*Big data* is a term for [data sets](https://en.wikipedia.org/wiki/Data_set) that are so large or complex that traditional [data processing](https://en.wikipedia.org/wiki/Data_processing) [application software](https://en.wikipedia.org/wiki/Application_software) is inadequate to deal with them. Challenges include [capture](https://en.wikipedia.org/wiki/Automatic_identification_and_data_capture), [storage](https://en.wikipedia.org/wiki/Computer_data_storage), [analysis](https://en.wikipedia.org/wiki/Data_analysis), [data curation](https://en.wikipedia.org/wiki/Data_curation), search, [sharing](https://en.wikipedia.org/wiki/Data_sharing), [transfer](https://en.wikipedia.org/wiki/Data_transmission), [visualization](https://en.wikipedia.org/wiki/Data_visualization), [querying](https://en.wikipedia.org/wiki/Query_language), updating and [information privacy](https://en.wikipedia.org/wiki/Information_privacy). The term "big data" often refers simply to the use of [predictive analytics](https://en.wikipedia.org/wiki/Predictive_analytics), [user behavior analytics](https://en.wikipedia.org/wiki/User_behavior_analytics), or certain other advanced data analytics methods that extract value from data, and seldom to a particular size of data set. "There is little doubt that the quantities of data now available are indeed large, but that’s not the most relevant characteristic of this new data ecosystem. Analysis of data sets can find new correlations to "spot business trends, prevent diseases, combat crime and so on. Scientists, business executives, practitioners of medicine, advertising and [governments](https://en.wikipedia.org/wiki/Government_database) alike regularly meet difficulties with large data-sets in areas including [Internet search](https://en.wikipedia.org/wiki/Web_search_engine), finance, [urban informatics](https://en.wikipedia.org/wiki/Urban_informatics), and [business informatics](https://en.wikipedia.org/wiki/Business_informatics). Scientists encounter limitations in [e-Science](https://en.wikipedia.org/wiki/E-Science) work, including [meteorology](https://en.wikipedia.org/wiki/Meteorology), [genomics](https://en.wikipedia.org/wiki/Genomics), [connectomics](https://en.wikipedia.org/wiki/Connectomics), complex physics simulations, biology and environmental research.