

Big Data is using computers to analyze information in order to identify patterns and get meaning that might be too complex for traditional methods.

Big data analysis is most useful when the data is extremely variable, large, or is being collected at a rapid pace.

Many businesses have begun to realize that information could be their greatest asset. With that in mind, businesses work to gather the most accurate and complete information, and then use that information to try and accurately predict future behavior.

This use of Big Data has the potential to transform everything from geology to medicine. For example:

- Earlier and more accurate earthquake and hurricane prediction may be possible using increased information analysis by sensors.
- Analysis of patterns in crime could improve coverage by law enforcement.
- In medicine, analyzing patterns of how people use emergency facilities has allowed medical personnel to intervene in less expensive, proactive ways before the next emergency.
- Many Human Resources departments now use Big Data analysis to mine social network information in an effort to help predict prospective employee performance or understand which incentive programs will be most successful.
- Big data analysis of purchasing behaviors also allows organizations to provide recommendations and create a more personalized customer experience.

As the world has become more strongly linked, issues of privacy have arisen as well, and privacy will become an even larger issue in the future.

Big Data paves way for more predictable events and behaviors. While there are both pros and cons that come from the amount of data available, it's clear that organizations who can leverage this information, will have a huge advantage over those who can't.