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## ARTIFICIAL INTELLIGENCE AND LOAN RISK MANAGEMENT IN ALGERIAN PUBLIC BANKS: A FORWARD-LOOKING STUDY OF THE POSSIBILITY OF ADOPTION AND PROSPECTS FOR APPLICATION

## **Boufafa Ouided**

LFIEGE, Department Financial Sciences, Badji-Mokhtar University, Annaba-Algeria. <u>wbbw1623@gmail.com</u>

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## ABSTRACT:

This research paper aims to examine the prospects for the adoption of artificial intelligence technology for effective loan risk management at the level of the Algerian banking system. In the context of efforts to keep pace with the global digital trend, the Algerian authorities have made profound reforms to this important economic agent.

Additionally, via a scoping research that uses a descriptive methodology and is backed by a case study. Academic researchers, officials inside the framework, and representatives of loan-seeking firms at the level of Algerian state banks were the three categories of players targeted in the lending process.

Depending on the interview. The study discovered that the sample dialects supported the digital track and experiment, notwithstanding differences in opinion between advocates and opponents of its usage. Uncertainty surrounds the perception of artificial intelligence as a cutting-edge financial technology that competes with conventional banking services.

Keywords: artificial intelligence, loan risks, Algerian banks, banking reforms, digital revolution.

## 1. INTRODUCTION

The major and fundamental part of the Algerian financial system is the banking system. The goal of the financial reform program prepared by the Inter-Ministerial Committee in the month of 2004 was to lower the cost of intermediation and strengthen the bank loan market in the context of its reform efforts and to strengthen its contribution to financing and driving economic development<sup>1</sup>.

Reform initiatives have persisted, taking into consideration the global financial landscape and, in particular, the rapid advancements in technology that the sector has experienced more than the whole economy.

Declaring 2024 the year of banking reform with the goal of updating the banking system and drawing capital from outside of it will serve to validate this combination.

The April 2023 draft monetary and banking law, which aims to modernize the banking system and create an atmosphere that encourages economic operators to employ all contemporary financial instruments, reflects this<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> °- https://www.mf.gov.dz/index.php/ar/documentation-ar/grands-dossiers-ar/420-2020-11-10-09-59-38

<sup>&</sup>lt;sup>2</sup> °- https://www.aps.dz/ar/economie/152496-2024

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Technology provides many financial services in concurrently. Encompassing artificial intelligence. The last one who has developed and gained so much experience in life overall is this one. Specifically, in the loan risk management<sup>1</sup>.

## **Research problem**:

A prospective analysis of how Algerian banks may use this technology and whether doing so would be beneficial in order to enhance loan services in particular and reap the benefits of it in order to accomplish a significant reform jump.

## **Research hypotheses :**

- Artificial intelligence is used to assist activate the financial standard's weight in the loan approval process.
- > The Algerian environment faces significant obstacles due to the issue of information credibility and the resolution's centrality, which makes the implementation's effective execution difficult given the associated technological risks.

## **Research objectives and importance:**

The objective of this study is to establish a rigorous, scientific foundation for evaluating the realities of Algeria's banking sector in light of global issues and stakes. The endeavor to pinpoint key areas for developing a reform and integration strategy for this crucial sector in funding Algeria's national growth is indicative of its significance.

## **Research methodology**:

In order to accomplish so, it offers the conceptual framework for this study article, following an evolutionary extrapolation. It is necessary to take into account the effects of the technology revolution and its potential benefits as the Algerian reform process aims to improve the local environment and integrate into the global economy. We have assisted in capturing reality and gathering data via interviews using a descriptive and analytical methodology. An examination of a random sample conducted in the field with three participants in Algeria's banking system in general and the loan procedure in particular reinforced the study and research efforts:

