and the degree to which they have reached compared to the intense competition in international banks.

➢ It helps Iraqi banks by highlighting the importance of qualifying and training the human element to benefit from the latest technologies, programs and applications in improving and developing new banking services for their current and future markets so that they exceed consumers' expectations, improve their banking performance and increase their market share.

➢ It helps to clarify the picture of the advantages and risks of introducing technological development and the emergence of new roles and new jobs in the future.

➢ It helps Iraqi banks in developing a map of future competencies (innovation - creativity - technical expertise - knowledge - behavior - skills. The goal of this is to enable that employee to understand himself/herself better, and where career development efforts are directed and to conduct appropriate training for him/her)[9].

2. Proposed Methodology

Artificial Intelligence (AI) is the process of programming a machine and adapting it to think, act, and interact in a way that mimics a human. The developers provide her with specific knowledge sources from which she can learn. Therefore, the processes of linking information are successfully carried out through logical methods. This technology includes several applications, the most important of which are[10]:

- Expert system
- Natural Language Processing NLP
- Speech Recognition
- Machine Visio

2.1 How can artificial intelligence help develop the work of the financial management department?

1. Increase the accuracy of the results
2. Increasing the level of efficiency of operations
3. Cost saving

Mistakes that can be avoided using artificial intelligence in financial management Artificial Intelligence protects your business from some of the human errors that can occur while managing finances. The source of these errors are elements that are not present in the machine and are overpowered by humans. They are as follows: [11–14].

1- Entering inaccurate data: As a result of the employee's distraction or lack of concentration, he may make mistakes while working and enter incorrect data. This error may eventually appear in financial settlements. Artificial intelligence prevents it from happening from the beginning, because it makes data entry automatic without the need for human intervention.

2- Performing incorrect calculations: This error may be a result of the previous error. Whether you are using an Excel spreadsheet or a software system, entering inaccurate data will eventually lead to incorrect calculations. The user can also apply incorrect mathematical principles that lead to the same results. If artificial intelligence is used, it ensures that the data and calculations for each process are correct to prevent errors.

3- Exaggerating or minimizing financial risks: A person is afflicted with bias in many situations, which sometimes affects his work. It supports one idea at the expense of another. This is what a financial analyst might fall into. Although his job depends on facts and what the numbers indicate, he may be affected by external factors or personal convictions. For artificial intelligence, the situation is different, it analyzes data objectively because it is a machine without whims.

2.2 The most prominent companies that have applied artificial intelligence in financial management

Several companies have applied artificial intelligence in financial management, including those working in the field of financial services. The most prominent of these companies are: [15].

1- PayPal: supports digital transfers of payments. Every money transfer has the potential to be a scam. So, PayPal uses smart tools to detect fraud attempts early without losses. By monitoring user behaviors, activities that fall within suspicious patterns can easily be identified. PayPal also uses machine learning techniques to improve acceptance rates for valid transactions.

2- American Express: As a global financial services company and credit card issuer, American Express has implemented intelligent applications that detect fraud attempts and automate customer service. As for customer service, it provided an automated chat with which the customer can engage in a conversation and obtain comprehensive responses to his inquiries. It also converts the voice conversation into texts that the machine can understand and fulfills the customer's request immediately.

3- MasterCard: MasterCard has achieved an amazing feat using artificial intelligence. By keeping personal files of its customers and their activities, with the help of the machine, it has become easy to notice any differences in the activities of individuals and identify suspicious ones. It follows patterns in real time and determines which ones are safe through its readings of the customer's previous transactions and data, such as geographical location, timing of the last transaction, etc.

Can a machine take the place of a human to manage financial operations 100%? What reality tells us is that it is definitely not, but there are always technological leaps that bring about changes that affect the future.

2.3 Artificial intelligence technology in the field of banking contributes to several things, the most important of which are: [16–18].

1- Managing credit card accounts: Providing advice to reject or cancel the cardholder's credit application, evaluating applications to estimate the applicant's eligibility for a credit card.

