



***The Use of Artificial Intelligence Applications in Public Relations  
Management:***

***Reality and Challenges***

***A Qualitative Study on a Sample of Some Banks Public Relations  
Practitioners in Algeria.***

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*Received: 10/02/2024*

*Accepted: 24/02/2024*

***Abstract***

In the purpose of evaluating the reality and challenges, this study aims to identify the trends of public relations practitioners about the use of artificial intelligence applications in Algerian banks. The qualitative descriptive approach was used on the study population which consisted of all public relations practitioners in Algerian banks, where the sample was selected by the Non-probability sampling technique. Fifteen (15) officials from the total number of banks within the population available for the study responded making the response rate 75%. The officials were exposed to a semi-structured open interview tool. The duration of the interview ranged between (30-60) minutes. The "Maxqda" software was used to analyze the collected data after transcribing it for textual analysis, to derive symbols and keywords related to each research question. The results showed positive trends in a large percentage of public relations officials in Algerian banks towards the use of artificial intelligence applications. Their future vision demonstrated what these applications can provide and enhance Algerian banks. There are many limitations facing the use of AI in banks, the most important of which

are technical and technological challenges. This paper recommends banks to be well-updated with technology and its use. In addition, it urges researchers to study different aspects of artificial intelligence use in different types of banks.

**Keyword:** Artificial Intelligence, Public Relations, Trends of Public Relations Officials, Algerian Banks.

## **1. Introduction**

Applications of artificial intelligence have the ability to completely transform a wide range of fields of human endeavor. Artificial intelligence has recently been able to draw significant investments, and it is being applied at an accelerated and expanding rate, particularly in China and the United States. The early attempt at implementing AI in the banking industry was the American bank, Ally. The bank developed a chatbot that bears the bank's name and responds to conversations, texts, and voice requests coming from customers. Subsequently, many banks around the world patterned this new strategy, including Erica, Ipal, SBI, SIA, and many other giant banks in the United States. Similarly, other countries have begun to adopt conversational technologies via artificial intelligence.

Public relations in banks work to keep pace with technological developments and adapt to them, including artificial intelligence, which is the most influential element currently. In doing so, banks create automated programs capable of simulating intelligent human behavior to solve problems and make decisions in a logical and organized manner, similar to a large extent the way the human mind thinks. Many public relations departments in banks have created special customer service models by adopting "Chatbot" applications that are used to communicate and deal with customers just like a customer service employee. This new smart solution, which mostly uses live chat applications that are based on text messages via popular applications such as "Facebook Messenger," "WhatsApp" and other banking platforms, has helped reduce the time it takes to connect the customer with the specialized public relations employee, as well as providing multidisciplinary services without any delay.

Therefore, to meet the varied needs of their clients, bank public relations professionals have altered the way they provide their services. This transformation has made it possible for banks to lessen risks, adapt their services to the needs of the market, and use the newest technology to draw in additional clients and partners. This transition has aided banks in enhancing their operations, adjusting to the times, and maintaining an advantage over rivals. The degree of demand for banking services reflects the economic development of the nation.

The study question is based on the researcher's acquaintance with previous Arab and foreign studies and the theoretical research on the topic of AI applications such as the study of Guzman & Lewis (2020), the study of Jeremy (2019), and the study of Ghobashi (2022), and the study Wang (2020). Accordingly, this study aims to answer the following question:

What are the trends of public relations officials in Algerian banks about the use of artificial intelligence applications?

Other sub-questions branch out from the main question:

1- How do public relations practitioners realize the importance of using artificial intelligence applications in the Algerian banks under study?

2- What is the respondents' view of the most commonly used levels of artificial intelligence in the practice of public relations in the banks under study?

3- What are the positive effects resulting from using artificial intelligence applications in the banks under study?

4- What are the negative effects resulting from using artificial intelligence applications in the banks under study?

5- What are the most important challenges facing public relations practitioners in using artificial intelligence in the banks under study?

6- How do the respondents see the future of public relations practice in light of the use of artificial intelligence applications within the banks under study?

