



## Recent trends in Management and Commerce

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# Artificial Intelligence in Accounting and Finance

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**Abstract:** The intelligence of computers or software, as opposed to the intellect of living things, mainly people, is known as artificial intelligence (AI). It is a branch of computer science that focuses on creating and researching intelligent machines. These devices could be referred to as AIs. Artificial Intelligence is widely applied in government, industry, and academia. Advanced web search engines like Google Search, recommendation systems used by YouTube, Amazon, and Netflix, human speech-based interaction like Google Assistant, Siri, and Alexa, self-driving cars like Waymo, generative and creative tools like ChatGPT and AI art, and superhuman play and analysis in strategy games like chess and Go are a few high-profile applications. In the fields of finance and accounting, artificial intelligence has had a big impact. In reality, because they save time and offer deep insights, AI-enabled finance and accounting systems are the means for businesses to remain successful competitors in a market that is becoming more and more competitive.

**Keywords:** Artificial Intelligence, Accounting, Finance

## 1. INTRODUCTION

The terms accounting and finance are sometimes used synonymously. Both have significant variations in their scope and focus, even though they are both concerned with the management and administration of an organization's assets. It's critical to have a working understanding of both disciplines when assessing and planning for the financial well-being of your group or division. Personal, corporate, and public finance are some of the subsets of finance that can be used to focus on the particular parties involved. Even while these groups usually consist of a comparable range of operations, each type of finance has subtle differences that correspond to the various laws, policies, and worries of various demographics. Accounting often involves recording transactions, gathering financial data, creating reports, and summarising and analysing performance. Comprehensive financial statements, such as income statements, balance sheets, and cash flow statements, are frequently included in the results. These statements are crucial for understanding the state of an organisation at any given moment. (<https://online.hbs.edu/blog/post/finance-vs-accounting>). Artificial intelligence is having a big impact on the finance and accounting industries, just like it has on every other area. AI-enabled accounting and finance solutions offer insights, save time and money, and help finance professionals and their companies remain competitive and draw in the next generation of clients and workers. Every industry is seeing a change in the way people work due to new technology. It is also altering the expectations that customers have of businesses with which they interact. This also applies to accounting. Accountants can become more productive and efficient with the use of artificial intelligence. Task completion times should be slashed by 80–90% so that human accountants can concentrate more on giving advice to clients. Because there will be fewer errors, integrating artificial intelligence into accounting operations will help improve quality.

## 2. SIGNIFICANCE OF THE STUDY

Accounting is one of the many corporate activities that robotic process automation (RPA) enables machines or artificial intelligence personnel to do repetitive, time-consuming tasks like document processing and analysis. After RPA is implemented, accountants' time that was previously spent on these responsibilities can now be allocated for more strategic and consultative work. RPA has evolved into intelligent automation (IA), which is more advanced. Since AI can evaluate documents using computer vision & natural language processing faster than ever before, it can often provide real-time status updates on financial matters. This makes it possible to produce daily reports at a low cost. This knowledge enables businesses to take initiative and change direction when the data reveal undesirable tendencies. Several internal accounting operations, such as purchasing and procurement, will

be improved by automated document processing and authorization using AI technology. (<https://bernardmarr.com/>)

### 3. OBJECTIVES OF THE STUDY

- To identify the role of AI in Accounting and Finance
- To know the benefits of adopting AI in Accounting and Finance
- To access the negative impact of adopting AI in Accounting and Finance

### 4. REVIEW OF LITERATURE

According to Davenport & Ronanki's (2018), report in the Harvard Business Review, businesses should consider AI's business capabilities rather than its technical know-how. Generally speaking, AI can assist companies in achieving three major goals: streamlining corporate procedures, gaining knowledge through data analysis, as well as interacting with customers and employees. Artificial intelligence's effects on the accounting sector were studied by Chukwuani & Egayi (2020). By doing this, they demonstrated the degree of automation in the accounting process that is occurring in the industry. In conclusion, they discussed the role that accountants play in today's automation and how 21st-century accountants can adjust to the increasing automation in the sector. AI use is not limited to large organisations, according to Lee & Tajudeen's (2020) study on Malaysian organisations utilising a variety of AI-based accounting software. Additionally, they saw that businesses were automating the entire information capture process by storing invoice photos in AI-based accounting software.