- <u>University researchers and PhD scholars</u>: In the context of finance and banking in particular, we refer to them as doctorate scholars and university researchers. They are all members of the Algerian Public University. The goal is to gain extensive scientific information, management, and measurement expertise regarding bank loan risks, as well as global experiences related to this topic.
- An officer in the Department of Loans at Algerian public banks: Whether it is for investment or exploitation. Given their professional practice of various techniques and their living in working life. We are interested in their viewpoint and evaluation of the relationship between professional and practical training and theoretical advances.
- <u>Companies looking for loans</u>: to find out how satisfied customers are with the bank's performance dealing with them and how well they are keeping up with all the latest changes in the banking and financial industries. Moreover, the way to do it is by concentrating on all the things that are associated with artificial intelligence in particular and financial technology in general.

Drawing on the aforementioned, the study article encompasses the subsequent themes:

<sup>&</sup>lt;sup>1</sup> °- K.Amzile(2023) : L'intelligence artificielle et modélisation du risque de crédit, l' Harmattan, page29.

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#### Section 1: artificial intelligence and loan risk

- Solution Basis concepts
- ♦ studying literature

## Section 2: Information on the financial environment in Algeria and the opportunities for enhancing and implementing

- Solution Qualities and benefits of the financial environment in Algeria
- ✤ Practical case

#### Section 1: artificial intelligence and loan risk

Clarifying the nature of the potential connection to which one might contribute is the aim of this paragraph. Artificial intelligence used in financial technology helps control bank loan risk. In order for us to examine the factors that determine whether or not it functions.

#### 2°-1°- Basis concepts:

Sizable portions of the bank's earnings come from loans. Raising the amount of risk and its efficiency are highly correlated<sup>1</sup>. More risk means greater pressure on the latter to improve efficiency.

In exchange, the bank is exposed to a variety of risks that might endanger its operations: liquidity risk, market risk, operational risk and loan risk<sup>2</sup>. However, this one has received a lot of research and attention. Following changes in the public and financial economic environments—particularly the transition from closed to open commerce and subsequent competition with financial markets—will help you understand how technology is influencing both environments<sup>3</sup>.

It is imperative that banks have more accurate and dependable processes for determining whether to approve a loan. Her customers did not lose her trust too quickly. Furthermore, it does not put them in a dangerous situation where they must take on the dangers of making the loan. When a lender defaults on a loan at maturity, It has called a credit risk, or the opposite part risk, for short<sup>4</sup>.

We discover that the process of deciding whether to give a bank loan consists of two stages: the construction and the path -based on a thorough review of scholarly sources and practical research-<sup>5</sup>.

The term "creation" describes the steps involved in establishing a financial connection, which begin with the client's development, involve obtaining data and information from the bank, and involve determining the information's veracity and suitability given the bank's current standing. The route follows the grant decision and leads from the consumption and transfer procedure to the payment.

Here, it is evident that the two phases' interactions are too important to overlook. In addition, that class is limited to organization. It is impossible to approve a loan and start a financing partnership

<sup>&</sup>lt;sup>1</sup> °- Yvon Pesqueux. La gestion du risque. Master. France. 2020. halshs-02909236, page 2.

<sup>&</sup>lt;sup>2</sup> °- T.V. GESTEL& Others (2009): Credit risk management, Oxford University Press, page 23.

<sup>&</sup>lt;sup>3</sup> °- E. Bishop (2004): Finance of international trade, essential capital markets, ELSEVIER, page 132.

<sup>&</sup>lt;sup>4</sup> °- T. Omrani & Others(2023) : Analysis and management of credit risk in Algerian commercial banks:

An attempt to develop a practical risk assessment model to improve banking performance, Journal of Contemporary Issues in Business and Government, Vol 29, N° 04, page 17.

<sup>&</sup>lt;sup>5</sup>°-Z. Chibel & Others(2018) : Etude de différente méthodes d'analyse de risque crédit-revue de littérature-, revue du contrôle de la comptabilité et de l'audit, N°7, page04.

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without researching the path the bank will take and taking a big chance on many supplementary grants.