2- Anti-Money Laundering: Adopting artificial intelligence systems that stop steps that make money that comes from illegal or unethical sources appear to be earned illegally; By adopting more

flexible, accurate and fast systems with continuous innovations and improvements in the field of artificial intelligence.

3- Chat bots that act as a customer service agent; It is characterized by advanced features to effectively deal with customer inquiries sent via electronic platforms.

4- Detecting fraud using data analysis techniques in the banking sector, which is the Fico-Falcon fraud assessment system, which relies on a neural network to deploy advanced artificial intelligence systems based on deep learning.

5- Create reports by collecting large amounts of data and putting them in the form of paragraphs that highlight the main points

6- Review and evaluate loan applications submitted to banks

7- Financial planning to create an investment portfolio for investors

8- Financial analysis and planning to secure the financial resources necessary to market products

9- Review accounting budgets

10-A system for providing advice and counseling for long-term investments

11-Better quality support across multiple channels. Customers today expect banks to provide support services through all available channels, such as email; And the phone; and social media; And others, and here comes the importance of interactive voice assistance tools and chatbots. Through which banks can adhere to their promises to their customers and enhance the quality of their services.

12-Faster customer service and fewer disputes; Customers usually deal with financial and banking matters impatiently. They need immediate support and will not be willing to wait even for a few minutes. Fortunately, AI-powered communication can serve customers instantly without them having to wait a single second; In addition to avoiding any dispute that may arise from dissatisfied customers. Interactive voice assistants and chatbots can support multiple customers simultaneously and instantly.

13-Reducing employee attrition. Every day, banking employees face many difficulties and challenges; Most notable are frequent customer inquiries and urgent requirements. Which leads to their exhaustion and draining their energy; Which in turn reflects negatively on employee satisfaction and retention in the long term. But by automating certain aspects of customer service, banks can save their employees a lot of headaches; It enables them to focus on strategic and more complex tasks. Artificial intelligence is also expected to contribute to preserving accumulated human expertise by transferring it to smart machines.

14-Stronger data protection. Data protection is undoubtedly of great importance in the world of banking. Interestingly, artificial intelligence can offer a whole new level of protection.

15-Artificial intelligence systems can also provide analyzes of historical data, real-time statistics, and accurate reports from all electronic systems, which supports the decision-making process and making solid and sound decisions.

2.4 The importance of artificial intelligence in achieving fundamental transformations and representing a positive negative impact on the presence of artificial intelligence applications is as follows: -[19]

1- Developing the dynamism and accuracy of the future: Adopting interactive artificial intelligence techniques in creating a more predictable and less creative work environment; Through the use of a set of complex algorithms capable of dealing with a large amount of huge and disparate data and processing it in record time to predict financial and regulatory competitiveness guarantees.

2- Reducing the cost of business: It is the most popular use for business institutions in that it affects the cost of business, which helps them achieve gains in the market, by introducing artificial intelligence applications in banks and brokerage to reduce costs; As banks work on AI data at the primary interface to facilitate customer identification and authentication to direct employees through chatbots, voice assistants and deep customer relationships; Artificial intelligence is also being applied by banks within the functions of teenagers to detect operations in and thus leads to combating money laundering.

3- Necessity and expectations of current and prospective customers: Artificial intelligence technologies for reactors are pivotal in creating high value for user data, which allows organizations to quickly adapt to the necessity and preferences of customers; Which results from their loyalty; Hence, increasing the market share and revenues of an establishment. Through the use of a chatbot, data can be analyzed and understood in customer relationship management applications. Thus their applications will be more efficient in managing customer information and providing customers with specific information.

4-Dynamic optimization of deep business: Artificial intelligence is prepared for more work through deep business software applications that provide organizations with visibility into how the company gets business done.

5-Increasing investment promotion: Public organizations can use; Banks specifically use artificial intelligence technologies by using their smart systems to help find investment alternatives and opportunities to help in making investment decisions.

