
MACHINE LEARNING IN BIG DATA

By Mehakpreet Kaur

BIG DATA

WHAT IS IT?

Big data refers to large amounts of data that require specialized solutions in order to be gathered, analyzed and implemented into the business operation. The name “Big Data” itself emphasizes on the huge size of the data in hand.

WHERE IS IT?

1. Social Media
2. Big Companies
3. Machine Data



BIG DATA ANALYTICS

WHAT IS IT?

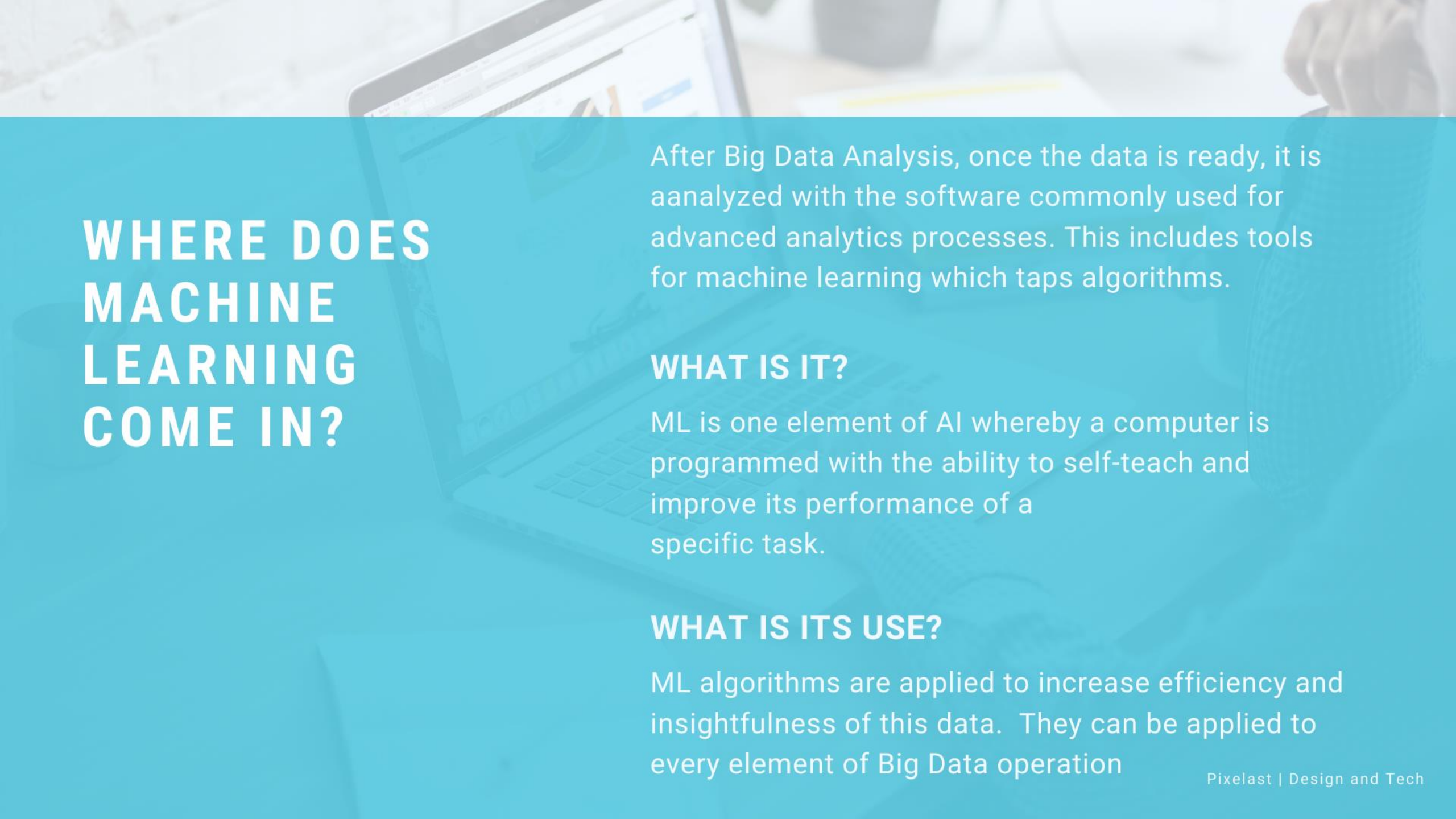
This is the process of studying large data-sets to identify the hidden patterns, market trends, consumer preferences and other valuable information helping organizations to form strategic business decisions.

WHY DO WE NEED IT?

It helps the user to look at a more sorted and structured form of data which can thus be used to various benefits, especially in the business world.

WHAT ARE ITS TYPES?

Prescriptive, Diagnostic, Descriptive, Predicative and Outcome.



WHERE DOES MACHINE LEARNING COME IN?

After Big Data Analysis, once the data is ready, it is analyzed with the software commonly used for advanced analytics processes. This includes tools for machine learning which taps algorithms.

WHAT IS IT?

ML is one element of AI whereby a computer is programmed with the ability to self-teach and improve its performance of a specific task.

WHAT IS ITS USE?

ML algorithms are applied to increase efficiency and insightfulness of this data. They can be applied to every element of Big Data operation



MACHINE LEARNING'S IMPACT ON THE BUSINESS WORLD

Helps analyze bigger, more complex data to uncover hidden patterns, reveal market trends, and identify customer preferences for faster, more accurate results. By automating analytical model building, the insight gained is deeper and derived at a pace and scale that human analysts can't match.

METHODS OF MACHINE LEARNING

There are two types of machine learning - **Supervised** learning and **unsupervised** learning.



SUPERVISED

In Supervised learning, you train the machine using data which is well "labeled." It means some data is already tagged with the correct answer. It can be compared to learning which takes place in the presence of a supervisor or a teacher.



UNSUPERVISED

Unsupervised learning is a machine learning technique, where you do not need to supervise the model. Instead, you need to allow the model to work on its own to discover information. It mainly deals with the unlabelled data. Deals with more complex data.



2006

How has machine learning changed
over the years since it started?

2019

It was born from pattern recognition
and has now reached a point where
machine learns from data itself. They
learn from previous computations to
produce reliable, repeatable
decisions and results.

THANK YOU

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