Since 1970, the idea of credit risk has changed in light of the global economy's openness and rapid expansion<sup>1</sup>. Due to heightened company risk, insolvency, and a high level of volatility in corporate results. Because managing credit now has a higher risk, it is important recognizing this, take appropriate action, figure out how to measure and avoid credit, and create a sound financial plan. In addition, among the several approaches to assessing the default risk that fall under the quantitative and qualitative categories, we find:

Financial analysis: based on the examination of projected liquidity flow and the development of the labor force's capital trend. This approach is predicated on a review of the financial accounts.

Because it does not permit enough information, it is categorized as a conventional technique. An investigation of the company's activities, environment, markets, and competitiveness served as the foundation for the application of qualitative approaches to finish the analysis<sup>2</sup>.

- The beginning of the mixing: The use of financial analysis based on earlier accounting data is still in place. The development of methods, such as the SC method and the LAPP approach, that combine the quantitative and qualitative components of credit risk through thorough investigations and aid in the formation of a comprehensive final judgment has started<sup>3</sup>.
- Modelling and measurement: The scrubbing and credit rating procedures have started with the creation of computational tools and the start of information technology dispersion to aid in the processing of massive amounts of data. Through an assessment of the borrowers' capacity to make all of their short- and long-term loan payments, it aims to convey the creditworthiness of the borrower<sup>4</sup>. This methodology is predicated around an indicator that encapsulates the flow of several data points. Research has been conducting more and more modeling, which has greatly aided in determining credit capacity and implementing effective risk management<sup>5</sup>.

This strategy stressed the correlation between credit risk analysis and data volume. Several and different scenarios, as well as a substantial amount of qualitative and quantitative data, are needed to decide whether to approve the loan. Using "manual intelligence" was suggested as a means of enhancing the effectiveness and quality of financial services from this standpoint.

The definition of artificial intelligence is the use of a set of ideas and methods to produce computers that can mimic artificial intelligence. Furthermore, given her appearance in her mid- $50s^{6}$ .

The existence of this technology in every aspect of life is still being confirmed. This is particularly advantageous to the banking industry and the financial sector in general. Until he emerged as one of the main figures in his industry in the modern era. Its impact is significant and extends from

<sup>&</sup>lt;sup>1</sup>°- R.Hennani(2016) : l'évolution des accordes de bale d'une approche micro prudentielle à un cadre macro prudentiel, l'actualité économique, page 06.

<sup>&</sup>lt;sup>2</sup> °- T.V.GESTEL& B.BAESENS (2009): Credit Risk Management, Oxford University Press, page 60.

<sup>&</sup>lt;sup>3</sup>°- D.karyotis (1997) : La notation financière : quand une information devient un instrument de décision, Revue d'économie financière, <u>https://www.persee.fr/doc/ecofi 0987-3368 1997 num 41 3 2332</u>, page 57.

<sup>&</sup>lt;sup>4</sup>°- P.J.Y. Wakungelani(2016) : la gestion des risques de crédit dans les banques commerciales-cas de la Rawbank-, <u>https://www.memoireonline.com/04/17/9783/</u>, page 31.

<sup>&</sup>lt;sup>5°</sup>- R.Hennani(2016) : l'évolution des accordes de bale d'une approche micro prudentielle à un cadre macro prudentiel, l'actualité économique, page 09.

<sup>&</sup>lt;sup>60</sup>- S.El-Kaddioui El-Idrissi& Others (2021): The Effects of artificial intelligence-a literature review, https://www.researchgate.net/publication/363654151, page 03.

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automatic legal document interpretation to bank statement reconciliation. This has created opportunities for research and discussion on how it may be used to enhance financial services while also raising issues regarding the difficulties associated with the intricate processing of the data it processes, which is summed up in the paragraph that follows.

