

# How is Artificial Intelligence and Machine Learning Impacting Accounting?

Artificial intelligence is all around us even if we don't necessarily think about it. Every time we search Google or ask Alexa a question, we are utilizing a form of artificial intelligence. The technology has radically altered processes like buying an airline ticket and booking a hotel.

What does it mean for the accounting and finance industry? Unfortunately, that is not exactly understood, but, just like other industries, we know it will have a profound impact. For example, auditors at Deloitte, one of the major accounting firms, are using artificial intelligence to sort through contracts and deeds during an audit. The computer does a risk assessment and flags potential problems.

## What is Machine Learning?

If you want to understand what artificial intelligence might mean to the finances and accounting industries, you first need to become familiar with machine learning. Artificial intelligence is teaching computers to solve problems. Machine learning is a subset of that field.

Arthur Samuel, who coined the term, defines machine learning as giving "computers the ability to learn without having to be explicitly programmed." In other words, machines teach themselves. For finance, that can be huge. The financial problems at a large manufacturing plant are completely different than in a software company. Machine learning allows the machine to learn the operation over time and create systems to improve the process.

Under this scenario, artificial intelligence is used to digest and analyze large volumes of data and make adjustments based on that data. It's a more sophisticated version of a spreadsheet where the formulas are updated over time. The process has the potential to radically change accounting and finance.

## Reducing Human Errors

One of the main ways that artificial intelligence can help the financial and accounting industry is by reducing human errors. Much of the standard data-entry practices that are common-place in accounting could be replaced with machines. Machines could manage invoices and low-level bookkeeping tasks. The machine would reduce the chance that numbers were entered incorrectly, which can cause major problems to the entire accounting operation.

While some might be concerned that the move would eliminate jobs, it could help the profession. It frees up accountants and financial professionals to work on higher-level aspects within an organization. Financial professionals will have more time to focus on strategy and improving the operation. They will be able to provide insights into how to make business practices run more efficiently.

## **Blockchain**

Another way that artificial intelligence might impact accounting and finance is using blockchain technology. Blockchain allows for the encryption of data through blocks, which track the time and date of a transaction. The technology could be used to make an audit process more efficient, because it would keep an accurate record of when a transaction occurred and who authorized it. Blockchain would limit the chances of an electronic record being altered.

Blockchain technology can then be combined with artificial intelligence to investigate the integrity of transactions. The computer will do a lot of the work, leaving the auditor to conduct the final analysis. Under this scenario, auditors will spend most of their time designing, reviewing, and verifying how information flows between systems. Rather than audits being conducted on a regular basis, blockchain and machine learning create the possibility of an ongoing audit. The machine is always working, and a human person would be notified when a potential problem is spotted.

## **Best way to prepare?**

Ultimately, though, artificial intelligence creates new opportunities. Much like when ledger books were transferred to computer, artificial intelligence will change the accounting and finance profession. It will need to adapt. Those who are ready for the future will find that their future burns even brighter.

## **Learn to become more tech savvy**

Financial professionals must embrace the technology. They need to understand how it works and learn how technology can improve an operation. They cannot fear change and must realize that artificial intelligence can be an important tool for their profession.

Numerous resources exist online about artificial intelligence and machine learning. A lot of smart people are developing the technology, and they are more than willing to spread their knowledge. It is up to the financial professional to embrace the change.

## **Add the technology to small projects**

An accounting department will not be transformed overnight by artificial intelligence. It is best to start small and become comfortable with the technology. A company can target specific tasks for the machine to accomplish. Once people become comfortable on a small project, the work can expand, and the role of the machine can grow.

## **Find a reliable partner**

A company is not going to understand and utilize artificial intelligence alone. It needs to find an expert in the field and form a partnership. The process begins by asking questions. The company needs to understand the technology. The process will be slow, but in the end, financial professionals will find the best way to integrate artificial intelligence into an operation.