# THE IMPACT AND CHALLENGES OF ARTIFICIAL INTELLIGENCE IN THE FUTURE OF FINANCE AND ACCOUNTING

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### **ABSTRACT**

Artificial Intelligence (AI) dramatically changes everything it touches. It is emerging as one of the most progressive and advanced innovations we have in the world today. Its influence can be felt everywhere from companies to health care, education, home automation and social impact studies, etc. Artificial intelligence has the ability to transform the finance and accounting industries with innovations that remove tiresome tasks and free human finance practitioners to do higher-level, more lucrative research and advice to their clients. However, companies are hesitant to employ AI in their workforce due to confusion regarding the business case or return on investment.AI is committed to improving both efficiency and production quality while allowing for greater transparency and auditability. Not only would AI offer a wide variety of resources and reduce the daily tasks of the finance team, but it will also save time and provide accounting professionals with an ability to carry out vital research on different aspects.

Keywords: Transform, Efficiency, Digital, Revolution, Robot.

## Introduction

Artificial Intelligence (AI) extends computational technologies to a whole new level. It helps systems to make predictions and make adjustments accordingly – just as humans would. It allows computers to conduct machine-based learning that was previously left to humans. In the accounting profession, where people deal with rote jobs, AI is a substitute for human ability for the better. According to a recent survey conducted by the MIT-Boston Consulting Firm, almost 85 per cent of people agree that AI contributes to a competitive advantage and 79 per cent believe that technology improves the company's efficiency. Artificial intelligence is being used by many accounting companies to process a vast amount of high-speed data that would not be easy for humans.

### Objective:

Machines Replicates the Human Brain

Automation, AI chatbots, machine learning software and other AI innovations play an important role in the financial sector. Accounting and finance firms invest in these innovations and make them part of their business. Researchers claim that AI Apps and Machine Learning (ML) apps have an impact on accounting & finance practitioners and their day-to-day work. With AI and ML, finance experts will boost efficiency and deal with new clients.

## Machines performs a variety of accounting tasks

Artificial intelligence machines simplify end-to-end accounting procedures. It maintains operating performance and at the same time reducing costs. As automation is accessing every corner of a business, financial firms are also undergoing a digital transformation that will benefit from technological developments. Accounting and finance leaders who have deployed AI would be ranked in the future of digital transformations.

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## Methodology

The information provided in the study is collected from secondary sources. The secondary data is collected through books, journals and internet.

#### Literature Review

**Daniel E.O leavy, Robert M O keefe,** "Impact of AI in Accounting work: Expert system use in Auditing and Tax", This paper analysed the relationship between AI in accounting work and used Perrow's sociological framework as a basis for a comparative organization analysis of the impact of the expert system on organization issues.

**William E. Spangler**, "The Role of AI in understanding the Strategic Decision-Making Process". This paper evaluated that AI plays a vital role in the decision-making process through various theories and models such as Rule-Based Approaches, Analogical Approaches, Frame-based, and object-oriented approaches, etc.

**Cindy Greenman**, "Exploring the impact of Artificial Intelligence on the Accounting Profession". This research paper concluded that the importance of AI in accounting work i.e., in the respective task of book-keeping or process driven assignment is replaced with automated technology.

### **Advantages**

- Pay / Receive Processing: Existing Al-based invoice management systems help clients finance the efficient processing of invoices. The digital transformation of accounting and finance is unbelievable. Digital Al machines learn accounting codes that are best suited to every invoice. Thanks to technological advances in the financial sector.
- Supplier Onboarding: The Al-powered systems can screen the suppliers by examining their
  tax details or credit scores. Al tools can set all suppliers in the systems without the need for
  humans. In addition, they can also set the query portals to get the required data
- Procurement: Many businesses are filing their procurement and purchasing processes on paper. They maintain separate structures and documents that are not connected to each other. As Al-machines process unstructured data using APIs, the procurement process will be automated.
- Audits: The digitization of the audit process improves the degree of protection. Using a digital
  tracker, auditors can monitor any file that is accessed. Instead of looking for all paper records,
  digital files will make audit work easier. The digitization process in auditing therefore increases
  the accuracy of audits. Thus, artificial accounting and audit intelligence helps to document every
  financial activity of the company. Al-powered audits are more effective and more perfect.
- Monthly and Quarterly Cash Flows: Al-powered machines can capture and incorporate data from a number of sources. Al software, devices, or Al applications not only speed up your processes, but also make your financial processes accurate and stable. Your monthly, quarterly or annual cash flows can be easily collected and consolidated by Al-powered machines.
- Expense Management: It is a daunting process to revise and finalise expenditures and ensure
  that they meet with company requirements. The manual method takes more time for your
  finance team. Machines can perform these things easily and effectively instead of humans. Al
  machines can read all receipts, inspect the expenses, and warn human employees when a
  violation has occurred.
- Chatbots: Al-driven chatbots are designed to solve user questions efficiently. The questions can include the most recent account balance data, statements, credit bills, account status, etc.