3. Result Discussion

Opinions of bankers and businessmen about the opportunities of artificial intelligence. Considering that financial activities are a world and are integrated into many aspects of human interaction, the adoption of artificial intelligence can lead to the introduction of innovations within the industry. For this reason, startups and financial and banking institutions are offering new products and services based on artificial intelligence and Financial technology.

The following table (1) highlights the results of a survey of decision makers in the field of financial services on the use of artificial intelligence:

Study Methodology: In this study, the descriptive approach was used to describe the study variables and analyze the relationship in order to achieve the objectives of the study. The descriptive analytical approach was used to identify the research hypotheses.

The sample and sources of the study consist of 50 Iraqi bank employees. The information necessary for the research was obtained, consisting of an axis that discusses the research hypothesis to confirm or deny it by developing a set of questions. The data was analyzed using the (SPSS) program, where analytical statistics are used, represented by calculating percentages and the mean. Arithmetic and testing differences in the opinions of sample members who work in Iraqi banks.

- Description of the sample's responses to the research variables

Personal data

Table No. (1) shows the volume of artistic research according to gender diversity

gender	frequency	ratio
male	15	30%
Females	35	70%
sum	50	%100

We note that the number of females constitutes about twice the number of males from the size of the sample studied. The percentage of females from the size of the total sample reached 70%, while the size of the number of males reached 30% of the size of the total sample.

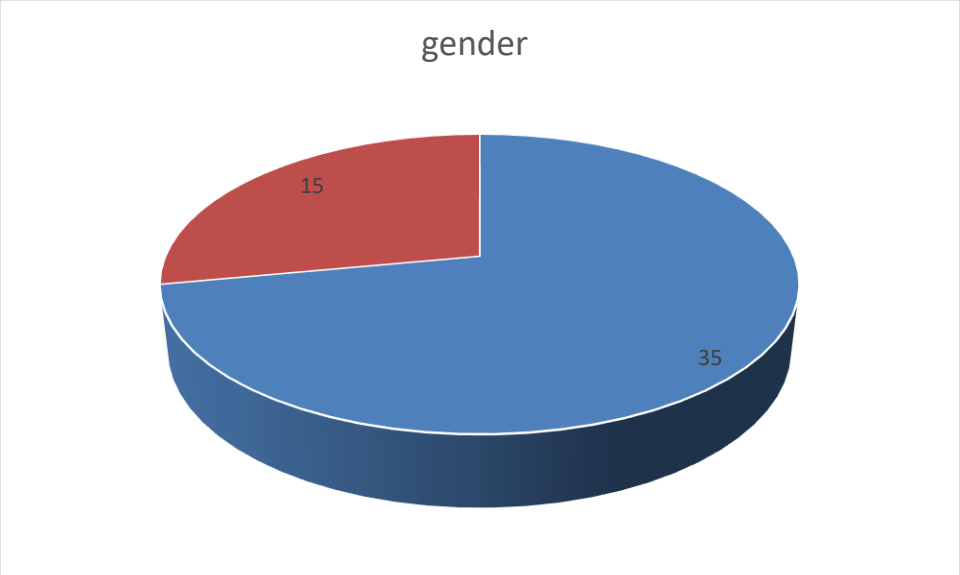


Figure No. (1) shows the size of the research sample according to the gender variable

Table No. (2) shows the size of the research sample according to the age variable

age	male	ratio	Females	ratio
Less than 30 years old	9	%66	7	%20
From 36-42 years old	2	%13	14	%40
From 42-47 years old	1	%1	8	%23
More than 48 years	3	%20	6	%17
the total	15	%100	35	%100

Through Table No. (2) we note that the young group of Iraqi bank employees represents the majority of the research sample.

