

Role of Artificial Intelligence on Financial Management

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Abstract: Artificial intelligence has become an important part in every field. From teaching to software development, AI is being used in every sector in the economy. AI makes man's life easy. AI is a technology that enables computers and machines to

Artificial Intelligence:

Artificial Intelligence is the stimulation of human intelligence process by machines, especially computer systems. Specific applications of AI include expert systems, natural language processing, speech recognition and machine vision.

Artificial intelligence is the capacity given by humans to machines to memories and learn from experience, to think and create to speak to judge and make decisions.

Artificial intelligence examples

Artificial intelligence uses algorithms trained on data sets to create machine learning models that allow computer systems to perform task like making song recommendations, identifying the fastest way to travel to a destination, or translating text from one language to another. Some of the most common examples of artificial intelligence in use today include:

- ChatGPT: It uses large language models (LLMs) to generate text in response to questions or comments posted to it.
- Google Translate: uses deep learning algorithm to translate text from one language to another.
- Netflix: users machine learning algorithm to create personalised recommendation in engines for user based on their previous viewing history.
- Tesla: users computer vision to power self -Driving features on their cars.

Evolution of Artificial Intelligence

The evolution of AI in finance has been a transformative journey, marked by significant milestones:

- **Origins in the 1950s:** The concept of AI dates back to ancient philosophers, but it wasn't officially recognized until the 1950s. The term "artificial intelligence" was coined in 1956 at the Dartmouth Summer Research Project¹.
- **Growth and Challenges:** Post-World War II, there was a need for systems to automate paperwork, leading to the development of AI. However, the field faced criticism and a period known as the "AI winter" in the mid-1970s to 1980, when interest and funding waned¹.
- **Resurgence in the 1980s:** AI gained prominence in finance in the 1980s, with over two-thirds of Fortune 1000 companies developing AI projects. In 1982, quantitative hedge-fund Renaissance Technologies was founded, leveraging AI for financial analysis¹.
- **Modern Era:** Today, AI is indispensable in finance, used for algorithmic trading, risk management, fraud detection, and customer service. The availability of vast

stimulate human intelligence and problem solving capabilities. AI can automate many basic finance activities using many AI tools like Machine Learning. This study deals with the role of Artificial Intelligence in financial Management.

amounts of data and affordable computing power has led to renewed interest and innovation in AI applications within the financial sector¹.

The evolution of AI in finance reflects the broader trends in technology and society, showcasing the potential for AI to revolutionize industries and the importance of adapting to its advancements

Meaning of financial management

Financial management refers to the management of flow of funds in the firm. It deals with the financial decision making of the firm. It is mainly concerned with the timely procurement of adequate finance from various sources and its utmost effective utilisation for the attainment of organizational objectives. Since raising of fund and their best utilization is the key to the success of any firm, the financial management as a functional area has got a place of prime relevance.

It is mainly focusing on overall managerial decision making in general and with management of economic resources in particular. All business decisions have financial implications and therefore financial management is inevitably related to almost every aspect of business operations. Broadly speaking, the financial management includes any decision made by the firm that affects its finances.

Definition of financial management

Solomon

- Financial management is concerned with the efficient use of an important economic resource namely capital funds.

Phillioppatus

- Financial management is concerned with the managerial decision that result in the acquisition and financing of short term and long term credits for the firm.

Significance of financial management

The significance of financial management summarised as given below:

1. The financial management is essential wherever funds are involved. It attempts to use funds in the most productive manner That is optimising the output from the given input of funds. It focuses on effective utilisation of the most important resource in any activity that is money.
2. Financial management helps in ascertaining how the firm would perform in the future . It helps in

indicating whether the firm will generate enough fund to meet each various obligations like repayment of various installment dues on loans redemption of other liabilities etc.

3. Financial management provides complete coordination between various functional areas such as marketing production EC. To achieve the organizational goals. If financial management is defective, the efficiency of all other management can come in no way, be maintained. For example, it is very necessary for the finance department to provide finance for the purchase of raw materials and meeting the other day today expenses for the smooth running of the production unit. If finance department fails in its obligations, the production unisales will suffer inconsequently the income of the firm rate of profit on investment will also suffer. Financial management occupies a central place in the business organization which controls and coordinates all the other activities in the firm.
4. Almost, every decision in the business is taken in the light of its profitability. Financial management provides scientific analysis of all facts and figures through various financial tools such as different financial statements, budgets EC, which helps in evaluating the profitability of the plant in the given circumstances so that a proper decision can be taken to minimise the risk involved in the plan.
5. Savings are possible only when the firm makes substantial profits and maximise its wealth. Effective financial management helps in promoting and mobilising individual and corporate savings.
6. Financial management also helps in profit planning capital spending measuring cost controlling inventories accounts receivables EC.

Role of artificial intelligence in finance Management

Artificial intelligence is changing the landscape of finance, and there is no doubt that it will continue to do so in the future. Here are some key areas where artificial intelligence is changing finance today.

AI tools used in finance

1. Investment research tools

- **Finchat.io:** this generative a I tool streamlines investment research by reducing the time spent on data aggregation, visualization common and summaries. It acts as a personal investment research assistance, answering questions, summarising results, and providing visualizations. FinChat.io Offers insights to financial metrics company data super investor holdings and market forecasts.

2. Accounting tools:

- **Truewind.ai:** An AI powered solution dor accounting tasks.
- **Booke.ai:** Helps automate bookkeeping processes.
- **Nanonets:** Provides document extraction and data entry automation.
- **Trullion:** Streamlines financial compliance and auditing.
- **Accounts IQ:** Offers cloud based accounting and financial management.

• Market prediction and trading :

The algorithms of artificial intelligence are strong and enough to analyse data and sharply predict future trends. This train is great for investors and financiers whose job is to forcesee the upcoming risk and opportunities and make financial decisions accordingly. One great example is AI finance software for trading that predicts the price of the stocks based on influencing factors.

• Personalised financial management for customers

Customers don't prefer going to banks to enjoy their services. So come on AI financial technology takes banks closer to their customers. The banking application has been designed to personalise the experience for customers. While personalization has been existing already for a long time, a I ads it's touch by eliminating the need for an actual person to offer personalized support and assistance 24/ 7

• Credit eligibility check

Financial institutions relay on credit scores to find out who is more likely to return the borrowed money on time. With an increasing number of application and loopholes in the current credit system, lenders have a hard time in weighing factors and delivering the funds to the most eligible person. Being one of the crucial and time saving a I applications in finance, AI based tools can accurately predict and pick reliable borrowers and thus it helps banks not to lose their money or chase defaulters.

• Risk management

Asia part of financial management, the finance team as to prevent fraudster activity to not lose their money. The current safety protocols do not offer much scope to mitigate such risks and they are well known for triggering false positives it takes a lot of effort from the cyber security team to keep up with the growing hacking trends. A I finance software let's them set dynamic and cognitive rules and trigger with high degree of accuracy to catch dubious activities at the drop of the hat.

- **Xero:** A popular accounting software with AI features.

3. Personal Finance tools

- **22seven:** Assist in budgeting, expenses tracking and financial planning.
- **Snoop:** Analyzes spending patterns and suggests money saving opportunities
- **Range:** Helps manage personal finances and investments.
- **Mint:** Offers budgeting, bill tracking and investment insights.

4. FP&A (Financial Planning and Analysis) tools

- **Datarails:** enhances financial planning processes.
- **Planful:** enables collaborative financial planning and reporting.
- **Anaplan:** A versatile platform for modeling, planning and decision making.

Companies using AI in Finance:

