



Cataloging Your Test Equipment Saves Time and Money

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Structured Cataloging



Introducing Structured Cataloging

What is Structured Cataloging?



- Structured cataloging turns unstructured or free-form text data into information building blocks,
- assembles these building blocks into a human-friendly user interface, and
- ties-together like kinds of equipment for ease of search and substitutability
 - Manufacturer
 - Model
 - Standard Nomenclature (Noun Description)
 - Performance Specifications

What's the Problem!



- GIGO lives! (Garbage In – Garbage Out)
- Manufacturers/Vendors change names or locations
- Model numbers are entered inconsistently or incompletely
- Equipment descriptions vary widely
- There is no standard for specifications search/comparison
- Brute-force searches are frustrating and unreliable

Result:

- **20% of asset investment “hidden” in poor records**



Manufacturers

Up to 50% of your manufacturers have:

- Changed Names
- Changed Address
- Gone Out of Business
- Merged Into Another Company and Assumed its Name
- Become Part of Another Company but Retained Old Brand Name

Typical Manufacturer Problems



Garbage-In, Garbage-Out (Case Study)

- 1) HP
- 2) H P
- 3) H.P
- 4) H.P.
- 5) H-P
- 6) H/P
- 7) HEW
- 8) HWP
- 9) HEW PACK
- 10) HEWLETT-PACKARD
- 11) H. PACKERS
- 12) HEW-PACK.....

Manufacturer Problems (cont'd)



- ROHDE & SCHWARZ vs. RHODE & SCHWARZ

- GENERAL RADIO
 - QUADTECH (QUADTECH GENRAD)
 - IET (IET GENRAD)

- Mis-spellings, Acronyms, Name Changes, Mergers/Buyouts

Manufacturer Data Solution



Manufacturer Index

- Manufacturer Index
- Current Name, Address, Phone, Web Site
- Name Change Cross-References
- CAGE Code Cross-Reference
- Sales or Service Locations under Parent

Noun Description/Nomenclature Probs



Descriptions are not Consistent across Asset Records

- “Plotter Graphics”
- “Graphics Plotter”
- “Color Printer”
- “Plotter HP”
- “HP Colorpro Plotter”
- “Plotter Pen”
- “Plotter 6-Pin”

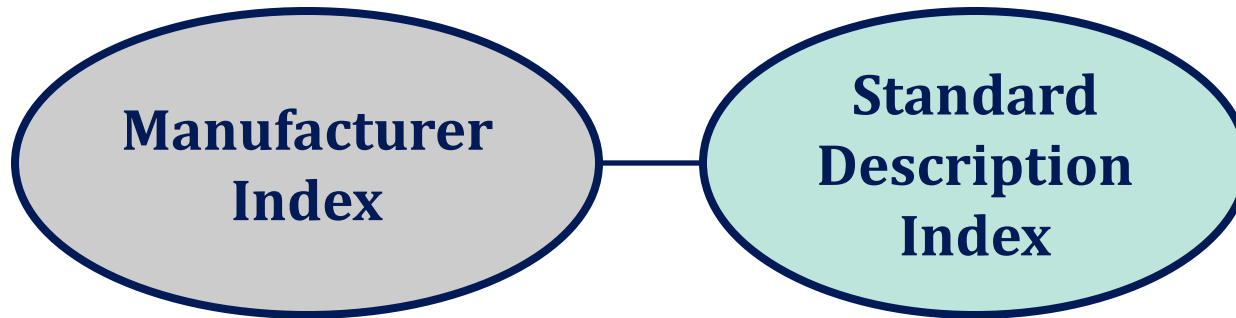
Noun Description Problems (cont'd)