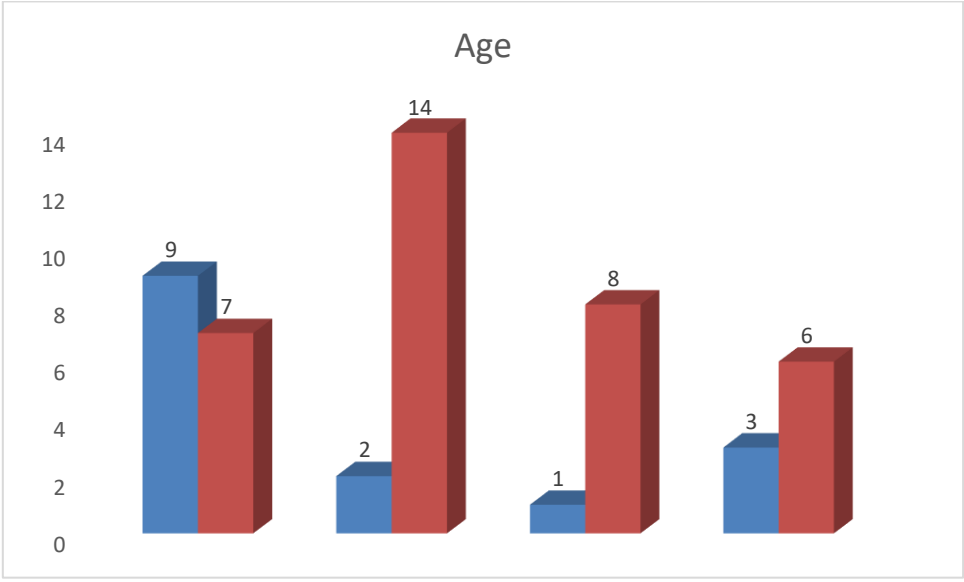
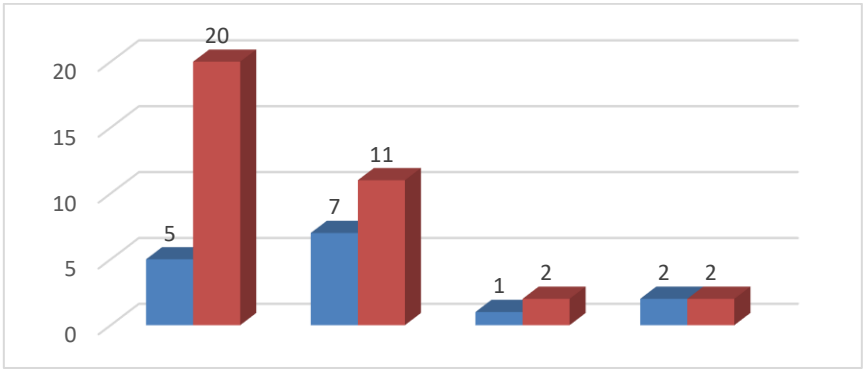


Figure No. (2) shows the size of the research sample according to the age variable

Table No. (3) shows the sample size according to the academic achievement variable

Educational level	male	ratio	Females	ratio
Bachelor's degree or equivalent	5	%33	20	%57
Higher Diploma	7	%47	11	%31
Master's	1	%7	2	%6
Ph.D.	2	%13	2	%6
the total	15	%100	35	%100

From Table No. (3), we note that the percentage of females reached 57% of those holding a bachelor's degree, while the number of males reached 33%.



.Figure No. (3) shows the sample size according to the academic achievement variable

First: Testing the normal distribution of the data

(One sample Kolmogorov-Smirnov test) was relied upon to test the normal distribution of the data, and the results showed that the value of (Asmp. Sig. (2-Tailed) is as shown in Table (4), which means

that there are no statistically significant differences between the distribution Variable values and normal distribution**.**

