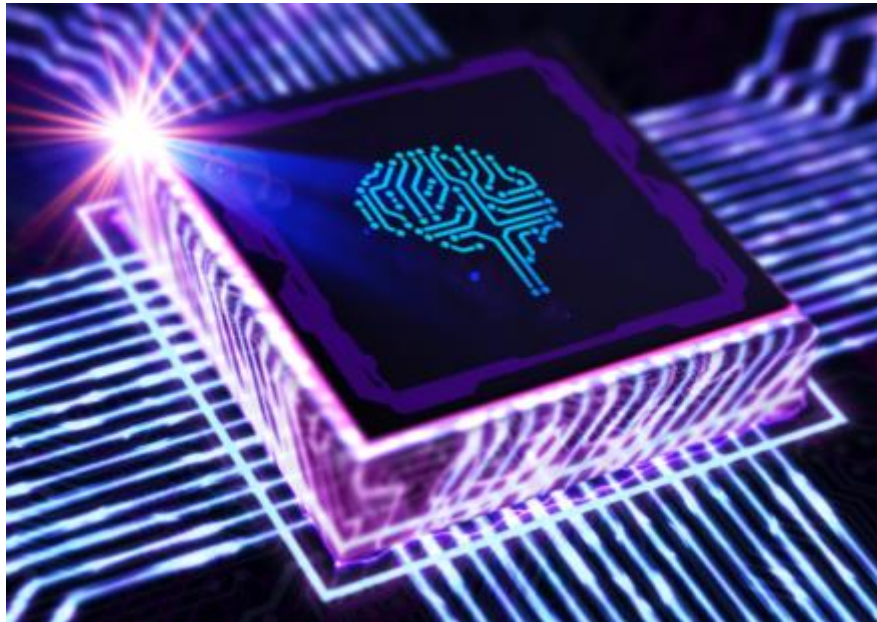


## How AI and Machine Learning will Impact Business in 2020



Although artificial intelligence (AI) can be defined in many ways, most people would agree that it is, in essence, a software solution that can solve problems according to a predetermined set of rules. A simple example is the artificial intelligence that allows or prohibits access to your smartphone. The AI in this case might ask 'Does the access code inputted, match the one on file?' and then respond appropriately.

Machine learning (ML), on the other hand, takes AI a stage further. It is a form of technology in which computer algorithms search for patterns in data. Once such patterns are established, probable outcomes can be predicted. It is ML that works out that you regularly use your debit card to buy a coffee most mornings, to withdraw cash from a particular ATM, to book a certain train journey ever couple of weeks. And it is the same technology that will set alarm bells ringing when the card is used to buy expensive jewellery, book a long-haul flight, or withdraw cash from a machine in another country.

Where running a business is concerned, ML can significantly reduce costs. It can automatically identify a sales inquiry or a complaint, and instantly direct the message to the relevant department. The result is a huge reduction in human intervention, and to underestimate the potential cost savings could be perilous in the extreme.

### **Integrating Chatbots**

At one time regarded as a bit of a nuisance at worst, and something of a gimmick at best, chatbots are increasingly playing a vital role in customer service. This is because, through ML, chatbots are helping businesses provide superior customer service. For a start, chatbots never sleep so they can serve your customers at all hours of the day and night. They can resolve certain queries without human intervention, and they can even be so sophisticated that they recognise emotions such as anger, and seamlessly transfer a call to a human if necessary.

Chatbots can also increase customer satisfaction by taking calls instantly rather than putting them in a queue; always a sure-fire way to get customers looking elsewhere.

When it comes to gathering and digesting customer data, chatbots leave humans way behind. Like a virtual assistant, chatbots can collect customer data from support interaction and feed this to your customer service staff, giving them a full history of each customer account. It's hardly surprising, therefore, that around 85% of customer service interactions are now powered by chatbots, with household names, including Netflix, enhancing customer engagement through investment in machine learning.

### **Increasing Customer Base**

According to the research firm Markets and Markets, the ML market is expected to grow to \$8.81 billion by 2022. With other companies already embracing the technology and considering how they can integrate ML into their systems and processes, now is the time to look at what you should be doing to ensure that your business isn't left behind.

You already know that creating a rapport with your customers is crucial to developing engagement and loyalty, ultimately leading to solid relationships. Machine learning can utilise lexical analysis to make those initial conversations much more valuable by scrutinising the sort of words, sentences, and topics that resonate with your target audience. In this way, you can establish what sparks certain peoples' interest, tailor your advertisements accordingly, and personalise your marketing communications.

### **Personalisation and Trend Prediction**

One of the most exciting things about AI is its potential impact on social media listening and lead nurturing. Through personalised, real-time content targeting, AI will soon be able to locate and start the nurture process.

An AI algorithm could, for example, learn that someone who is in the habit of logging on to LinkedIn on a Monday morning has been browsing the web for a new CRM system. The AI is so sophisticated that not only can it generate relevant content, but it can even get posts ready to be published at the times when it knows the user will see them. You've probably seen it for yourself. One day you search the web for a pair of trainers, then, very soon after, you're being bombarded with ads for them. That's AI doing its thing.

And how about using ML to monitor purchasing habits throughout your industry? There are already business using ML to work out what products people are buying, where, and at what volumes. Armed with this kind of information, suppliers can ensure that they order sufficient stock to meet demand, thereby reducing waiting times and increasing customer satisfaction.

### **Automated Data Visualisation**

The ability to visualise relationships in data helps businesses make better decisions, while building confidence. Whilst it's possible to obtain rich snapshots of data, visualisation tools are currently only powerful if you can interpret the underlying data.

Machine learning will offer more user-friendly automated visualisation platforms. By providing many hitherto unseen insights, you will be better informed and will increase productivity.

## **Conclusion**

If you're running a business, it's important to ask yourself how ML is going to aid your progression. As is typical with disruptive technologies, it will be those who first take the initiative to integrate ML with existing software solutions who will reap the rewards while the cynics risk losing out on a grand scale.

Like it or not, machine learning is gathering momentum and is already making businesses more productive, predictive, efficient and intelligent. There is likely to be some resistance, but the adoption of a transparent roll-out strategy can counter this. Explain to staff how ML will help your business and help the members of your team do their jobs. Reassure them that you will give them the support they need to adapt their skills and adjust their working methods. By embracing ML and describing how it can improve their working lives, you will make a huge impact that will last long into the future.