 $2^{\circ}-2^{\circ}$ - **A review of literature**: A number of earlier studies served as support for the conceptual framework that was built for the research paper's topic. We have chosen the following, out of several, since it best supports the research idea:

- Concerning the need of researching and creating efficient techniques of measuring loan risk: It became the focus of several investigations. And in this context, the most significant literature in this field was compiled by the research (Gouiaa & Ouedraogo, 2022). Which focused on understanding the impact of credit risk on the performance of Canadian banks. It aimed to make clear the factors that influence credit risk and its significance in order to support an efficient risk management strategy and, therefore, improved bank performance. In order to accomplish effective risk management and thereby improve the performance of the Bank, research with scientific value added highlighted the significance of developing and setting appropriate benchmarks.
- Concerning the use of artificial intelligence in loan risk management: We find the Deloitte study, it is an extensive analysis of algorithms, processes, and designs related to artificial intelligence. By way of his algorithms' development. In addition, how does it facilitate the processing of expanding amounts of data? It supports the modeling technique used as the most recent approach to assessing loan risk. The research also made note of the issue of risk management, particularly as it relates to financial institutions, and the necessity of developing clear, verifiable regulatory frameworks and processes to facilitate prudent decision-making and advance the advancement of business and finance.

Remarkably, the study provided a thorough description of the link and the mechanism involved. Furthermore, because Algerians and other emerging economies matter to us. We have, albeit to differing degrees, funded research on the same concept at the level of comparable emerging economies in their general financial environments. However, in terms of financial changes, she is attempting to take a quantum leap:

(EL OUIDANI & Others, 2023): The study sought to illustrate how artificial intelligence affects three different categories of economic agents economically. By means of an extensive review of research and writings in the area. Furthermore, I discovered a condition of discord when it comes to figuring out which manner artificial intelligence and various economic agents are causally related—that is, how to investigate it. Additionally, because the study concentrated on the possible and present economic impacts of artificial intelligence on humankind, It has been determined that, in terms of its application by financial institutions, it addresses a broad spectrum of requirements concerning risk assessment, financial analysis, conservative management, credit approval procedures, customer systems, anti-money laundering, different operational procedures and systems, and customer communication. The study also warned that such high technology would improve life but would do nothing to poor countries that were technically uncompetitive. You don't know financial stability, The study concluded that the model was theoretical or theoretical, highlighting the benefits of utilizing AI to boost revenue, productivity, and expenses for banks at every point of the value chain. However, this does not guarantee that she will have the greatest time or investment.

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★ (DOUA, 2022): The article's focus was on artificial intelligence's significant benefits for bank management and other IT product users. Consistent with government strategy, which integrates ICT usage across all aspects of life in order to promote visibility via the growth of the digital economy. At the Ivorian economic level, it has not shied away from addressing the difficulties and applications of AI in banking, nevertheless. Along with the issue of cyber security, the progressive changes in roles, responsibilities, and skill sets that go hand in hand with the digital transformation of businesses.

## & (Senden,&Alexandre,2021):

As a doctoral thesis, it is.Her research aimed to investigate the potential application of AI insid e the banking industry. Rearranging established business structures in order to address the novel difficulties of the 20th century. Specifically, financial technology. The study evaluated issues and trends from the standpoint of risk management. It produced outcomes that were reasonable for the financial and economic climate in Rwanda:

- ▲ Data quality and quantity are related to the use of artificial intelligence. It is an essential prerequisite for its acceptance.
- ▲ It is impossible to explore artificial intelligence without considering the necessity of tying it into the creation of policies and legal frameworks for the advancement of this technology and its application to the growth
- (Mahmoud Diab, 2022): The researcher started by noting how prevalent technology is in the contemporary corporate world. Additionally, it is the basis for raising the odds of growth, survival, and survival. After reviewing a history of the use of software at the bank level. Moreover, different types of technology in banking. According to research, the use of artificial intelligence in a number of financial service sectors has improved the quality of banking services, which has enhanced bank performance.