## Will Accountants be Replaced by AI?

Are accounting and finance practitioners in a huge dilemma that AI will replace accountants in the future?

The AI revolution in accounting will not slow-down in any way whatsoever. AI technology has the maximum capacity to manage all accounting activities in the world. But that doesn't mean that the accountants will be replaced. Human intelligence will always be required to run and operate technology efficiently. Companies allow accountants to interpret and analyse the data collected by AI machines. In addition, accountants will play a vital role in offering advisory services that are better than computers. Therefore, rather than replacing accountants, artificial intelligence helps accounts carry out their everyday tasks in a modern way.

As AI and machine learning perform repetitive tasks more efficiently, accountants can save time and focus on other general tasks such as data analysis and consulting services. The future of accounting jobs will therefore be automated and intelligently supported by AI, but not by accountants (human employees) will be replaced by AI devices.

## Market Growth of AI in Accounting:

According to industry forecasts, artificial accounting intelligence is expected to hit \$4.7 billion by 2024 for a CAGR of approximately 48 per cent. The growing need for automated accounting systems, enhanced audit processes and decision-making capacity is driving demand for AI in accounting.

## Latest trends that will Impact the Future of the Accounting Jobs

- Working in the Cloud Technology: A clear technology shift is currently underway in the cloud.
  Cloud offers direct access to data and computing capabilities. A major benefit of a cloud-based system is the regular updating of data that helps clients and accountants to evaluate information and make strong data-based decisions.
- Automation of Accounting Tasks: As the use of Artificial Intelligence in self-learning systemscontinues to be incorporated into accounting tasks, computational systems can take on redundant and time-consuming tasks, leaving conceptual and administrative tasks to humans.
- Blockchain Technology: The third most important movement that would have an influence on
  the future of accounting jobs is 'Blockchain.' As blockchain technology will enable users to
  access fine documents, create smart contracts and record transactions, the framework is
  supposed to receive notification from accountant professionals. Some famous accounting firms
  have already embraced the blockchain, namely Deloitte, KPMG, PricewaterhouseCoopers, and
  Big Four—Ernst & Young.

## 3 ways Accountants can Implement Al today

Artificial intelligence is poised to change the finance and accounting industries with innovations that reduce tiring activities and free up resources for financial workers to prioritise higher impact responsibilities. To streamline processes and broaden their expertise, companies can explore the current opportunities provided by AI. Here are three ways in which these advanced technologies can perform day-to-day tasks:

- Streamline data entry and analysis: Artificial intelligence helps financial administrators remain on top of transactions in time-consuming and time-consuming processes. Instead of financial data spread through numerous papers, PDFs and spreadsheets, machine learning—an artificial intelligence branch-extracts data from the receipt of photos, automatically classifies it based on the expenditure type, and populates reports for review in one location.
- Reduce fraud: Business investment has been highly decentralised. Today, workers spend more
  money on more types of expenditure, using more payment systems than ever before. As
  financial data expands and extends through additional payment networks, the risk of fraud and
  non-compliance increases.
- Enforce Corporate policy: Artificial intelligence can be used to significantly reduce the time it takes to detect non-compliance issues in financial data. Purchase orders, employee receipts, travel bookings and credit card transactions are immediately checked for non-policy purchases-allowing auditors to easily correct the mistake and help enforce corporate policies on employees.

## Challenges

- Necessity of rich technology: Artificial intelligence tools and techniques require a great deal of computational resources which is needed to process vast quantities of data in order to construct an AI system and to use deep learning techniques. Obtaining and financing this level of computing capacity is a challenge for companies, especially small-scale enterprises and start-ups. This has been made possible to some degree by the parallel processing system and cloud computing, but as the amount of data rises, these are not efficient as computing becomes more complex.
- Business and Organisational support: Few organisations have been involved in putting
  money into Al-based goods. As there is very little deployment and the Al product is currently
  being used the interest of the organisations does not lie in investing in Al products. More there

are not enough people who know how to run computers that think and learn on their own. Some less people can help other companies understand the machine's success. The solution to this problem is by providing platforms and resources that enable Al-driven customers to function as a service, so that they can use the Al and use data on ready-made solutions. Al is also a black box for people, and people don't trust something until they know how to make a decision. Algorithms are complicated and make people realise that it is more important to make more precise and accurate predictions.

