



Artificial intelligence and accounting: An impact analysis

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Abstract

Artificial Intelligence is a cutting-edge technology that accounting companies and experts worldwide may utilize. Accounting has moved from manual paper and pencil recording to computer and software-based recording as a consequence of these advancements. In the long run, the use of artificial intelligence in accounting will result in substantial change and advancement for the business. The biggest risk with AI is that people think they understand it too soon. This study's aim is to examine AI's impact on accounting. The descriptive study approach was used to examine the effect of AI in accounting and offer solutions to present and future problems.

Keywords: Artificial intelligence, accounting, machine learning

Introduction

The mid-20th century invention of stored-program computers represents the beginning of viable artificial intelligence. The primary "artificial intelligence" gathering was led in the year mid 1950s. The expression "artificial intelligence" was instituted by John McCarthy (computer based intelligence). It is an informatics field that seeks to create an intelligent machine capable of doing activities similar to a human person. In this category of computer science, researchers strive to create an intelligent machine that can do many tasks. Intelligent software and computers are also known as the realm of study known as creative computing. This is also known as AI. Artificial intelligence is a subfield of computer science that is concerned with both theory and practise of creating intelligent computer systems. The computers that respond the same way as humans do when they are confronted with simulations are being researched as artificial intelligence.

The four aspects of artificial intelligence are intellect, research, business, and programming. The intelligent component of artificial intelligence involves programming computers to act like humans. AI is a set of technologies and procedures that are superior to people when it comes to solving human and company issues. Finally, artificial intelligence experts think that replicating human cognition is an essential component of the discipline. Accountants and auditors create and evaluate financial records for businesses. They ensure that records are accurate and free of mistakes, and that taxes are paid on time and efficiently. They also evaluate financial transactions and help companies operate more efficiently by making smart choices. Artificial intelligence has been used in accounting applications for more than 25 years, with financial reporting and auditing being the primary areas of use. There is a 95% chance that accountants will lose their jobs due to computers doing data analytics and number processing, according to a research done by the University of Oxford in 2015. However, the study showed that as technology advances, some jobs are lost and others are gained.

Literature Review

A growing number of financial organizations are using AI to save costs and improve operational efficiency. AI has been

used to accounting for at least twenty-five years, mostly in the field of financial accounting and auditing. Artificial intelligence (AI) is already utilized in almost every aspect of accounting, prompting worries among experts about the future role of the human accountant. According to the same study, new technologies may eliminate some employment while creating others. In other words, it means that artificial intelligence will simplify accounting and turn it into a service with faster turnaround times.

Financial Stability Board said AI is just using computer tools to activities previously performed by humans. Artificial intelligence (AI) is a major component of the technology industry, solving many of computer science's most challenging problems. The long-term aim of artificial intelligence has always been to do tasks that are too complex for humans. Its variety, aptitude, construction, and complexity are the computer's strongest features, not its energy use. It is the computer's diversity, intelligence, connectivity, and complexity that make it technologically powerful. The way individuals conduct business has evolved as computers and artificial intelligence become more intertwined. The study found that technology supports most organizations, from large companies to MSMEs.

According to a research done by the Financial Stability Board, compliance with regulations, monitoring, data integrity evaluation, and fraud detection are all done utilising artificial intelligence. Accounting systems and operations evolved from paper journals and ledgers to computer-based forms with the introduction of computers, enabling artificial intelligence to apply self-management, self-tuning, self-configuration, self-diagnosis, and self-healing to accounting operations. Accounting and business solutions software and more recently artificial intelligence have substantially changed accounting processes. Computers, the internet, software/expert systems, and most recently advancements in artificial intelligence have all benefited accounting procedures. These are just a few of the advantages of utilizing computerized expert systems in accounting. For example, Murungi and Kayimba (2010) discovered that businesses that ignore expert system technologies often provide inaccurate financial data. (Chukwudi *et al*, 2018) ^[6]. Technology and expert systems

are evolving rapidly. Recent advances in artificial intelligence have led to improved accounting and business solutions software robotics and professional systems. This novel technological phenomena has changed the business environment and the way industries function. Apparently, these technological advancements may undermine the job of experienced accountants. ACCA (2013) displays that intelligent and advanced systems, robotics, and artificially intelligent tools are now being asked to deal with the issue of a gradually less-skilled accounting workforce. A number of artificial intelligence research shows that if we don't watch our step, increasing income disparity, mass unemployment, and societal instability may result. They predicted that increasing automation and technological advancement will exacerbate societal discontent by 2025. Risk of an accounting profession being crippled by technology was among the top five issues highlighted in the Accountant Research Report (2015). As a consequence, this study will examine how AI has impacted corporate and professional accounting operations.

Objective of the Study

The primary goal is to discover how the use of artificial intelligence in accounting operations impacts the financial statements.

Research Methodology

This study is descriptive in nature. Descriptive research collects data from secondary sources. A data source may provide primary and secondary data. In this survey, since the goal is descriptive, selecting data is a prerequisite to doing the research. A data source may provide primary and secondary data.

Analysis

Artificial Intelligence in Accounting

The work definition of an accountant 20 years ago was significantly different from the job description now. Eventually, in the not-too-distant future, accountants will be out of work. The tasks they are being assigned will drastically alter in the next decade. Advisory services, business development, and risk management are all anticipated to grow in importance in the future years. In the future, accountants will need to specialize and utilize advanced and improvised technology.