## Section 2: Information on Algeria's financial landscape and potential applications

The research idea's practical and practical projection are given in the paragraph that follows. By outlining the peculiarities of the banking, landscape in Algeria, after that, we proceeded to the applied study, which comprises the survey of all parties engaged in this perspective.

<u> $3^{\circ}-1^{\circ}$ - Algerian financial environment's characteristics</u>: the intermediary between savers and investors is the bank. Furthermore, it has always been a crucial source of capital for economies of all sizes.

The financial system in Algeria's economy is dominated by the banking sector, yet considering the e fforts put in, one might say that this sector plays a respectable role.

A capitalist colonial inheritance served as its foundation. Algeria's economy has faced several challenges.

To address the increasing difficulties associated with economic openness, the authorities have worked very hard. Still, the main source of funding for economic growth is the banking industry. In addition, it was 1986. The first lawn. The task of advising commercial banks on the essential steps to monitor loans that were provided and lower the risk of non-recovery commenced with the introduction of the national currency and the Central Bank's.

The Monetary and Loan Act began to be implemented in 1990. For the financial system in Algeria, that marked a significant second turning point. The Central Bank was granted independence, and certain roles were prioritized, the principal ones being:

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- Issuance of currency
- Control over the management of currency
- Acceptance of the opening of the offices of representatives of foreign banks and financial institutions in Algeria.
- Management of the loan distribution for the economy

Due to the significance of this lending activity, commercial banks quickly established the steps they take to examine a loan file and its components, which are as follows:

## A°- The steps involved in making the loan:

First, determine the customer's identity and job quality through an in-person interview prior to submitting a loan application. Having knowledge of the amount, terms, and conditions of the loan that is sought, finish the lender's personal information form, offer a list of all their mobile and immovable property, and provide proof of ownership for each item, Check the borrower's authorized property by conducting a field inspection around its perimeter.

Second, examine the customer's bank information to ascertain his standing based on previous exchanges.

Finally, examining financial records to see if the information required is different from loans intended for investment or exploitation. The client conducts the investigation at the level of consulting offices and special analysis agencies. For final decision<sup>1</sup>.

This procedure has begun, and its availability and respect have been confirmed. The default loan rates continue to rise, as Table 01 summarizes:

# Table -1- : Proportion of loans defaulted and rate of supplies allocated at the level of public banks

Year	2018	2019	2020	2021	2022
Proportion of loans defaulted	13.49	15.60	17.17	21.06	21.35
rate of supplies allocated	49.69	45.88	44.85	47.53	48.65

Source: Annual report of the Bank of Algeria on economic and monetary development: https://www.bank-of-algeria.dz

Between 2018 and 2020, the rate of loan default stayed nearly constant. Likely increase in 2021 because of the severe economic downturn brought on by the Covid-19 quarantine. Table 02 indicates that there was a stabilizing condition throughout the same period according to financial hardness index:

Table -2- : Financial naroness index 2018-2022					
Year	2018	2019	2020	2021	2022
	19.05	17.99	19.17	21.60	21.53

#### Table -2- : Financial hardness index 2018-2022

<sup>1</sup> °- For more details, you can go through the official website of the Bank of Algeria.

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Source: Annual report of the Bank of Algeria on economic and monetary development: https://www.bank-of-algeria.dz

However, one of the biggest obstacles facing the banking industry, and the Algerian financial system in particular, is raising the caliber of the loan portfolio of the country's public banks. When substantial bank reform takes effect in 2024. Accompanying the ongoing prosperity of the digital revolution and the increasing voices advocating for its benefits: Is it possible to propose artificial intelligence as a technical means of closing the gap in how Algerian state banks handle loan risk?

## <u>3°–2°-Study results are presented and discussed:</u>

The study's sample includes the following, as previously stated:

- $\tau$  <u>The first category</u> : 35 academic researchers
- $\tau$  <u>Category II</u>: 30 professional researchers at the level of public banks.
- τ <u>Category III</u>: 15 Researcher, representative of a medium borrowing company. Its activities was divided between poultry farming, the making of soda, the making of pastries and the making of food canteens.

