



# Change Management of Data Products

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- ◆ **What Does it Mean to Manage Change?**
  - ◆ Provides for a process whereby the development of data products controlled
  - ◆ Protects the integrity of the data products because the consequences of the change are surfaced
  - ◆ The history of the data products is preserved
  - ◆ Affords a known stepping off point for further change

- ◆ **Why Control Data?**
  - ◆ **Data is of value**
  - ◆ **Contract requirements**
  - ◆ **Organizational requirements**
  - ◆ **Common sense requirements**
  - ◆ **Approval authority**

- ◆ **What Data Needs Control?**
  - ◆ **Not everything needs to be controlled**
  - ◆ **Some data already under control by the CM process**
  - ◆ **Some data will be controlled by a DM process**

- ◆ **What Data Needs Control?**
  - ◆ **Not everything needs to be controlled**
    - ◆ Data not at a level of maturity
      - Work in progress
    - ◆ Data not yet “approved”
  - ◆ Some data already under control by the CM process
  - ◆ Some data will be controlled by a DM process

## ◆ What Data Needs Control?

- ◆ Not everything needs to be controlled
- ◆ Some data already under control by the CM process
  - ◆ CM controls a large body of existing technical data
    - Requirements
    - Specifications
    - Drawings
- ◆ Some data will be controlled by a DM process

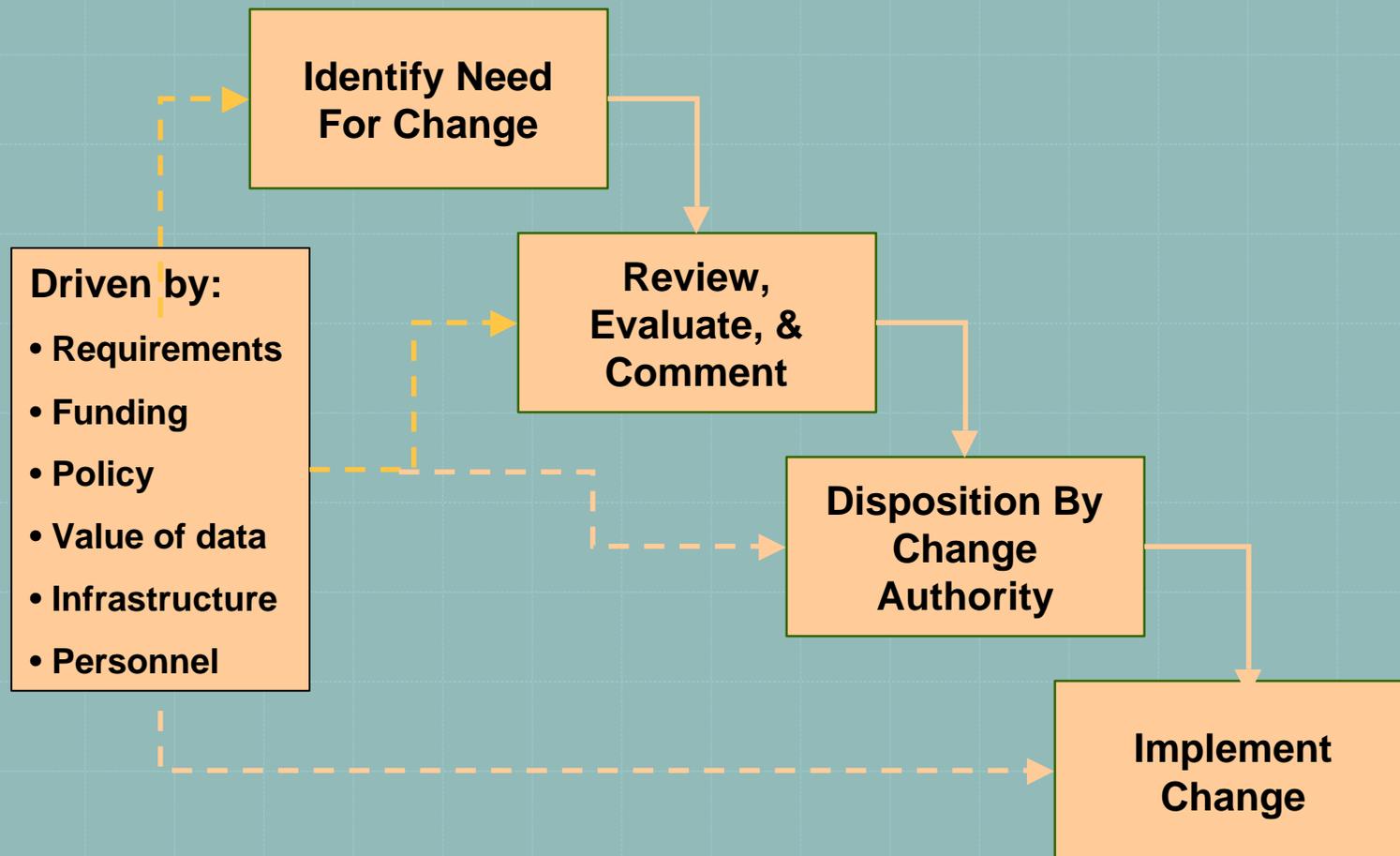
## ◆ What Data Needs Control?

