

Data science is the field of study that combines domain expertise, programming skills, and knowledge of math and statistics to extract meaningful insights from data.

Data Science Lifecycle

Capturing Information : Develop methods of capture and collect important data.

Store and Maintain Data: Create data stores that are compatible with how data is being collected and it's intended method of consumption. Frequently revise and maintain data stores to ensure quality and reliability.

Conform Data for Analysis: Transform existing data stores for planned analysis, conforming data into required layouts.

Analysis: Work with subject matter experts determine which tool or technique can effectively uncover desired insights.

Communicate Results: Summarize and transmit findings in an easily digestible way so that insights can be understood by all levels of the organization.

Things to Remember

Data Science requires blending three key areas to achieve success

- Domain Expertise: Subject matter experts with an intimate knowledge of the problem at hand
- Programming Skills: People with access to advanced computing resources and techniques
- Statistical Methodology: Knowledge of current and developing statistical and analytical techniques

Strong leadership with a clear understanding and reasonable expectations are key to success. Data Science is not magic but it can be a great tool for accelerating advancement in many areas of an organization.