Before submitting an analysis of personal data, a review of the results obtained for each category is attached. We provide justification for the analysis's use of the interview. It was as follows :

- > The challenge of reaching the sample size necessary for a questionnaire's distribution
- Divergent perceptions among researchers regarding the digital revolution, its terminology and levels
- A number of participants declined to complete the questionnaire and expressed satisfaction with the interview process, which involved multidevice any expression contend when the recencheric inecticable curies its about learning and

day conversation sessions centered upon the researcher's insatiable curiosity about learning and human response to a great deal of real-world information.

The interview made it possible for the interviewees to elaborate in a methodical manner. It made it possible for the mammoth to address every subtraction this paper handled in a thorough, organized manner.

Personal characteristics of t	he sample members - Category	Frequency
	1.	
Function	University professors	20
	Doctoral student	15
Т	otal	35
Professional seniority	2 to 5 years	15
	5 to 10 years	07
	Over 10 years	14
Total		35

<u>For academic researchers</u>: The following table provides an overview of the sample organs' distribution.

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Source: Prepared by Researcher

According to the table above:

- About 43% have a doctoral degree and thesis in financial technology and the banking sector, equivalent to 15 researchers from the academic sample.
- Bank researchers make up over 57% of university academics. That is the same as twenty academic researchers.

The reason PhD students who talked about it were singled out was that they were able to live in Algerian banks, stalk them, and try to abandon the theoretical knowledge that was gathered from their travels. When they reviewed the idea of a research paper, their answers varied on the following points:

- ✤ A few of them desired to enter the workforce (Specifically, focusing on bank employment). As long as efforts are made to enhance financial technology. The younger generation is the focus of this. Nonetheless, 10 of the 15 individuals. It is a reflection of how they dealt with the technology and digital revolution prior to expanding their scholarly understanding.
- Most of them are urged to advance towards having substantial access to the financial technology industry. In their view, public banks may enhance their efficiency and performance by utilising this paper, which benefits both parties. Any financial organisation that uses modern technology presents a s uccessful and advanced image.
- Most are urged to employ AI to increase understanding of banks, clients, and finances. Work on enhancing, expanding, and revitalizing the intelligence initiatives in use. They would like to be able to identify financial services to the degree that it is within their power for a client, whether or not they are a client, to access the updated website. Prior to trying, he seeks out complete agony. Who will support the choice to deal with the bank after the response has been provided?
- This group's researchers support using AI to boost confidence and increase market share in the banking sector. Because, based on his own data, he establishes the standards for everyone and makes them accessible to him at all times. They are transparent and unambiguous standards that apply to everyone. On a private level, it is available to everyone. By creating a private user account for a customer at the level of the bank's whole information system. In addition to the bank creating an ineffective protection system, that permits penetration and the customer maintaining the secret code for this account, the consumer is growing increasingly worried, secure, and private.

Consequently, the total of all the transactions and searches the customer has made or done with its bank are progressively included to this computation.

★ At this time, a loan file can be processed in a maximum of 30 days<sup>1</sup>. The processing and ultimate decision-making procedure will start after the bank receives the necessary (before indicated) papers. Nevertheless, the operation is centralized (at the Algiers Central Unit level). Despite the clarity of the procedures in place and the documentation required, the analysis's financial component is not entirely evident, though. The client submits a feasibility study of the project to be funded by the loan. The amount of external financial consulting firms recognized in the Algerian market is where this study is being conducted. According to its goals or point of view, the bank does not reexamine. A few of the loan files that served as the study sample for the researchers' scholarly work were examined. Whereby they have used the modelling approach to reassess the risks associated with these loans. Medium- and high-grade files produced different

<sup>&</sup>lt;sup>1</sup>°- https://www.bank-of-algeria.dz/wp-content/uploads/2023/08/Loi-monetaire-et-bancaire-a-publier.pdf

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results. Nevertheless, the loan was approved. Actually, it was discovered that they—along with the people who had been charged—had accidentally discovered the loan's final payments.