Artificial intelligence is being created to think, feel, and respond like a biological creature. A Deloitte research claims that AI may bring in a new class of accounting products and services. Among them include client service, R&D, logistics, sales, marketing, and data analysis. AI has the potential to revolutionize jobs that need specialized skills, data processing, report writing, and other repetitive tasks (i.e. bookkeeping, transaction coding, etc.). Automation, according to the Association of Chartered Certified CPAs, may free accountants up to concentrate on higher-value tasks like advising.

There is an increased possibility that AI will soon be used in the areas of monitoring compliance, administrative process, employee valuation, and even employment and termination. Accounting software is not a new idea. Accounting firms have not gone out of business because of tax preparation software; they have become more skilled and able to submit much more returns. However, the new program may enable some customers to do away with the need for an accountant.

The newer options, like QuickBooks Online, are more "cloud" oriented, leading some to do their own accounting. Everyone has a distinct vision of how the accountant's job will shift. Some predict a major shift, comparable to what occurred when Uber and Lyft entered the taxi/transportation market. Others argue that software will only outsource less complicated tasks to businesses, leaving certified experts to perform audits and interpret more complex laws.

Artificial Intelligence in Auditing

Perceptive technologies empower customers to overcome the tradeoff between price, speed, and quality that has traditionally existed. This AI technology will assist accountants and auditors streamline laborious procedures that have been in place for decades. The quality improvement auditors will have more time to focus on now that they don't have to hunt for source documents is made possible by advanced analytics, insight, and expert judgement. There has been some potential shown with AI when it comes to document inspection. Previously, extracting key words from contracts required reading through pages and pages of documents. Artificial intelligence has now automated this idea. Because of this approach, the system can learn and memorise text examples in order to identify and extract key terms.

In 2011, KPMG Australia revealed intentions to use artificial intelligence in audits. They advise using IBM's cognitive computing system Watson. According to KPMG, Watson will increase their statistics and analytics. Sample sizes formerly were restricted by time and people, but now this is no longer the case. (Greenman, 2017) [8]. KPMG will be able to assess all data rather than just a selection. More data means greater knowledge for customers, and more audit costs. KPMG is a worldwide accounting company that consistently ranks fourth (returns, figure of personnel, earnings and possessions). KPMG isn't the only company using this technology. Similar technologies are used by Deloitte, Ernst & Young, and Price Waterhouse Cooper (PwC).

Conclusion

Accounting and auditing will rely heavily on artificial intelligence in the future. AI is an important tool that will assist these professionals accomplish their goals. Professional judgement-based specialisations are more likely to be automated than repetitive tasks like accounting or process-driven assignments. Many think the future generation of accountants must understand and deal with artificial intelligence.

So, will robots replace us as the dominant species? In online education, instructors are being replaced by online instruction, investing websites are taking the place of actual financial advisors, and so on. No industry has been left untouched by new technology's influence on the workplace. Tax preparation software has helped accountants generate more tax returns. There has been no impact on accountants' salaries as a result of QuickBooks; rather, it has simply shifted the focus from hand-entry to computer-based input. Although accounting AI will not completely replace accountants, it will put a new focus on the role.

Analyzing artificial intelligence for accounting, from a different perspective

Artificial intelligence (AI) is actively encouraged by the government in accounting.

As a consequence of economic globalisation, nation links and cooperation are strengthening, but competition is intensifying. For India to remain internationally competitive, the country's accounting sector must improve. Chinese government agencies have also identified artificial intelligence (AI) as a critical national interest, and have undertaken an initiative to raise its prominence. Business strategies and policies should also be adopted by the government, along with the promotion of artificial intelligence in accounting. To promote and govern AI in accounting, appropriate laws and regulations are required. Businesses that actively utilize AI, for example, should be eligible for appropriate tax benefits.

It is critical for business management to use artificial intelligence (AI) technologies.

Many tech giants are expanding their investments in artificial intelligence, such as Apple Inc., Google Inc., and Microsoft Inc. Additionally, the domestic internet leaders are utilising artificial intelligence to increase its usefulness and introduce it to more everyday uses. Artificial intelligence is employed in many important industries, including banking and payment processing, where face recognition is used, as well as customer care for retail customers. Businesses seeking to improve their core competitiveness are turning to artificial intelligence (AI). As a consequence, companies should explore AI in conjunction with cloud computing and big data analytics to maximize resource utilization.

In the short term, it will result in increased costs for the organisation. However, in the long run, it will support the growth of sustainable development skills, and it will play a part in the future of AI.

Foster accounting education quality in higher educational institutions

In order to achieve their educational goals, colleges and universities should develop structured professional training programs. One must respect students' theoretical knowledge and accounting practice, while fostering university-industry cooperation and providing chances for students to develop their practical skills and become certified and qualified accountants. Colleges and other higher educational institutions should ensure that their faculty and teaching personnel continuously improves. Accounting classroom and practical education should always be informed of current developments and trends in worldwide financial standards and accounting. We can only develop outstanding accounting skill by raising the teaching level.

Establishing the concept of lifelong learning gives the idea of Accounting Flairs

Under these conditions, accountants should focus on cultivating their personal and professional skills, fostering ethical standards, and encouraging life-long learning. The "13th Five-Year Plan for Accounting Reorganization and Development" aims to promote management accounting and execute China's accounting talent strategy. China's accounting industry is currently shifting from financial to management accounting. To avoid being outshined by the

market, one should aspire to a level of high-level comprehensive accounting.

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