

"Data science" became more widely used in the next few years: in 2002, the Committee on Data for Science and Technology launched the Data Science Journal. Though it was used by the National Science Board in their 2005 report "Long-Lived Digital Data Collections: Enabling Research and Education in the 21st Century", it referred broadly to any key role in managing a digital data collection. The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. Vasant Dhar writes that statistics emphasizes quantitative data and description. During the 1990s, popular terms for the process of finding patterns in datasets (which were increasingly large) included "knowledge discovery" and "data mining". While data analysis focuses on extracting insights from existing data, data science goes beyond that by incorporating the development and implementation of predictive models to make informed decisions. Data science and data analysis are both important disciplines in the field of data management and analysis, but they differ in several key ways. F. Data science also integrates domain knowledge from the underlying application domain (e.g., natural sciences, information technology, and medicine). The field encompasses preparing data for analysis, formulating data science problems, analyzing data, developing data-driven solutions, and presenting findings to inform high-level decisions in a broad range of application domains. Davenport and DJ Patil declared "Data Scientist: The Sexiest Job of the 21st Century", a catchphrase that was picked up even by major-city newspapers like the New York Times and the Boston Globe. Vasant Dhar writes that statistics emphasizes quantitative data and description. Data science also integrates domain knowledge from the underlying application domain (e.g., natural sciences, information technology, and medicine). He describes data science as an applied field growing out of traditional statistics. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. In 2012, technologists Thomas H. Data science is multifaceted and can be described as a science, a research paradigm, a research method, a discipline, a workflow, and a profession. In contrast, data science deals with quantitative and qualitative data (e.g., from images, text, sensors, transactions, customer information, etc.) and emphasizes prediction and action. He describes data science as an applied field growing out of traditional statistics. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. In 1962, John Tukey described a field he called "data analysis", which resembles modern data science. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. The modern conception of data science as an independent discipline is sometimes attributed to William S. Cleveland.