### 5. ROLE OF AI IN ACCOUNTING AND FINANCE

Role of AI in Finance Artificial intelligence (AI) in finance refers to the application of technology, such as machine learning (ML), to improve financial organisations' analysis, management, investment, and money-protection processes by simulating human intellect and decision-making. By simplifying conventional banking procedures and revealing deeper insights from generated data, artificial intelligence (AI) in finance is revolutionising the whole sector and influencing where and how investments are made. AI is also transforming the way customers engage with businesses by enabling quicker, frictionless processes that include instant credit approvals as well as enhanced cyber security and fraud prevention. The way financial institutions handle risk, including security, regulatory compliance, fraud, anti-money laundering (AML), and know-your-customer (KYC) regulations, is heavily influenced by artificial intelligence (AI). Banks, investment firms, and insurance companies can use AI as part of their infrastructure.

For Financial institutions

- AI enables businesses to expedite and automate laborious, traditionally manual operations like market research. With AI's speedy analysis of massive data sets, investors can track the growth of their investments and assess risk by seeing patterns.
- Evaluation is also applicable to insurance, as personal information may be collected and utilised to calculate rates and coverage.
- Artificial intelligence can be applied to cyber security, particularly to detect fraudulent transactions. By keeping a careful eye on consumer behaviour and comparing it to the past data.
- AI is able to recognise unusual activity, notify the institution and the customer automatically to confirm the purchase or transfer in real time, and take appropriate action to address the issue if necessary.

For Banking customers,

- The general consumer experience can be enhanced by AI and ML. The advent of internet banking, sometimes known as contactless banking, reduces the necessity for face-to-face encounters; yet, this change to virtual interactions may lead to an increase in endpoint vulnerabilities (e.g., smartphones, PCs, and mobile devices).
- A lot of routine banking tasks, including transfers, deposits, payments, and customer care inquiries, can be automated by AI.

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- AI is also capable of handling the approval and rejection of credit card and loan application processes, with nearly instantaneous results.

#### Role of AI in Accounting

- AI has revolutionised the accounting sector by automating nearly all accounting activities, including payroll, taxes, banking, and audits. This has resulted in a significant shift in the way company is conducted.
- AI increases production quality and productivity while also increasing openness and auditability.
- Artificial Intelligence presents a multitude of prospects and reduces the customary laborious duties of the finance department to explore additional avenues for business expansion.
- Accurate financial statement forecasting is made easier using AI. Finance experts can use machine learning (ML) to forecast future trends by using records and data from the past.