- ✤ The issue of censorship and artificial intelligence governance is being disregarded by academics in this field. They consider it a global issue. The evolution of the usage for framework, monitoring, and control is monitored by international monetary and financial agencies, as well as sophisticated financial systems, as they deal with artificial intelligence and other financial technologies. This presents an opportunity for exploitation rather than a barrier to non-use. It will take into account all financial legislation while creating its broad regulatory framework.
- ♦ Cyber security is an issue that this group of researchers focuses on. The bank is forced to allocate the work to IT specialists due to concerns about hacking.Put differently; they view this issue as an automated information function. His main requirement is for a secure security system. However, it is not only about hacking; it is also, about how financial data and information algorithms work and are unknown to automated media!

This group's enthusiasm for digital revolutions in general and private financial technology in particular drives their need to integrate artificial intelligence in the loan analysis process in order to speedupdigitaltransmission.

In particular, given the Janvi 2024 trend that started the liberalization of public bank capital<sup>1</sup>. They also believe that technology will eventually restore trust between capital and the public banking system by helping to make the process clearer and more equitable for everyone.

Personal cha	racteristics of the sample members - Category II	Frequency
	Crédit Populaire d'Algérie (CPA)	08
Banks	Bank for Agriculture and Rural Development (BADR)	10
	Local Development Bank (BDL)	07
	External Bank of Algeria (BEA)	05
	Total	<u>30</u>
	5 to 10 years	15
Professional	10 to 20 years	12
seniority	Over 20 years	03
	Total	<u>30</u>
Educational level	Licence	17
	Master	10
	Doctorat	03
		<u>30</u>

**For Professional researchers**: The following table provides an overview of the sample distribution:

Source: Prepared by Researcher

According to the table above:

<sup>&</sup>lt;sup>1</sup> https://www.aps.dz/ar/economie/155369-30

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✓ Four years plus a baccalaureate degree makes up around 57% of the sample members who were questioned.

Public banks were singled out for attention because of their extensive professional background. During its many phases, the financial environment has been fiercely disputed. The following is a summary of their responses.

- Financial analysis is used by banks more formally than professionally. Its approval of the client's feasibility studies without further review or analysis in accordance with the Bank's opinion and proper status serves as proof of this.
- The sample searchers had a wealth of knowledge on AI. Furthermore, when it comes to using it in the banking industry and specifically controlling the risks faced by the bank, it is both almost exhaustive and nonexistent for two of them. Once it has been clarified, discussed, and its content examined. Due to the current state of public banks' digitalization and technology adoption, members of this group have ruled out the prospect of using artificial intelligence. According to their findings, 90% of bankcard transactions included withdrawals and very few reimbursements.
- ✤ 45% of the study group participants raised the topic of the future of bankers generally and the purpose of lending specifically during additional conversation. Because of the economic slump, particularly following the Covid-19 disaster, the government is working to create new jobs in order to counteract the spread of unemployment rather than the other way around.

Due to the numerous challenges posed by Algeria's financial system, chief among them being the need for decision makers to go beyond the legal and economic frameworks when making decisions.

This group has generally expressed strong worries about the likelihood of dependency. 45% of them have gradually indicated that they may be able to activate the customer service function through certification. Without being required to move or visit the bank frequently, customers may use artificial intelligence programs to build a complete image of the loan they want to take out or other lending services the bank offers.

Personal character	Frequency	
	Poultry altar	02
Foundation	The soda industry	01
activity	The Wonder Industry	08
	The food-spray industry	04
	<u>15</u>	
	Private	10
Ownership of capital	Public	05
	Total	<u>15</u>
Capital of the	Less than 3,000,000	12
Foundation	3,000,000 to 150 000 000	03
	Total	<u>15</u>

For the category of searchers, borrowing companies: The distribution of the sample was as summarized in the following table:

Source: Prepared by Researcher

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According to the table above:

- ✓ Of the businesses surveyed, 53% are in the dough industry. That Algerians consume the most of the food item.
- $\checkmark$  67% of the companies interviewed belong to the private sector.