## **2.1 Objectives of the study:**

The study seeks to achieve a set of objectives:

-Identifying artificial intelligence techniques and their role in Algerian banks.

-Monitoring the positive and negative effects resulting from using artificial intelligence applications in the practice of public relations in Algerian banks.

-Revealing the most important levels of artificial intelligence used in practicing public relations in Algerian banks.

-Identify smart programs and electronic applications that serve the banking field in general.

- Identify the effectiveness of smart programs and artificial intelligence applications in health institutions.
- Identifying the most prominent challenges facing public relations practitioners in their use of artificial intelligence applications in Algerian banks.
- Revealing the features of the future of public relations practice in light of the use of artificial intelligence applications in Algerian banks.
- Providing a set of results and recommendations that would contribute to defining ways to use artificial intelligence techniques in public relations.

### **3.1 The importance of the study:**

The importance of the study comes from the theoretical part, which will study an important sector of Algerian banks. Also, this paper will enrich the theoretical literature about AI use in Algerian banks. Furthermore, its significance is derived from the importance of the topic, which is “the concept of artificial intelligence and its applications.” The purpose of this study is to better understand the opinions of public relations specialists about the usage and implementation of contemporary technologies, including artificial intelligence, in the Algerian banking industry.

The relevance of this study from a practical perspective lies in the fact that it will provide planners and decision-makers in the banking sector with a clear picture and concrete results about public relations trends towards the use of artificial intelligence applications. The study results and recommendations are expected to help improve planning and increase the effectiveness of future strategies to make banks modern and up-to-date with the technologies of AI. Finally, this paper is an attempt to enrich libraries with studies about AI technologies and their applications in the banking sector.

### **2. Limitations of the study:**

A - Spatial Limitations: The study is limited to the main branches of commercial banks operating in the capital of Algeria, Algiers.

B - Sample Size: The paper includes all officials in charge of public relations in the banks under study.

T- Time Constraints: The field study data was collected during the period from December 1st, 2023, to December 20th, 2023.

### **3. The cognitive framework of the study (Artificial intelligence in the field of public relations):**

Valin (2018) refers to Artificial Intelligence (AI) as a software or computer program equipped with a learning mechanism. It is used to develop solutions and make decisions in new situations as humans do and has the ability as a machine to use algorithms to learn from data. Thereafter, it uses what has learned to make decisions as humans do. It is a system that can think like humans and act rationally Valin (2018). Krönke (2019) also defined it as the ability of machines to perform tasks that, if performed by humans, would be said to require intelligence in contrast to tasks that can be performed mechanically.

The concept of the term artificial intelligence (Frank, et al. 2019, 6531-6539) includes simulating the cognitive functions of humans, self-education, searching for intelligent solutions, and comparing the results of the intellectual activity of artificial intelligence and humans.( Kirtil & Aşkun 2021, 2) defined intelligence Artificial technology as enabling technologies to carry out activities and tasks like the human mind and without any human intervention. Hence, AI technology would be able to think, understand, make judgments, and conclude from data using intelligent systems.

By creating computer systems that can mimic intelligent human behavior, artificial intelligence seeks to mimic human intellect. Based on the numerous inferential procedures that have been put into them, these algorithms are able to decide which way is ideal for solving a certain problem or reaching a judgment. (Davenport, et.al, 2020, PP24-42) noted that artificial intelligence has a set of characteristics, which are as follows:

- The ability to solve complex and non-routine problems using a method similar to that of humans.
- The tendency to process non-numeric data of a symbolic nature.
- Supporting human expertise by providing multiple options to experts, enabling them to make informed decisions.
- The propensity to recognize sounds and speech, and manipulate objects.
- The power to analyze inputs and provide outputs with high efficiency.
- Learning and understanding from previous experiences and experiments, and applying that knowledge to handle difficult and complex situations.
- The capacity to deal with difficult and complex situations in the absence of complete information.

- The potential to create, understand, and perceive visual elements.

### **The contribution of artificial intelligence technology in the field of banking:**

- **Saving time:** AI does not have time restrictions due to its ability to reach a wider base of customers without being restricted by place or time. AI provides comfort to the customer in addition to the confidentiality of transactions, which increases the customer's confidence.

- **Ease of communication:** Customers can now more easily learn about electronically delivered financial services thanks to electronic channels like the internet, fax, and phone.

#### **-Providing comprehensive and quality banking services:**

\* Issuing electronic newsletters advertising banking services.

\* Providing customers with a way to verify their balances.

\* Providing a method for customers to pay withdrawn amounts electronically.

\* Transferring funds between customer accounts electronically.

- **Creating reports:** collecting large amounts of data and putting them in paragraphs highlighting the main points.

- **Reducing costs:** Offering low-cost electronic services via contemporary electronic channels at a significantly lower cost than traditional services is one of the biggest benefits of artificial intelligence programs in banks.

- **Quick completion of banking services:** Customers can now easily contact the bank and benefit from their services in just a matter of minutes, with good performance and high efficiency, without the need to visit the bank's physical location.

### **Applications of Artificial Intelligence in Public Relations:**



**-Data analysis:** Data analysis is one of the most important applications of artificial intelligence in e-marketing. As all marketing decisions need to be made based on data, the huge amount of data about customers available for artificial intelligence allows the latter to analyze and use the results to formulate attractive and effective marketing messages. Artificial intelligence techniques can be used to analyze data quickly and accurately beyond human capabilities, as there are systems to analyze market fluctuations, predict general trends, and analyze customer behaviors.

**- Obtaining Machine Learning:** Artificial intelligence technology is characterized by machine learning capabilities that enable it to automatically learn and improve previous experiences without being explicitly programmed. The basic terms and functions of artificial intelligence can be developed automatically. Also, AI has the ability to be up-to-date about the latest trends in the field. This will help in understanding the capabilities, limitations and risks of deploying artificial intelligence in the field of public relations over time without human intervention. Artificial intelligence systems can learn and adapt to new situations, which allows them to perform tasks that were previously done by humans.

**- Obtaining more accurate information about customers:** To understand customers' behavior and the degree to which they interact with a particular brand, it is critical to understand their emotional disposition towards that brand. In order to measure customer sentiment toward a product, service, or brand, social media tools today include artificial intelligence features that can analyze sentiment. This allows marketing and public relations professionals to make data-driven decisions about their target audience, their behavior, and their performance. It also makes it possible to design social listening tools and an appropriate marketing plan.

**- Content production by professionals:** Since content marketing strategies can be matched with artificial intelligence based on data acquired on customer searches, purchasing patterns, and interests, artificial intelligence can play a significant and important role in content development. Chatbots, which are robots built to communicate with consumers depending on the data they receive, are another way that artificial intelligence can be utilized to enhance the customer experience.

**- Return on Investment:** The return on investment will be better with the use of artificial intelligence technology to recognize images of customers. It is a great feature that makes payment processes faster than they are now. Artificial intelligence can also solve security problems related to online transactions. Machine learning is one of the tools of artificial intelligence that helps collect sufficient data about user behaviors and provides a database

based on customers ' interests. Algorithms also provide more accurate information for decision-making that brings a significant "Return on Investment (ROI)."

**-Accuracy:** AI algorithms are way behind human creativity when it comes to original thinking. AI can process massive amounts of data and identify patterns that humans may not be able to detect. This can lead to more accurate predictions and better decision-making.

**- Efficiency and productivity:** Numerous jobs are able to be automated using artificial intelligence, increasing productivity and efficiency. Chatbots with AI capabilities can respond to consumer questions, freeing up people to work on trickier issues.

Artificial intelligence has affected the public relations industry considerably. AI provides advantages and opportunities while simultaneously creating challenges, as explained in a recent report by strategic and media consultancy W7Worldwide. Among these challenges:

-One of the challenges is related to content creation, especially with the ability of artificial intelligence to collect and analyze data, but experience so far indicates that the content created by artificial intelligence lacks creativity, and is not advanced enough to replace the human writers who will eventually intervene to edit.

