

# How Knowledge Industries are Leveraging Big Data Analytics and AI

It would be an understatement to say that big data analytics and artificial intelligence have just contributed to the growth of knowledge industries. These technologies have completely revolutionized the core way these industries operate. Amazon, Netflix, General Electric, and other leading organizations have recorded tremendous growth in the last few years due to leveraging big data analytics and AI.

## What Are Big Data Analytics and AI?

Big data analytics is an emerging field in computing that seeks to create value from large data sets. As web technologies become more available to consumers, the amount of data being generated as a result is growing by the day. Big data analytics is used to establish patterns and gather insights that can better inform business decisions. Artificial intelligence helps companies process datasets produced by big data analytics to learn from this data, create new business analytics rules, and advise company decision making.

## How Are Big Data Analytics and AI Transforming Knowledge Industries?

To understand the potential of big data in knowledge industries, we need to look at what makes these industries unique.

Knowledge industries are businesses that heavily depend on data in their day-to-day decision-making. This is not exclusive to the tech sector - manufacturing, healthcare, and public sector organizations, for example, are increasingly realizing the importance of data-driven decision-making. Such organizations can use big data to model their business's critical functions - be it cash flow projection, supply chain optimization, or even the potential reception of a new product.

As new organizations are being premised on data-driven decision-making, and old ones restructure to fit the model, one can only conclude that the knowledge industry is growing. Governments and financial enterprises are making particularly good use of this emerging technology. The following are some of the ways that these two sectors are leveraging big data analytics and AI:

- Analysis of public health information to help with the control and management of pandemics, such as COVID-19.
- Analysis of economic data to help governments develop more efficient economic policies.

- The use of automated trading tools, such as cryptocurrency bots, to trade digital assets.

These are only a few key example scenarios where big data analytics and AI have resulted in easy wins and innovations for data-driven industries.

## Big Data Analytics and AI in the Era Of COVID

The current coronavirus pandemic has disrupted a multitude of industries in unprecedented ways. Big data's most significant utility during this time can be seen in how governments can predict spikes in infections and thus respond accordingly. Supply chains, the markets themselves, and even consumer behavior itself have changed. While most organizations were caught unprepared, those who leveraged big data analytics have developed resilience as a result of more efficient decision making.

Big data analytics has been particularly useful in analyzing consumer spending behavior changes during the pandemic and thus has been particularly useful in making decisions based on these insights. There is no denying that there has been a spike in demand for some products while the demand for others has collapsed; big data analytics and AI allow companies to respond to these changes in the market with unprecedented speed.