



Artificial Intelligence

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Part One

1. AI is an abbreviation for "artificial intelligence," and it's a field in IT that merges computer science and robust datasets to allow problem solving. To clarify, this field helps machines and computers learn and do human tasks. (By: [IBM Cloud Education, What is Artificial Intelligence \(AI\)?](#))[1]

To understand the field, we must first comprehend its history. British scientist John McCarthy invented the term "artificial intelligence" in 1950, and the first conference to commemorate the new area was held in 1956. "Eliza," which was founded in 1966, is one of the earliest chat-bots that can hold discussions like a psychotherapist. In 1980, two scientists devised "deep learning" techniques, while another created a system that mirrored a human expert's decision-making process; nonetheless, the great surprise came in 1997, when the chess computer Deep Blue defeated world chess champion Gary Kasparov. Siri (the intelligent speech assistant) was developed for the first time in 2011, and universities now offer AI degrees. ([Kelley, 2022](#))[2]

2. From my point of view, every bank has three main sectors: the front office, which describes the bank's transactions with the customers, such as the customer experience; the middle office, which contains the risk and technology managers to deal with and monitor risk management; and the back office, which is the sector that the customers can't see and should be the most private sector in the bank. ([Digalaki](#))[3]

AI can be implemented in these three sectors and improve performance. Examples include: using AI to get the best chance for cost savings in digital banking; using chatbots and voice assistants to mimic live customers and have conversations with them and make recommendations to them; using AI to help the bank evaluate risks and prevent payment fraud; and by using it, we can apply predictive analytics that help the bank get unused sales or data that leads to a direct revenue impact. In summary, it helps to increase the work efficiency, develop the bank customer experience and that lead to increase the bank reputation. ([Digalaki](#))[3]

3. On the other hand, if the bank wants to create a new AI department, there will be some issues such as : ([Eliacık et al., 2022](#))[4]

- Some employees in the bank may lose their jobs because the artificial intelligence will take their jobs.
- Highly cost to implement it in the bank because of the needs of equipment, computers, also after the implementation, there will be a need for maintenance which can cost affect the continuation of the department.
- By implementing it in the bank, it will generate high energy which negatively effect the environment.
- Also by increasing the implementation of this field in the world, it will be a new security issues such as : Ai terrorism that can effect the bank's reputation And putting the bank's managers under legal issues.
- It could effect the employees in the bank by making them lazy because they will always depends on the machines to do the majority of work.

(Eliacık et al., 2022) [4]

4. Every important industry, in my opinion, should establish an AI department, because this department will benefit the bank and every industry in the business for a variety of reasons, including: it can improve the quality of the customer experience, which is the most important thing for the bank to satisfy customers and have a good reputation in the labor market to attract more customers; we can use the technologies in this department to make smarter decisions (by collecting data, analyzing it, and so on).

And we know that the bank always deals with the customers' transactions or money, so we need to implement AI to increase the efficiency of the work while reducing the errors that can negatively affect the bank and the customers' satisfaction, also by using AI, we can identify any suspicious transactions and deal with it. And to approve that, many popular industries such as : apple,facebook, microsoft, tesla implement AI in their work so we also must implement it. Also, by implementing it, we will give ourselves an advantage over other competitive banks.(Koch, 2022)[5]

5. As we know, we can use AI to get better customer service and help them by recommending what to do, and we can do this by using the customer's information and applying the information to the AI, this can be risky because the bank breaches privacy law by using the customer's information for improvement purposes without taking the customer's permission. (Author(s) Scott Atkins et al. , 2021) [6]

Also, I advocated for the use of chatbots, which can pose an ethical risk because we must be certain that the service will resolve the customer's issues effectively and without error. When we implement weak services that depend on a primitive algorithm, it will not solve any customer's issues and it will become exposed to many technology breakdowns, which will affect the customer's satisfaction and the bank's reputation. (Author(s) Scott Atkins et al. , 2021) [6]

An absolute risk is bias when hiring new employees in the bank (using AI) based on data such as gender, religion, and age, which can cause unfairness to some job applicants. And finally , AI department will face many cyber security to threat and get many information about the customers and that will make the bank under legal laws.(Author(s) Scott Atkins et al. , 2021) [6]

	Asses AI Risks
Users	Privacy breaches (Hackers can use their information in illegal methods) and also they can steal their money.
Bank business	Decrease reputation, make the bank under legal questions , decrease revenue and Financial loss.

After all of this, we need recruit professionals with the finest knowledge of security concerns and the AI industry to handle all the threats that may harm the bank. [\(Cbi\)\[7\]](#)

6. Maybe there will be many technical challenges when implementing an AI department, Examples of these challenges include:

- When we use AI to predict things, many employees and managers will not know how the system predicts, so there will appear to be some trust issues with the result of the prediction. [\(Artificial Intelligence in banking 2023: Examples & challenges 2022\)\[8\]](#)
- Humans will outperform AI in some cases due to AI's limited understanding. For example, if we have two piles of money containing all the different types of Jordanian dinar and give one to an employee and one to an AI to separate each type, the employee will get 100% of the work while the AI may only get 90%. [\(Artificial Intelligence in banking 2023: Examples & challenges 2022\)\[8\]](#)
- Also, in some cases the bank data will be not suitable to implement AI on it, or maybe it would need some cleaning and preparing to make it suitable to use it. [\(AI technical challenges, Top 7 AI Challenges & Solutions in 2023\)\[9\]](#)
- When AI engineering use customer information to implement AI, he should protect the information from any breaches and he will face many breaches. [\(AI technical challenges, Top 7 AI Challenges & Solutions in 2023\)\[9\]](#)

We all know that implementing AI in important sectors like banking is not easy, and it will need the best plans and experts to deal with any problems that may occur. Also, the job of an AI engineer is not easy because one mistake could put the bank in danger, so the bank must provide a clearly defined plan on how to use the data, the timeframe for using the data, who and how to deal with problems, and so on.

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