- Replacing employees with robots, creating fake content, and unethical use of artificial intelligence. While these worries are valid, past experiences demonstrate that public relations experts are adaptable enough to deal with artificial intelligence, just as they did with the digital revolution. Building relationships through communication and doing strategic work will always involve humans. In the public relations sector, their presence is essential since they may use AI to accomplish their objectives by utilizing AI technology to increase productivity and efficiency.

#### **4. Study methodology and procedures:**

This study relied on Descriptive Survey Research, which was adopted due to its suitability to the study questions and objectives. It helps extract results related to the trends of public relations officials in Algerian banks about the use of artificial intelligence applications directly from the study sample, through the use of the open interview tool (Semi-structured interview). The study tool was built by referring to theoretical literature, where the researcher conducted a personal interview with one respondent at a time. Therefore, the



researcher relied on the opinions of the sample members, as the interview questions consisting of 6 questions were directed in the text interview form and 10 oral questions were recorded related to the trends of public relations officials in Algerian banks about the use of artificial intelligence applications. Finally, all responses were written from which data were extracted.

#### **4.1 Research population and study sample:**

The study population consisted of all public relations officials in Algerian banks (private and public). This study also used purposive sampling to obtain information from a specific population segment capable of providing information related to the subject of the study, which mainly focuses on public relations officials (private and public). A purposive sample was chosen from public relations officials in Algerian banks (private and public).

- Local Development Bank B D L
- Bank of Agriculture and Rural Development B ADR
- Algerian External Bank BEA
- National Bank of Algeria BNA
- Popular Credit of Algeria CPA
- Algerian Gulf Bank AGB
- BARAKA Bank
- Al Salam Bank, Algeria
- Commercial and Industrial Bank of Algeria
- Al Rayan Bank

#### **4.2 Study tool:**

The researcher prepared the interview tool (qualitative research tool) taking into consideration the specificity of the subject, its previous studies and the theoretical framework. It consists of a set of questions. The interview was an "open interview" to study the attitudes of public relations practitioners towards the use of artificial intelligence applications. Forms for interview questions were provided, in addition to a recording, to explain some of the answers and open up discussion. The duration of the interview ranged between a minimum of 30 minutes and a maximum of 60 minutes, which allowed participants the freedom to delve into areas of interest to them.

#### **4.3 Data analysis method:**

The researcher used the maxqda software. The data were transcribed and analyzed textually by the software. Such an analysis would derive symbols and keywords related to each question, and then compare them to each other to extract patterns or central themes. Thereafter, these patterns and themes were analyzed, arranged, and grouped to obtain classifications from them and link them together. These classifications represent the basis on which the researcher relied to answer the study questions.

#### **5- Results and Discussion:**

**Discussion of the first question:** How do public relations practitioners realize the importance of using artificial intelligence applications in the Algerian banks under study?

The answers of the study sample agreed by 100% on the importance of using artificial intelligence applications in banks. Such agreement indicates the extent of public relations practitioners' awareness of AI applications' importance in enabling banks to obtain an appropriate and accurate view of their data with a low level of error. Also, AI with its innovative tools allows its clients to make autonomous financial decisions faster, more easily, and more securely. This is supported by a study conducted by Abdel Hamid, & Azmy (2020), which found that banks seek to lower operational costs and get closer to customers through artificial intelligence applications, which are incredibly beneficial in monitoring news trends.

One of the public relations practitioners in the study sample pointed out, "Artificial intelligence applications are very useful because they have helped a lot with the issue of monitoring the news," noted one of the study sample. Workers need a lot of time to examine patterns one at a time, thus artificial intelligence may be able to complete activities that once took two hours in as little as ten minutes." According to another public relations professional, artificial intelligence is significant since it allows rapid access to vast volumes of client data via email, social media, and the Internet.

