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Agenda

- Background
- Components of Data Quality
- Completeness
- Timeliness
- Consistency
- Relevance
- Accuracy
- Data Quality and ITAM Maturity

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Background

Value of the CMDB

An accurate CMDB enables IT service desk operations, engineering, program planning, and cybersecurity to make informed decisions with clean data.

High quality CMDB data quality increases operational efficiencies, reduces risk, and reduces spend.

- Drives the need to define and measure "Quality"

Data Quality is not a single value or measurement

Data Quality definition is dependent on the use of the Data

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Components of Data Quality

- Completeness
  - Do you have inventory coverage over all of your IT assets?
  - Are you getting all of the data elements that you need from your IT assets?
- Timeliness
  - Is the IT asset data you are getting fresh?
- Consistency
  - Is the IT asset data you are getting normalized?
  - Are there duplicate records?
- Relevance
  - Is the IT asset data related to my system boundaries, locations, or programs?
  - Is the IT asset data enriched with vulnerability, lifecycle (EoL, EoS, GA), and related to product catalogs?
- Accuracy
  - Are there errors in the IT asset data?

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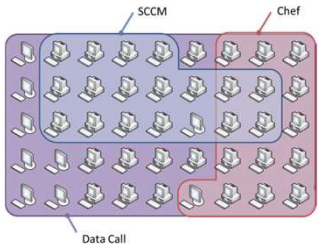
Completeness

- **Evaluate how much of the expected data is present.**
  - Understand the components of inventory data
  - Understand the Fidelity of the data source
  - The Unknown Unknown – Security is your partner
    - Gaps identified through Analysis
  - Investigate ways to move to High Fidelity views of inventory
  - Do the underlying Data Elements collected support the License types used?



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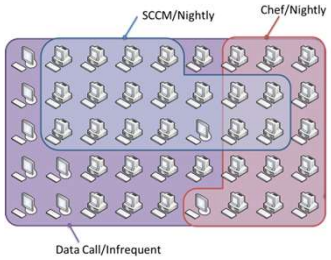
Timeliness

- **Consider the recency of the data. Depending on the context, outdated information might be less valuable. Timeliness is crucial in fields where data changes rapidly.**
  - Understand the collection timeline for each inventory data
  - Recommend categorizing:
    - Device less than 7 days
    - Device between 7 and 30 days
    - Device age greater than 30 days



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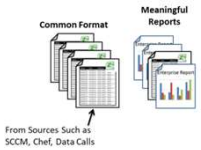
Consistency

- **Ensure uniformity in the format and structure of the data. Inconsistent data formats or units can lead to confusion and errors in analysis.**
  - Consistency in data format enables:
    - Normalized Inventory
    - De-duplicated Inventory
  - Data Scripts to understand Assets



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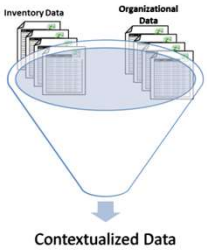
Relevance

- **Is the data contextualized to support the organization critical functions.**
  - Common meta data elements are EoL, EoS, GA
  - Categories/sub-categories
  - Common System Name e.g. ERP, CRM
  - Location
  - Organization supported



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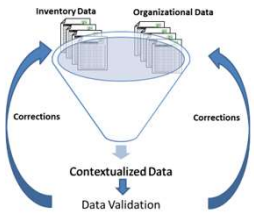
Accuracy:

- **Check for errors, inconsistencies, and inaccuracies within the data. Incorrect or outdated information can significantly impact the quality of the dataset.**
  - Establish a validation program to test the data
  - Build validation into use
  - Track Data to understand how extensively it is used
    - %SW Spend – License compliance and validation
    - %COTS SW – License Compliance and validation



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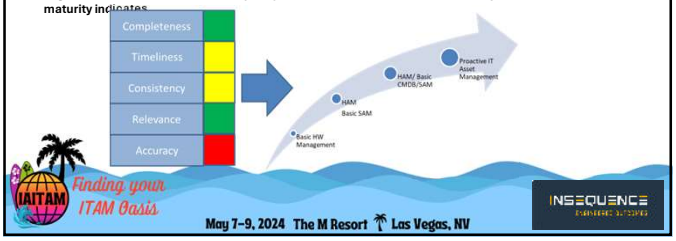
Data Quality and ITAM Maturity:

- Automation alone does not guarantee quality
- Organizations need to establish a basis of understanding for their data
  - This allows an informed evaluation of the SAM Tool, Service and or the data
- Organizations should evaluate the quality of their data and understand the risk profile that maturity indicates



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