Local businesses have been targeted in order to supplement the participants in the financing procedure. I visited a bank fund. Specifically, we have attempted to ascertain the degree to which they find the financial studies convincing and the degree to which their institutions' metrics align with them:

- Their goal is to finance their operation as cheaply as possible through loans.
- In addition to honoring their promise to return their debts, they want further oversight and follow-up about the effectiveness of their endeavor.
- ✤ A contradiction between optimism in achieving good advantages by using digitalization and different financial technology in return, fearing the decision of artificial intelligence, should it be adopted?

In general, there is uncertainty among group members regarding the potential of digital financial technology.

## **3°-3°-Analysis of the result:**

Following extensive deliberation and clarification with the various sample groups, it was discovered that the notion of artificial intelligence was restricted to a cursory understanding of the phrase for a n excessive number of individuals. The study's findings are summed up here:

- Financial technology is only concerned with digitalization.
   Without a thorough analysis of its varieties or field of use, knowledge of its mechanism of usag e is cursory.
- The first hypothesis is verified based on the findings of the interviews as well as the theoretical and practical analysis. Regarding the role artificial intelligence (AI) plays in operationalizing the financial weight standard in the loan evaluation process. Thus, the loan-granting procedure has begun. However, the quality of the data offered and the development of the forgotten algorithms will determine how successful this endeavor is.
- ✤ In the financial industry, it is widely recognized that both conventional and cutting-edge technology are essential.
- b Digitized technology facilitates rapid file processing.
- ♥ Permits funding and follow-up to be transparent.
- As for the second hypothesis, the fact that Algerian banks are content with the research that the customer produced in order to obtain the loan validates the veracity of the data. Conversely, the choice is made at the parent unit level. To centralize the choice is what it entails. As a result, this theory is verified. The statement highlights the significant obstacles presented by the Algerian context while highlighting the overstated benefits of artificial intelligence. If only in terms of information processing and completion time.
- Sinancial technology is a win-win card for restoring confidence in the public and private banking system.
- ✤ Financial technology as a whole is represented by the digitalization.

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The sample members' perspective centered on outlining the benefits of implementing financial technology and endorsing the digital transformation route in order to significantly advance the goals of the reform movement.

Broadly speaking, we discover that the sample participants initially utilized the same type of financial technology while interacting with AI. Following more conversation and preliminary investigation, the various sample members raised many issues that need to be resolved and managed for the reform process to be successful. Introducing financial technologies in a profitable and efficient manner. Moreover, the embodiment of these anxieties was:

- Security risks in Siberia and the issue with the offenders
- ➢ To structure and define artificial intelligence activities, provided they are implemented in a way that aligns with Algeria's financial and monetary policies.
- > The online flow and the power of the electronic public are examples of the considerable and quick development and support of the digital architecture.
- Evaluation and analysis of international experiences to determine the makeup of the human resource in the field of technology finance.
- Conducting research and educating people about the practical applications of financial technology in general and artificial intelligence in banking services
- Who will write the algorithms for these programs? Is the most common query from proponents of artificial intelligence in the banking sector?

Algerian reality has always been subjected to the application of foreign knowledge and experience without any modifications or thorough tribal analysis. This is a crucial step since it affects the outcome of the initial funding source for the intended economic growth...

#### 4°-CONCLUSION:

The allure of financial technology may be immensely alluring, leading to decisions that are not institutionalized. He takes her down to the chasm. To fully profit from this paper—which is the most trustworthy for financial and economic reform in general—a thorough and in-depth investigation should be conducted, based on the facts of the Algerian environment and the characteristics of its members.

As a result, efforts to enhance the financial and economic environment can both shorten and make long-term implementation possibilities achievable.

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