## 6. BENEFITS OF AI IN ACCOUNTING AND FINANCE

**Finding Trends in Huge Datasets:** The capacity of AI to swiftly find patterns in big datasets is one of the technology's main advantages in accounting and finance. Businesses may quickly identify trends or anomalies in their financial data that may have gone undetected in the past by leveraging ML algorithms and NLP technology. An algorithm might, for instance, review previous transactions and highlight any questionable behaviour before it develops into a bigger problem. With the ability to take preventive steps when necessary, this capability allows organisations to see a better picture of their financial situation. **Leverage Predictive Analytics for Profit** Based on historical data, sophisticated computers may predict future patterns with high accuracy. Organisations can get a competitive edge by utilising AI-driven analytics to make well-informed decisions regarding their resource allocation and long-term plans. Executives may stay one step ahead of their rivals by actively leveraging enhanced insights from historical data. Even in the face of constantly shifting market conditions, executives can maintain their agility. **Acquire Knowledge About Consumer Behaviour** Via the analysis of previous transactions or the prediction of future outcomes based on prevailing market conditions, AI-powered systems can offer insightful information about client behaviour. As a result, financial institutions are better equipped to comprehend the needs of their clients and create solutions that are unique to them. However, a corporation needs someone who understands business processes as a whole in order to fully utilise this data. This prior information can be obtained using the **Quantic MBA**. **Stop Fraud** By quickly analysing large amounts of data, artificial intelligence (AI) may also be used to detect and prevent fraud, enabling businesses to act fast and minimise costs. AI-based solutions can identify suspicious activity far more quickly than traditional approaches by analysing massive datasets in real time. This enables businesses to act promptly in the event of an issue and minimises losses brought on by fraudulent activity. AI technologies are also being applied in the banking industry, where they assist institutions in evaluating applicants' trustworthiness by thoroughly examining their financial records, hence decreasing loan default rates and boosting profitability. **Obtaining New Funds** Through automated trading platforms, advanced machine learning techniques have opened up new funding sources for organisations, enabling them to buy and sell assets remotely without the need for human participation. Businesses may now maximise their productivity and profit margins thanks to automated trading platforms, giving them a competitive edge in the marketplace. Many experts predict that this technology will continue to play an even bigger role in the future because of the potential benefits that have already begun to revolutionise a variety of industries, including healthcare, retail, banking, and finance. **Quantic** combines an excellent Executive MBA programme with a technology-enabled platform. This innovative method enables people like Matthew, astute traders, to gain new abilities.

## 7. NEGATIVE IMPACT OF AI IN ACCOUNTING AND FINANCE

**Job Displacement Concerns** Despite the fact that artificial intelligence (AI) technology is bringing about a lot of progress, there are worries that it will eventually replace human labour. When jobs that were formerly done by accountants and other finance professionals go automated, it might be necessary to retrain or reallocate human resources. **Risks to Data Security** AI systems rely a lot on data, and any flaws in the way that data is processed or stored could lead to security breaches involving sensitive financial data. In order to avert possible data breaches, it is imperative that CFOs prioritise, put strong security measures in place, and upgrade their AI systems on a regular basis. **Overreliance on AI** A balance between automation and human expertise is key to maximising the potential of AI in your business and organisation. Overreliance on AI Overreliance and increased dependency on these AI systems can lead to complacency and a lack of critical thinking. To avoid this, you should ensure that human oversight is maintained to validate the accuracy and reasonableness of AI-generated insights.

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## **8. CONCLUSION**

Certain technological analysts claim that anything that can be converted into data will ultimately be replaced by machines. That leaves judgement and imagination, which are exclusive to humans and often serve as differentiators across organisations. Similar to databases and spread sheets, AI is a technology that is only beneficial if users understand how to use them to optimise corporate procedures. Artificial intelligence cannot take the role of accountants and auditors when it comes to using human ingenuity and judgement. This is a good thing because technological, regulatory, and economic changes will keep challenging the profession's traditional methods and ways of thinking. In the end, how the market reacts to these modifications will determine how audits are conducted. In addition to being able to react swiftly to shifts in user demand, accountants and auditors also need to be able to adapt to the development of new and developing measurements of organisational performance that go beyond conventional financial statements.

## **REFERENCES**

- [1]. AAAI (2017, April 17). A Brief History of AI. AITopics. <https://aitopics.org/misc/brief-history>
- [2]. Accounting Today (2017, June). Scoping out the Audit of the Future. <https://www.accountingtoday.com/news/scoping-out-the-audit-of-the-future>
- [3]. Bizarro, P. A., & Dorian, M. (2017). Artificial Intelligence: The Future of Auditing. *Internal Auditing*, 5, 21 - 26
- [4]. Brown, C. E., & O'Leary, D. E. (1995). What Is Artificial Intelligence (AI)? In *Introduction to Artificial Intelligence and Expert Systems* (pp. 1-14). Authors.
- [5]. Buchanan, B. G. (2005). A (Very) Brief History of Artificial Intelligence. *AI Magazine*, 26, 53.