- ◆ Not everything needs to be controlled
- ◆ Some data already under control by the CM process
- ◆ **Some data will be controlled by a DM process**
  - ◆ **What do we do about the rest of the data? – DM Control**
    - Program Management Data, e.g. cost, schedule, personnel records, etc.

- ◆ **Data Management Control Process**
  - ◆ **Level of control – informal ? rigorous**
    - ◆ **The project drives the process**
  - ◆ **Borrows heavily from CM**
    - ◆ **ANSI/EIA 859**



## Basic Control Process:



- ◆ **Identify Need for Change**
  - ◆ **Who, What, When, & Why**
    - ◆ **Anyone can request a change to a data product**
    - ◆ **The content of the change needs to be described**
    - ◆ **When does the change need to be implemented?**
    - ◆ **What is the rationale for making the change?**

- ◆ **Review, Evaluate, & Comment**
  - ◆ **The change “package” requires review**
    - ◆ **Subject matter expert**
    - ◆ **Project management, finance, contracts, etc.**
  - ◆ **What is the impact of the change**
    - ◆ **The result of the evaluation process**
    - ◆ **Reviewer selection determines the extent of the review**
  - ◆ **Comment ? record the results, expose the impact**

## ◆ Disposition by Change Authority

### ◆ Who is the change authority?

- ◆ Single person or board
- ◆ Competent and responsible for the decision
- ◆ Designated by the program
- ◆ Ultimate responsibility

### ◆ Actions:

- ◆ Approve
- ◆ Disapprove
- ◆ Defer



## ◆ Implement Change

### ◆ Approve

- ◆ Direct and schedule change incorporation
- ◆ Notify concerned parties

### ◆ Disapprove

- ◆ Data product remains as is
- ◆ Notify concerned parties

### ◆ Defer

- ◆ Delay incorporation for cause
- ◆ Return for resubmittal
- ◆ Notify concerned parties

- ◆ **The Need for Status Accounting**
  - ◆ Now that you've reached a decision, what do you do?
  - ◆ Borrow another trick from CM ? **Status Accounting**
    - ◆ Record what you did
  - ◆ Why?
    - ◆ Provide a history of the development of the data product
    - ◆ Record the rationale for the change

- ◆ **The How of Status Accounting**
  - ◆ **As simple as pencil and paper**
  - ◆ **As complex as a data base or commercial software**
  - ◆ **Your requirements drive the complexity**
    - ◆ **Contractual**
    - ◆ **Corporate**
    - ◆ **Local**
    - ◆ **Capability**
    - ◆ **and of course, \$\$\$**

- ◆ **Take Aways:**
  - ◆ **Why control data**
  - ◆ **What data is controlled**
  - ◆ **How data is controlled**
    - ◆ **The process**
    - ◆ **The people**
    - ◆ **The tools**