Table No. (4) Normal distribution of data

	N	Posterior			95% Credible Interval	
		Mode	Mean	Variance	Lower Bound	Upper Bound
the age	50	1.2857	1.2857	.003	1.1858	1.3856
gender	50	2.2976	2.2976	.015	2.0594	2.5359
Academic achievement	50	2.6071	2.6071	.017	2.3496	2.8647
From your point of view, banks must adopt a strategy for the digital transformation of banking services that enables them to benefit from technological development and maintain their market share.	50	2.5238	2.5238	.015	2.2814	2.7662
Obtaining market share in the banking sector has become dependent on the extent of banks' success in attracting and developing workers with the appropriate competencies to keep pace with developments in the digital age.	50	2.5595	2.5595	.018	2.2923	2.8267
Digital transformation of banking activities creates more jobs than it destroys	50	2.7738	2.7738	.017	2.5200	3.0276
The human element is considered the most important asset of the institution and one of the most important components to enable the bank to digitally transform and keep pace with developments in the digital age	50	2.8690	2.8690	.024	2.5625	3.1756
Serious steps must begin to be taken to digitally transform banking activities, even in the absence of a large segment of customers integrating into digital activities.	50	1.8214	1.8214	.020	1.5440	2.0989
FinTech companies are competing with banks in providing financial services to customers.	50	2.9405	2.9405	.023	2.6405	3.2405
Competition in the field of financial services has become dependent on the elements of creativity and innovation in providing banking services through innovative electronic channels that suit existing customers and attract new customers to the banking sector.	50	2.5952	2.5952	.022	2.3035	2.8869
Egyptian banks conduct appropriate training courses to enable employees to keep pace with developments in the digital age	50	2.6548	2.6548	.018	2.3894	2.9201
The more experience the employee has, the greater his ability to keep pace with the requirements of digital transformation and adapt to technological activities	50	2.6905	2.6905	.017	2.4330	2.9480
Atman companies	50	2.8095	2.8095	.023	2.5093	3.1098
Regulatory sectors (risk, compliance and internal governance).	50	3.0476	3.0476	.023	2.7485	3.3468
For support sectors (human resources - engineering sector).	50	2.2262	2.2262	.015	1.9841	2.4683
asset management	50	2.9405	2.9405	.022	2.6483	3.2326

