Importance of data management

You've learned that data management is the process of collecting, storing, and using data, and communicating your plan. Data management is one of the critical components of keeping your data organized, and your team informed about the structure of your data. In this reading, you'll learn more about the importance of data management, and review the components of a data management plan.

Reasons for data management

Data management plans provide all members of a team with specific guidelines for collecting, storing, using, and communicating data. To better understand the components of a data management plan, you'll explore the three key phases, and learn how they support a successful plan.

Collect

During the collection phase, a data management plan ensures that your team is using the same categories for collecting data, and that your data follows privacy guidelines. It also defines the minimum amount of data needed to complete a project. Data management plans also ensure that your team is following a process that can be scaled to handle an increase in data.

Store

During the storage phase, a data management plan ensures that file name conventions and formats are used consistently. It also ensures that data is stored safely and is not accessible beyond those who require access. Finally, following a consistent storage procedure ensures that data is still easy to find when data stores grow larger.

Use

While data is in use, a data management plan provides clear guidelines for how the data can be used. It also ensures that data is used in a way that is consistent with the privacy of users. Following procedures for using data also supports scalability during use, while data management policies make large databases easy to search.

Communicate

During the communication phase, a data management plan defines how data can be shared internally and externally, ensuring that data is shared only with those who need it. Clear guidelines also minimize confusion when sharing an increased volume of data.

Key takeaways

Whether you're a team of one, or working with a group, having a clear data plan ensures that everyone has the same information when working with data. And, a data plan ensures that you can collaborate using the same datasets without disrupting the work of others. A data management plan also helps you create parameters for ensuring the security of your data when it's shared both internally and externally.

Resources for more information

For more information about data management plans, check out these resources:
- Boston College provides guidelines for creating your own data management plan:
  https://libguides.bc.edu/dataservices/dmp
- North Carolina State provides a list of potential elements for a data management plan:
  https://www.lib.ncsu.edu/do/data-management/elements-of-a-dmp