Another considered AI importance emerges in accurately identifying the characteristics of the target customer. Artificial intelligence's ability to analyze customer data, enables it to create an effective dialogue with the customer. Artificial intelligence helps in the analysis of data thoroughly, as the machine learning algorithm can disassemble complex data then link them to other information and provide deeper insights.

**Discussion of the second question:** What is the respondents' view of the most commonly used levels of artificial intelligence in the practice of public relations in the banks under study?

The respondents mentioned that the most common level of artificial intelligence used in the selected banks is mechanical intelligence. The respondents pointed out the facilitation and processing of automated payment methods in a way that saves the customer time and cost (as the most important application used in the selected banks). Also, they appreciate financial monitoring, algorithmic trading, and communicating with customers through interactive chatbots. Kaczmarek (2019) came to similar conclusions. The study confirmed that artificial intelligence has a significant impact on data processing, customer communication through chatbots, as well as converting audio into text and translating it into multiple languages.

Additionally, the majority of public relations professionals concurred regarding AI's advantages in terms of analytical intelligence. According to their agreement, banks use analytical intelligence when doing public relations. According to the respondents, artificial intelligence approaches are employed in two significant matters. First, they employed it to simultaneously analyze market aspects in a variety of intricate dimensions. They also employed it as fraud detection software and a secure transaction method. These outcomes are in line with research by Huang & Rust (2018), which concludes that systematic, predictable complicated tasks require analytical intelligence. Since robots can now process, gather, and learn from vast volumes of data, this is thought to be the most significant and pervasive change artificial intelligence has brought to services to date. Among the most significant analytical uses of artificial intelligence are machine learning and data analytics.

**Discussion of the third question:** What are the positive effects of using artificial intelligence applications in the selected banks?

The respondents find many positive impacts. They think that AI provides a distinctive and unique experience to customers.” The study by Panda & Others(2019), which characterizes artificial intelligence and machine learning as an efficient and crucial component in offering a distinctive user experience, supported this. Many entrepreneurs are being prompted by artificial intelligence (AI) to expedite the integration of AI technologies and machine learning applications in order to achieve success for their online enterprises. Choosing this decision will align business owners with the global trend towards digitization, guaranteeing a distinctive user experience that offers them a competitive edge and maximizes returns on investment.

The sample agreed on "improving the efficiency and business skills" of public relations practitioners and leaders. One of the sample members confirmed that the use of artificial intelligence helped in the learning process among practitioners, which is the most important step that used to take time from them and thus freed up time to deal with other challenges. Also, another respondent emphasized that artificial intelligence will increase work efficiency through deep learning software applications that will provide business organizations with insights into how banks do business. Adopting artificial intelligence will improve work efficiency. Any organization that empowers its workforce to be AI professionals and experts will be able to create an agile and competitive business that can adapt and keep up with transformations as demonstrated by the findings of the Pribadi & Nasution (2021) study, which also concluded that the genuine worth of technology in enhancing human ability rises and shines automatically.

"Providing faster service to customers and with fewer disputes" was one of the phrases that were repeated among the study sample. Customers usually deal with financial and banking matters impatiently. They are unlikely to wait, not even for a few minutes, and require urgent assistance. Thankfully, AI-powered communication may eliminate disputes arising from unhappy clients by providing instantaneous service without requiring them to wait a single second. Chatbots and interactive voice assistants are capable of helping several clients at once and in real time. This result is consistent with the study (Wang and Yang), where they deduced that the emergence of smart conversational agents (chat robots) is responsible for the significant decline in customer service agent jobs.

The study sample also agreed on "reduced cost of work". By introducing artificial intelligence applications in banks, costs will be reduced, as banks work to benefit from artificial intelligence to facilitate the process of identifying and authenticating customers and carrying out the work of direct employees through chat robots, voice assistants and deepening customer relationships.

Furthermore, the study sample agreed on "reducing employee attrition." Every day, bank staff deal with a variety of issues and obstacles. Above all, they are frequently contacted by individuals with immediate requests, which wears them out. The latter adversely affect long-term staff retention and contentment. Banks might conserve a great deal of time and effort by automating some client service chores, freeing up staff members to work on more strategic and difficult assignments. It is anticipated that artificial intelligence will also help transfer human goods to intelligent machines.