Second: Normal distribution and testing it by drawing

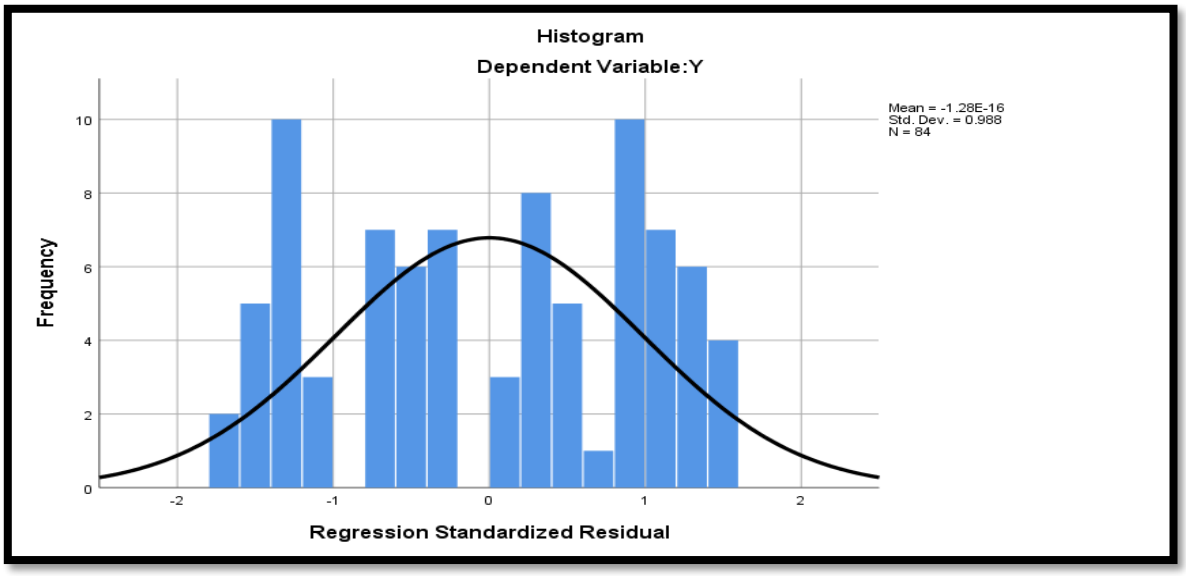


Figure (5) shows the histogram showing the normal distribution

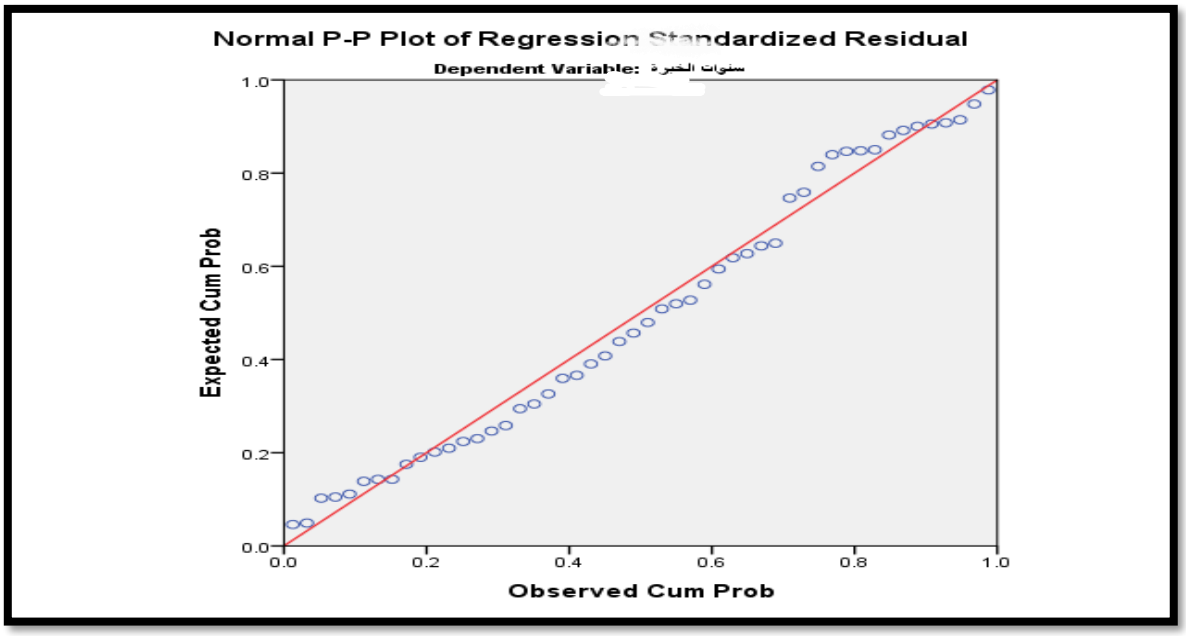


Figure (6) represents the normal distribution of random error.

To check the assumption of homogeneity of random error, we plot the y values on the horizontal axis and the random errors on the vertical axis. It is observed from the resulting figure (Figure 6) that the points are uniformly distributed around zero, which indicates that the model does not suffer from the problem of random error variance heterogeneity.

Thus, the data and information obtained are ready to test hypotheses as follows:

Study Hypotheses

The first hypothesis: There are no significant differences between the ability of Iraqi banks to apply artificial intelligence and machine learning and the rapid technological development in financial services.

There is a significant correlation between the ability of Iraqi banks to apply artificial intelligence and machine learning and the rapid technological development in financial services for the sample studied.

Table No. (5) shows the analysis of variance to test the first hypothesis

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	66.99	36	0.231	0.843	.0043[b]
Residual	39.585	14	0.273		
Total	106.575	50			

a. Dependent Variable

b. Predictors: (Constant

c. Predictor: (constant)

We note from the regression analysis tables above that the ability of Iraqi banks to apply artificial intelligence and machine learning reflects the rapid technological development in financial services. Especially for age groups under 30 years, it has led to a significant development in the ability of Iraqi banks to apply artificial intelligence and machine learning, as well as the rapid technological development in financial services.

