



CAREER COMPASS

Steer Your Career. Accelerate Our Mission.

Data Management Fundamentals

Participant Workbook

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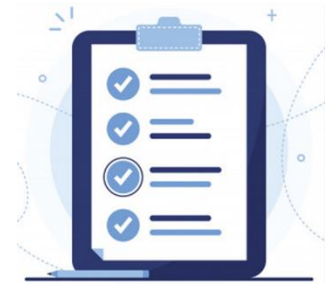
Introduction

Objective

You will be able to identify data management categories and utilize data management workflows and best practices to support decision-making.

Agenda

- What Data Management is
- Data Management Categories
- Data Management Best Practices
- Workflow for Data Management



What is Data Management?

- The practice of collecting, keeping, and using data securely, efficiently, and cost-effectively
- The goal of data management is to help people, organizations, and connected things optimize the use of data within the bounds of policy and regulation so that they can make decisions and take actions that maximize the benefit to the organization

-Oracle

“It is a capital mistake to theorize before one has data.”

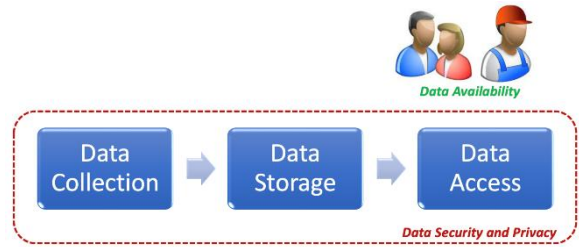
-Sherlock Holmes

Chat Question

What are some examples of your current process or practice for collecting, keeping, and using data?

Data Management Categories

- Data Collection
- Data Storage
- Data Access
- Data Availability
- Data Security and Privacy



Data Collection

- Integrating and organizing data sources
- Enables teams to derive value from data
- Know what you want to collect
- How to collect it
- Where to store it



Data Storage

- Storage strategies
- Data storage types
 - Shared Drive
 - Cloud
 - SharePoint
 - OneDrive
- Folder structure for easy discovery



Chat Question

What are some examples of how you implement data storage strategies to help you easily find data?

Data Access

- Get the right people
- Give the necessary access privileges
- Enable the best work



Data Availability

- File backup
- Disaster and recovery plans
- Stakeholder access to maximize workflow efficiency



Data Security and Privacy

- Compliance with established security and privacy policies
- Make security practices part of your routine
- Access based on need to know

Workbook Exercise

Of the data management categories, which is the most challenging for you and why?

- Data Collection
- Data Storage
- Data Access
- Data Availability
- Data Security and Privacy

Data Management Best Practices

- Reduce Duplicate Data
- Focus on Data Quality
- Prioritize Data Protection and Security
- Setup Monitoring and Alerts



Reduce Duplicate Data

- Data backups
- Avoid version control issues
- Setup process to avoid duplicates
- Routine audit to remove duplicate data
- Clear up storage
- Reduces confusion
- Find data quicker



Focus on Data Quality

- Quality data is usable and relevant
- Validate data accuracy
- Ensure data is suitable for analysis
 - Does the data help answer questions related to the problem you need to solve?



Prioritize Data Protection and Security

- Compliant with data security and privacy standards
- Access control
 - enable you to specify privileges for each type of user
- Encryption
 - turns data into meaningless code, which can only be deciphered by keys you control
- Physical security
 - use techniques to help secure data stored on devices



Setup Monitoring and Alerts

- Monitor data repositories for important patterns and events affecting your data
 - Primarily an IT function
 - Everyone should monitor for safeguarding data
- Alerts provide notifications when data changes
 - Allows you to track progress



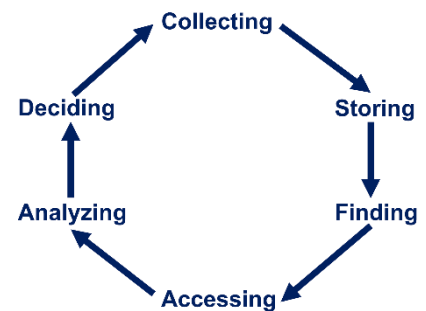
Chat Question

Of the Data Management Best Practices, which would be the most helpful for you and why?

- Reduce Duplicate Data
- Focus on Data Quality
- Prioritize Data Protection and Security
- Setup Monitoring and Alerts

Workflow for Data Management

- Collecting
 - Data quality
- Storing
 - Intuitive File/Folder construct
- Finding
 - File naming convention (ex. YYYYMMDD_Title_version#.)
- Accessing
 - Proper access and controls
- Analyzing
 - Review data to propose solutions
- Deciding
 - Make data-driven decisions



Workbook Exercise

From the 6 steps in the Workflow for Data Management, order your level of competency (1=highest, 6=lowest). How can you improve these areas?

1. Collecting
2. Storing
3. Finding
4. Accessing
5. Analyzing
6. Deciding

Summary

Learning Objective: Identify data management categories and utilize data management workflows and best practices to support decision-making

- ✓ What is Data Management?
- ✓ Data Management Categories
- ✓ Data Management Best Practices
- ✓ Workflow for Data Management



Final Reflection

What actions can you take now to improve your data management to support decision-making?

Key Takeaways

What are some of the key takeaways from today's course?

Course Credit

You will receive credit for participating in this course. Email the address below. Make sure to include all the following information:

Component	Include in Email
Address	W_NAVFAC_PRTN_NITC_NFI_ADMINS_US@us.navy.mil
Email Subject Line	Self-Certification – Data Management Fundamentals
Course Name	Data Management Fundamentals
Course Completion Code	'B~'NJ

Or, if you have a smart phone, you can simply scan the QR code below to generate the email with all the necessary information. If you use this method, please include your Navy email in the body of the email.



Contact Information

BD17 Contact Information: Write to us! We are always seeking to improve our learning and development products and encourage your feedback. Please email us with your suggestions and we will incorporate them into future work. Additionally, we are available to answer any questions about the content you may have and provide additional resources to support your learning endeavors.

- NAVFACHQTotalForceDevelopment@us.navy.mil

Development Resources

Career Compass Resource Center: An online source of information that provides NAVFAC civilian employees access to professional growth and development opportunities.

- <https://www.navfac.navy.mil/Careers/Career-Compass-Workforce-Development/Career-Compass-Resource-Center/>

To access more content specific to the **Technology & Data Management** competency:

- <https://www.navfac.navy.mil/Careers/Career-Compass-Workforce-Development/Career-Compass-Resource-Center/Competency-Development-Content/Technology-and-Data-Management/>

Career Compass Catalog: an online tool which provides you with information to help you take ownership of your professional development. It identifies options to assist in planning and creating a successful career path within NAVFAC.

- <https://www.navfac.navy.mil/Careers/Career-Compass-Workforce-Development/Career-Compass-Resource-Center/Career-Compass-Catalog/>