Finally, "better quality support across multiple channels" is another aspect of AI the respondents agreed on. Bank clients now anticipate assistance via phone, email, social media,

and other means. Chatbots and interactive help tools are ways for banks to improve the calibre of their offerings while maintaining service standards.

The previous results indicate the respondents' awareness of the role of AI applications in changing the practice of relationships within banks. AI applications can save effort by performing multiple tasks at the same time, create intimate relationships that are well compatible with the interests and agendas of the target audience, allow automatic and simultaneous examination of changing market conditions, and enhance security and detect fraud. These applications also help in discovering the number of times the bank's name is mentioned, where it is mentioned most, what is said about it, and who says it, as well as communication outside banking hours. It can also create a safer environment and enhance banking functions, managing risks, anticipating future events and making informed decisions. Our findings are consistent with the general trend that presents the technological optimism scenario represented by represented by Cismaru (2018), Puspitosari (2019), Al-Talawi (2021) & Amroush (2009).

**Discussion of the fourth question:** What are the negative effects of using artificial intelligence applications in the selected banks?

Regarding negative trends, the total negative responses of public relations practitioners in Algerian banks were small. Only 7% responded with negative answers due to the lack of negative trends about the use of artificial intelligence applications in banks compared to the positive trends mentioned by respondents, which reached 93% of the total responses.

The answers of the study sample show that the most important negative effects of using artificial intelligence applications in public relations in Algerian banks, as seen by the study sample, were the fears of piracy and electronic fraud. One of the public relations practitioners of the study sample commented during the interview, "Gaining the trust of clientele about fraud and hacking is one of the main problems and barriers impeding the adoption and growth of artificial intelligence applications in banks."

The respondents also noted how these technologies' propensity for malfunctioning and their difficulties to maintain have a rapid impact on workflow. Accordingly, this is one of the drawbacks that the research sample experiences when using AI apps. The majority of the sample concurred that buying smart systems and devices comes with high financial costs. This finding is in line with Ardila (2020) research, which reveals that businesses with limited funding are unable to incorporate AI technology into their operations or strategies because of the high cost of initial setup, upkeep, and repair.

Roughly all of the interviewees sided on two points. The first one deals with the incapacity to recognize misleading information and facts and the absence of autonomous awareness. The second one is about consumers' perceptions of their data's confidentiality and privacy. This is in line with Munandar & Irwansya (2020) assertion that while artificial intelligence applications are capable of generating decisions, they do not account for a variety of factors because they are unable to understand the reasoning behind a particular behavior or predict its psychological and emotional effects, particularly in situations where they come into contact with people. During the interview, a PR worker acknowledged that banks can now download large amounts of data more quickly than before. However, with the increased speed comes a higher risk of confidentiality being compromised due to the volume of data.

The study sample believes that the absence of legal accountability controls when errors occur in artificial intelligence techniques is one of the negatives of applying artificial intelligence. According to a report by the Union of Arab Banks, several nations lack data privacy regulations, insufficient frameworks for consumer protection in the financial services industry, and no rules pertaining to information security or cybercrime.

The fact that participants are worried and nervous about replacing humans with robots and smart technology suggests that they are not afraid or anxious about employing intelligence since they see it as a tool to further their careers. During the interviews, the study sample affirmed the latter. One of the respondents stated that since real public relations is such a difficult career, it is impossible to replace. Artificial intelligence needs to be quite sophisticated since public relations work is exceedingly complex.

Finally, the statement “There are no qualified practitioners to work in the field of artificial intelligence and manage its affairs in the digital transformation process” indicates that the majority of the study sample rejected this. They emphasized that banks are constantly conducting training courses that qualify them to use these modern applications in their work.

**Discussion of the fifth question:** What are the most important challenges facing public relations practitioners in using artificial intelligence in the selected banks?