At a significant level (0.01), that is, with a highly significant effect, this is why the null hypothesis is accepted, which states (there is a significant correlation between the ability of Iraqi banks to apply artificial intelligence and machine learning and the rapid technological development in financial services), meaning that the use of artificial intelligence facilitates banking services.

Table No. (6) shows the analysis of variance to test the first hypothesis

Total correlation coefficient	The coefficient of determination	Corrected coefficient of determination	Standard error
0.878	0.8361	0.8426	0.523

The coefficient of determination was (0.8361), meaning that the application of artificial intelligence and machine learning reflects the rapid technological development in financial services. The value (0.8361) is from the increase in the absorptive capacity of Iraqi banks, and the remaining amount (0.1639) is due to variables outside the elements studied.

Second hypothesis: There are some sectors in the bank that are more affected by the application of financial technology tools than other sectors

Table No. (7) shows the analysis of variance to test the second hypothesis.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	50.75	36	0.175	0.0577	.0039[b]
	Residual	43.935	14	0.303		
	Total	94.685	50			

a. Dependent Variable
b. Predictors: (Constant
c. Predictor: (constant)

We note from the regression analysis tables above that age, gender, and educational level have an impact on some sectors of the bank that are more affected by the application of financial technology tools than other sectors.
At a significant level (0.01), that is, with a highly significant effect, this is why the null hypothesis is accepted, which states (there is a significant correlation between some sectors of the bank that are more affected by the application of financial technology tools than other sectors.

Table No. (8) shows the analysis of variance to test the second hypothesis

Total correlation coefficient	The coefficient of determination	Corrected coefficient of determination	Standard error
0.793	0.802	0.819	0.472

As for the coefficient of determination, it reached (0.802), meaning that all age, gender, and educational level determine the value (0.802) of the requirements of the sectors in the bank that are more affected by the application of financial technology tools than other sectors, and the remaining amount (0.198) is due to variables outside the variables studied.
- Internal consistency of the data of the first axis (personal data) with the data of the second axis. The role of artificial intelligence and machine learning in digital banking technology.

Table No. (9) shows the extent of internal consistency of the impact of the data of the first axis (personal data) with the data of the second axis. The role of artificial intelligence and machine learning in digital banking technology and the extent of the correlation coefficient.

NO	questions	Pearson Correlation Coefficient (calculated)r	The result
1	From your point of view, banks must adopt a strategy for the digital transformation of banking services that enables them to benefit from technological development and maintain their market share.	0.965	significant
2	Obtaining market share in the banking sector has become dependent on the extent of banks' success in attracting and developing workers with the appropriate competencies to keep pace with developments in the digital age.	0.654	significant
3	Digital transformation of banking activities creates more jobs than it destroys	0.899	significant
4	The human element is considered the most important asset of the institution and one of the most important components to enable the bank to digitally transform and keep pace with developments in the digital age	0.814	significant
5	Serious steps must begin to be taken to digitally transform banking activities, even in the absence of a large segment of customers integrating into digital activities.	0. 65	significant
6	FinTech companies are competing with banks in providing financial services to customers.	0.823	significant
7	Competition in the field of financial services has become dependent on the elements of creativity and innovation in providing banking services through innovative electronic channels that suit existing customers and attract new customers to the banking sector.	0.765	significant
8	Egyptian banks conduct appropriate training courses to enable employees to keep pace with developments in the digital age	0.623	significant
9	The more experience the employee has, the greater his ability to keep pace with the requirements of digital transformation and adapt to technological activities	0.854	significant

Tabulated value of r: 0.235 at a significance level of 0.05 and degree of freedom =48
Degree of freedom = sample number -2
Rule: If the calculated r is greater than the tabulated r, there is a significant correlation
Source: Prepared by us based on SPSS V26 output.
That is, its paragraphs are statistically significant, as we find that the correlation coefficients calculated for each of its paragraphs are greater than the tabular value of r, in all the paragraphs. The axis means that there is an important correlation, including the paragraphs of the axis, that is honest and internally consistent with what it was designed to measure.
3- Cronbach's Alpha reliability analysis
Validity and reliability are among the most important topics to be examined in terms of their impact on the results and their ability to generalize the results.

