

The background of the slide features a light-colored, textured surface, possibly a piece of aged paper or parchment, with faint, brownish stains. On the left side, there is a vertical stem of a dried plant specimen, with a single, elongated, brownish leaf attached near the top. Another similar stem and leaf are visible at the bottom right of the slide.

Data Standards

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Definition

- Technical Standard (Wikipedia)
 - established norm or requirement
 - formal document that establishes uniform technical criteria, methods, processes and practices
- Data Standard (DS/TT Committee)
 - documented structure of data elements for the purpose of enhancing compatibility of data from different sources



Types

- Schemas (data structure or content standard) - specification
 - Table structure – including required elements
 - Table relationships
 - Data Exchange Standards
 - Examples:
 - NatureServe Observational Data Standard
 - FGDC Content Standard for Geospatial Metadata
 - Ecological Metadata Language
- Protocols (data collection) – test method
 - Standardized method for collecting data
 - Examples:
 - Coarse Woody Debris Data Collection
 - Tidal Marsh Benthic Community Data Collection Protocol
- Element Classification
 - Thesauri – list of accepted terms
 - Crosswalk tables (exchange between standards)
 - Examples:
 - Integrated Taxonomic Information System (ITIS)
 - NBII Biocomplexity Thesaurus



De Facto Standards

- US Standard Railroad gauge = 4 ft. 8.5 in. Why?
- The first railway lines were built by the same people who built tramways in England to that specification.
- The people who built the tramways used the same jigs and tools used to make wagons, which used the same wheel spacing.
- Old roads were rutted, and would not accommodate different wagon widths.
- First roads made by Roman war chariots, so the width was determined by the space required for two war horses.

Food for Thought...



A pressed leaf is shown on a light-colored, marbled paper background. The leaf is dark brown and has a long, thin stem. The stem is positioned vertically on the left side of the image, with the leaf at the top. The background has a subtle, wavy pattern in shades of cream and light brown. The word "Discussion!" is written in a dark red, serif font in the upper right quadrant of the image.

Discussion!



Potential Topics

- When do you use a de facto data standard and when do you use your own (or none)?
 - De facto - When your data is designed to be shared.
 - Not - When your data is only to be used internally
 - The concept of data sharing is one that all of us likely agree upon. However, how many times have you used someone else's data? When has formatting made it difficult/impossible?
 - If we placed our data in standardized formats, would this facilitate sharing?
- When to go with an outside data standard? When to develop your own? When to use no standard?
- What prevents the use of a data standard?
 - Knowledge?
 - Does not conform to needs?
- Are the only time we use standards when it is enforced, or collaboration is part of the initial design?
- What makes a standard useful?
 - Ease of use?
 - Simplicity?
 - Applicability (to the data being stored collected)?
- What categories/subjects are more suited to development of a standard?