Many of the respondents indicated that the biggest obstacles they deal with are technological and technical in nature. These difficulties stem from the inflexibility of the technologies' operations as well as the growing issues of information piracy and electronic danger. Also, intelligent machines and human thought processes are entirely different. Furthermore, employees lack the necessary training and certification for cutting-edge operating systems. Regarding professional obstacles, the study sample concentrated on the fact that the



complexity and difficulty of using artificial intelligence programs, together with the difficulty of understanding technologies for human feelings and social values, are the most significant challenges. Relationship professionals' lack of inventiveness in applying artificial intelligence approaches. Another issue is that relationship practitioners often lack the inventiveness necessary to use artificial intelligence approaches. The responders also discussed organizational and institutional challenges, the most significant of which were sticking to conventional responsibilities while disregarding some of the new artificial intelligence tools, as well as the lack of strategies to encourage the adoption of these technologies. A public relations professional in the study group who stated, "Artificial intelligence cannot replace tasks that require human argumentation", supported this. "AI can do entry-level things, but it can't do complex work," confirmed another.

As for the economic challenges, the respondents mentioned the lack of budgets for infrastructure and training and the high cost of acquiring software. The ethical challenges included the lack of transparency and accountability in what artificial intelligence technologies provide and the lack of ethics for using artificial intelligence technologies.

**Discussion of the fifth question:** What is the future of using artificial intelligence technologies from the point of view of public relations practitioners in the selected banks?

100% of public relations practitioners in the chosen banks confirmed that the future of AI technologies use in banks is expected to develop significantly during the coming years. It is also expected that the term Smart Public Relations (SPR Public Relations) will develop as an extension to the term digital public relations, in line with artificial intelligence technologies and their integration into the automation of public relations tasks. The development of the public relations field with AI would continue into the third decade of the second millennium, due to its association with a science that is still at the beginning of its era in public relations applications. In addition, the intelligent integration of public relations with digitalization is going to display bank messages. Accordingly, the current research paper can point out another term, which is Integrated Public Relations (IPR).

It is expected that more than two to three types of technology or more will continue to be integrated. The artificial intelligence robot will be integrated in dealing with customers like making a service selection robot, goods and services delivery robot, and a reception and farewell robot at international and local events and exhibitions. With the link of robots work to the applications that the customer downloads on their smart devices, especially smartphones, the communication with the customer would pass through successive stages through different technological devices. This is consistent with the vision of (Yosyali, 2021,

680-691) about robots for managing social media platforms and automatic news production in the press.

The study sample unanimously agreed that the replacement of human practitioners entirely was impossible, as the work of public relations is exceedingly complex. A respondent confirmed that artificial intelligence is incapable of addressing tasks that involve human argumentation. However, they acknowledged that artificial intelligence can complement and enhance decision-making processes. Another said in the same context, "I don't think machines will ever completely replace public relations specialists and practitioners, because they are unable to implement many creative movements in the field of the public relations industry, such as building and continuing relationships between bank clients. Artificial intelligence can be helpful and supportive to them in facilitating the operations of the public relations industry." This is in line with a study by Guzman & Lewis (2019), which found that public relations professionals need to embrace the fact that artificial intelligence is transforming their field, in spite of their fears of being supplanted by clever machines. This technology enhances and supports their capacity to make quicker, more informed decisions rather than taking their place.

Additionally, banks aim to increase clients' contentment with what they provide. Artificial intelligence (AI) facilitates the simultaneous availability of data and information across numerous platforms, hence increasing competitiveness. This is achieved through media fusion. Access to data is facilitated, viewpoints are analyzed and categorized, and the vision of clients using blogs, forums, and social media more frequently is supported. Despite the challenges associated with using these technologies, public relations professionals can use AI to discover, understand, and measure people's beliefs, attitudes, and behaviors in ways that were not possible before. They can also use AI to conduct social sentiment analysis, study competition, and identify key influencers.