Credibility and consistency are among the most important topics that concern researchers in terms of their impact on the importance of research results and their ability to publish the results. Reliability and consistency are related to the tools used in research, and their ability to measure and accurately measure the readings taken from these tools.

Cronbach's alpha is a measure of the reliability of a test (questionnaire), Cronbach's alpha is a measure of internal consistency, i.e. the extent to which a group of items are closely related, and Cronbach's alpha is a measure of internal consistency.

It is a simple way to measure whether a result is reliable or not. Reliability refers to the amount of true variance that can be accounted for by the observed variance in a measurement. Several coefficients have been proposed to estimate reliability from internal consistency, Cronbach's alpha is the most popular, and Cronbach's alpha is one of the most widely used reliability measures in the social and organizational sciences.

The test was performed and the alpha value was extracted as in the table below.

Table No. (10) shows Cronbach's alpha coefficient

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.799	.957	4

From the table above it is clear that the alpha ratio is equal to (0.799), which is a good ratio.

It has been proven that the questionnaire will give good results and indicates honesty and stability in its results.

Internal consistency of the data of the first axis (personal data) with the data of the third axis. What sector do you think will be most affected by the technology tools associated with digital transformation processes.

Table No. (11) shows the extent of internal consistency of the data of the first axis (personal data) with the data of the third axis. What sector do you think will be most affected by the technology tools accompanying digital transformation processes and the extent of the correlation coefficient

NO	questions	Pearson Correlation Coefficient (calculated)r	The result
1	Atman companies	0.731	significant
2	Regulatory sectors (risk - compliance and governance - internal).	0. 842	significant
3	For support sectors (human resources - engineering sector).	0. 991	significant
4	asset management	0.514	significant

Tabulated value of r: 0.235 at a significance level of 0.05 and degree of freedom =48

Degree of freedom = sample number -2

Rule: If the calculated r is greater than the tabulated r, there is a significant correlation

Source: Prepared by us based on SPSS V26 output.

That is, its paragraphs are statistically significant, as we find that the correlation coefficients calculated for each of its paragraphs are greater than the tabular value of r, in all paragraphs.

Axis means that there is a significant association, including the axis items, that is true and internally consistent with what it was designed to measure.

Table No. (12) shows Cronbach's alpha coefficient

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.812	.973	9

From the table above it is clear that the alpha ratio is equal to (0.812), which is a good ratio.
It has been proven that the questionnaire will give good results and indicates honesty and stability in its results.

4.Conclusion

1- Difficulty gaining customer trust due to fear of fraud in the absence of adequate consumer protection frameworks in the field of financial services and data privacy laws.
2- Low quality of Internet and mobile phone service and their prices, despite the high penetration rates of information and communications technology in recent years.
3- Institutional support is still limited, as a few Arab countries have established incubators to help increase startup companies.
4- The laws imposed on financial technology have hindered the development of this field in the Arab world
5- Financial technology is no longer an option because of the local and international investment opportunities it provides
6- The abundance of means of communication allows quick access to the world of financial technology
7- In order to increase the efficiency of the Iraqi banking sector, Iraq must adopt a smart regulatory strategy with its effective implementation
8- Investment in technology and continued support for emerging companies by the government
9- The application of artificial intelligence contributes to increasing the efficiency of the performance and strategic activities of the state and institutions
10- Banks must make better use of new capabilities by continuously innovating at speed and scale and reinvesting as necessary to extract optimal value from technologies that support artificial intelligence.
11- The application of artificial intelligence contributes to reducing the negative aspects accompanying banking work, such as cases of fraud, money laundering, and reducing human errors.
12- Artificial intelligence is applied in the banking sector through a number of approaches, such as chat robots and process automation. Despite the positives presented by investing in artificial intelligence, there are a number of challenges that may prevent the widespread application of these applications

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