Equipment Data and Standards

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Equipment Data and Standards

Theorem

A = B
B = C
A = C

Incompatible Standards
Design ≠ Construction
Construction ≠ Operations
Design ? Operations

$15.8$ billion annual loss
$10.4$ billion to Owners
Standard versus No Standard

Universal Industry Standards Used

- No integrators required

Facility Management
- Projects
- Portfolio
- Energy Management

Standards Formatted Database

Standard

Facility Management
- Projects
- Portfolio
- Energy Management

Facility

Integrators required between the different database formats and schema
Equipment Inventory Influence on Facility Management
Interoperability of Equipment Data
Two Main Equipment Data Points

- **Equipment Type** (Air Conditioner, Centrifugal Pump, etc...)
- **Industry Code** (related to that type)
OmniClass Table 23 Products

- Revised 2008-2010 (IFACT)
- From 3500 to over 6600
- Expanded to include (Beside AEC/FM):
  - Medical
  - Historical Preservation
  - Custodial
  - Food Services
  - Physical Security
  - Horticulture
  - Child Care,
  - etc...
- Current Revision Cycle
  - (2012-2014)
  - Vehicles
  - Airport Equipment
Reference for Objects Based Codes to Assets Database (ROBCAD)

- CSI/CSC
- Revised 2008-2010 (IFACT)
- Cross Referenced NCS/ASME Abbreviations to OmniClass Table 23.
- Provided a means to cross reference other codes to OmniClass Table 23.
OmniClass

Multifaceted Object Oriented Standard
Facility Management and OmniClass Tables

- Table-11: Construction Entities by Function
- Table-13: Space by Function
- Table-21: Elements
- Table-23: Products
- Table-49: Properties
- Equipment Database
  - Facility Data Tables
  - Space Data Tables
  - Commissioning Data Tables
  - Job Plan and Task Data Tables
- Table-35: Tools
OmniClass: Equipment and Systems

Uniformat for Systems

Products = Equipment

Domestic Water + Centrifugal Pump
Fire Suppression + Sprinkler Head
Fuel Oil Distribution + Gate Valve
OmniClass in Equipment Standards
## Future Needs Requirements

**FM Reference Data Tables (No Standards):**
- Equipment Priority
- Curtailment Level
- Equipment Status
- Equipment Failure Status
- Equipment Tag Condition Reference Table
- Equipment Security Level Reference Table
- Equipment Purchase Condition
- Specification Purpose Type
- Facility Priorities
- Space Priority
- Job Plan Type
- Job Task Status
- Seasons
- Equipment Condition
- Equipment Condition Cause
- Condition Recommendation Type
- Audits and Inspection Type
- Code and Regulation Type
- Operation Document Type

**OmniClass**
- Table 32 Services: FM document and task types addition.
Summation

Products

- LEED Products
- Green Products
- Codes
- Specifying
- Regulations
- Cost Estimating
- Energy Star
- Energy Analysis
- Warranty
- Taxes
- Projects
- Building Supplies/Parts
- Commissioning
- Smart Buildings
Questions and Comments

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