The obtained results indicate the presence of great optimism and positive expectations by public relations practitioners in Algerian banks regarding the future of the use of artificial intelligence techniques in the banks. The features of this optimism differed among them. Public relations practitioners in private banks in Algeria were optimistic about the emergence of a generation of chatbots in banks and the provision of the necessary technical infrastructure to use these technologies in all banks, as well as the dissemination of the chatbots service, which is a communication platform that will facilitate communication. On the other hand, public relations practitioners in public banks were less certain in light of the lack or non-availability of financial and technical capabilities compared to private banks in Algeria.

## **6. Results and conclusion:**

Although public relations officials in banks have relied on technology for many years to increase the efficiency and effectiveness of their work, this technology could not replace the knowledge that experts possess in making their decisions. The human factor is what the majority of institutions need, especially banking institutions. Banks have recently turned to using new technologies such as artificial intelligence as an associate and influence that can shorten time and speed up procedures with ease and accuracy. It also enables the public relations specialist to perform duties and responsibilities with comfort, which would save large amounts of time invested in developing and implementing strategies. Despite the presence of challenges, there are concerns about the impact of artificial intelligence platforms on the public relations industry. However, AI applications and platforms have achieved many benefits for the industry. Public relations professionals must learn the skills of using artificial intelligence tools, benefit from their advantages in solving problems they may face, and integrate these tools into their work.

The following are the most important findings that the study arrived at:

- 1- Public relations practitioners in Algerian banks stressed the importance of using artificial intelligence technologies in the field of public relations for what these technologies can contribute to the development of public relations activities in banks at the professional, administrative, technical and future planning levels.
- 2- The respondents' answers were similar regarding the use of artificial intelligence technologies in Algerian banks. Most of the public relations practitioners in the selected banks agreed that the commonly used level of artificial intelligence is mechanical intelligence, followed by the level of analytical intelligence
- 3- The most important positive effects resulting from using artificial intelligence applications were the provision of a distinctive and unique experience for customers, as well as the possibility of improving business efficiency and skills.
- 4- The most important negative effects resulting from using artificial intelligence applications in the selected banks were the fears of hacking and electronic fraud, as well as the frequent malfunctions of these technologies and the difficulty of maintaining them quickly.
- 5- Public relations practitioners in the study interview stated that the lack of trained human resources is the main reason why banks in Algeria do not rely on artificial intelligence technologies.
- 6- Using artificial intelligence applications to know customers' interests more effectively came at the top of the proposals of communicators in the selected banks for achieving optimal use of artificial intelligence in the future.

7- The challenges facing public relations practitioners in using artificial intelligence in the banks under study are technical, technological, professional, organizational, institutional, economic, and finally ethical challenges.

### **Recommendations:**

- Contacting foreign banks inside Algeria and abroad to benefit from their experience, expertise and high culture in the technological field. Algerian banks ought to take into account the principles of technological leadership and dependence.
- Working to develop human resources through qualification and training in a manner consistent with the process of modernization and development and the requirements of modern banking technology. This would provide the best services to customers.
- The importance of encouraging Arab central banks to keep pace with artificial intelligence and transforming the financial and banking sectors from the traditional economy stage to the digital economy, knowing that the risks and repercussions of this transformation are contained.
- In light of the widespread availability of smart devices, public relations professionals can interact with clients in more efficient ways by integrating services with artificial intelligence apps. Staying abreast of technology advancements helps banks grow and gains them greater favor with customers.
- Paying attention to creating data and information base that includes all data and information about customers, including the history of dealing with the customer, his biography, and credibility, to increase the ability of banks to make the right decisions and provide appropriate services to the customer with the help of artificial intelligence.
- Urging research institutions and universities to prepare graduates specialized in the field of artificial intelligence by spreading technological culture and educating institutions and business organizations about the positive effects of artificial intelligence.
- Banks must benefit from artificial intelligence applications, which enable them to achieve several advantages, most notably reducing costs, improving quality, excellence, and other advantages. The latter contributes to solving problems in dealing with customers and making decisions in a way that directly contributes to enhancing its competitiveness and ensuring its survival and growth.

- Completing research on the topic of artificial intelligence in various types of banks from other aspects and comparing their applications of artificial intelligence.

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