- Focus on single task: Generally, any AI is programmed to perform any particular or specialised task according to the feedback as the paradigm of the AI says, unlike the human mind, which can choose between the best outcomes for any specific task. What we should call as a general strategy, and this is yet to come in the future. It means that AIs need to be built simply to ensure that their solutions do not cause other areas to be considered.
- **Uncertainty**: There are very few Als available that can prove to be transparent, explainable and provable. As companies working on Al-based goods cannot clearly explain their vision and what they have done with the aid of Al techniques, people are uncertain about their result and whether production decisions are ideal or not.
- Data security: In accounting, a lot of data is used and depending on the purpose of these data are used on the AI platform. These data can be sensitive and confidential, so there is a possibility of infringement of the data. The Data Protection and Use Regulator has yet to come, so it is of great concern to the company to introduce accounting AIs.
- Ambiguity in the output: There may be a conflict in the mechanism by which any input can be
  handled between organisations or individuals, and human brain intervention is required. It is
  therefore still a challenge to produce Als that can withstand such circumstances and provide
  performance on which everybody agrees. There could be some data that are poor and that can
  lead to an immoral and unjust outcome. These findings should be ignored as this may lead to a
  bias in the decision.

## **Findings**

It's the digital era, but many finance organisations are still trapped in paper and manual processes – searching, transferring, copying, sorting and filing records. But it doesn't have to be that way. Studies show that 50-90% of financial processes can be automated.

- Supplier onboarding: Many businesses have invoice portals that streamline e-invoicing, but
  the on-boarding of new suppliers is still a manual operation. With AI, accounts payable teams
  may deploy a robot to access services to evaluate new suppliers for the validation of addresses,
  credit ratings, tax data and other relevant details, creating a full profile for the verification of new
  suppliers.
- Portal queries: Organizations also deal with suppliers across portals that do not have well-defined interfaces. This forces staff members to log in and out of portals manually to copy and paste data between systems. Al robot can be built to automatically collect and post portal-based information at pre-set times or as part of a given workflow.
- **Compliance**: Invoices must be checked to ensure that the data and contract terms of the provider are complied with. If your company is still validating manually, use AI to ensure greater precision, as one global telecommunications provider has discovered
- **Supplier price comparisons**: Comparing the prices of your suppliers is always a time-consuming, manual process when preparing a customer quote. All is automating this process, collecting and delivering the necessary data in substantially less time.
- **Delivery reconciliation**: Delivery notes are normally reconciled by hand with purchase orders to confirm orders against shipments. The robot will review and accept all matching instructions, notifying the human being only when an exception is found. This method saves time and increases customer service. For example, one transport company reduced the time to schedule appointments to just five minutes from a few hours and increased the number of appointments by 25%.
- Customer onboarding and master data maintenance: Manually, onboarding and checking new customers is sluggish and error-prone. Customer data also needs to be checked and revised on a regular basis. Instead, a robot will assess potential customers with a full report on credit ratings, tax data and other relevant information. Scheduled automated master data updates ensure that documents are correct and up-to-date.

- Data management: Reporting on financial and operational data is vital to any company.
  Gathering and aggregating these data and supporting information is slow, but there is a
  pressing need for information to be readily accessible. Robots speed up the processing and
  aggregation of financial data, ensuring that executives have the information they need to gain
  insight into the market.
- Accounting close support: Until accounts can be closed, the accounting staff must reconcile
  transactions in journals across departments and divisions. All not only collects and consolidates
  transactions, but also reconciles them in your ERP.
- **Financial close support**: The financial closeness and reporting process involves activities and procedures from various structures, agencies and personnel such as closing sub-leaders and developing and providing financial filings to regulators. All saves time and eliminates errors by automating the data posting process from sources such as Excel to the appropriate sub-leaders.

### Conclusion

Digital transformation in accounting and finance integrates machines and people to make workflows more efficient. As machines can gather and process large quantities of data, they can draw patterns and learn from data. When computers conduct repetitive and time-consuming activities, accounting and finance experts will have ample time to focus on the tasks they perform. We may therefore strongly say that the future of the accounting and finance sectors would be artificial intelligence. We really can't tolerate financial and accounting failures and delays. They have real consequences for sales. Al will help you gain true end-to-end oversight of your financial and accounting process gaps, allowing you to work like tomorrow.

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