Descriptions are not Consistent across Manufacturers

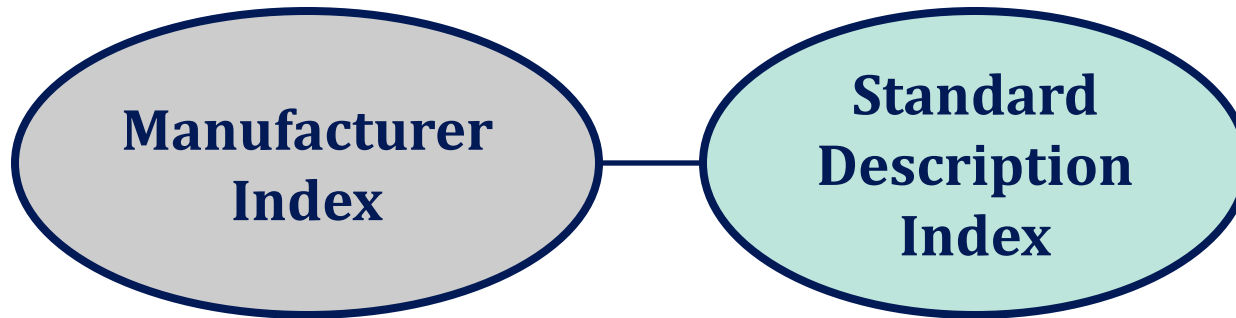
- “Magic Tee”
- “Signature Analyzer”
- “Personality Module”
- “Bug Hound Fault Tracer”

Noun Solution



- Use Generic Standard Description Index
 - Major noun – minor (two level)
 - Generator.....Function
 - Generator.....Noise
 - Generator.....Pattern
 - Generator.....Pulse
 - Generator.....Signal

Noun Solution (cont'd)



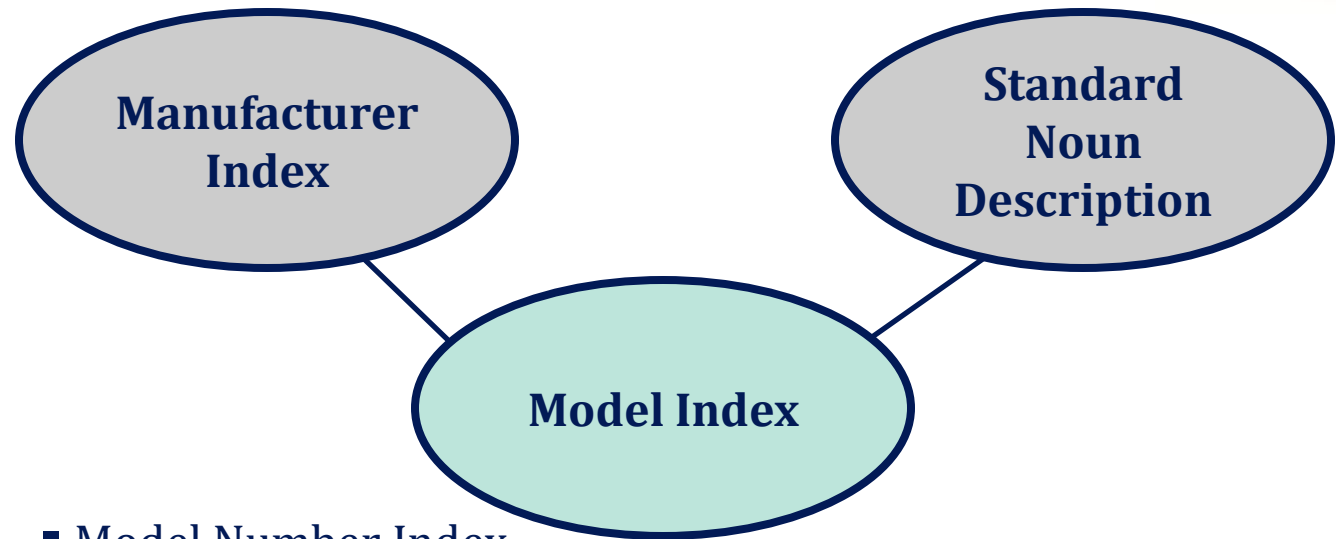
- Cross-Reference Alternate to Standard Names
 - Hypot = Tester, Insulation
 - Hipot = Tester, Insulation

Model Problems (Case Study)



1. HP 7475A
2. H-P 7475
3. Graphics Plotter
4. HP-7475A
5. HP-7475
6. HP7475A
7. HP7475A1
8. HP Plotter
9. HP 7475 6 Pen
10. Mod. 7475A
11. 7475A HP
12. 7475A RS233C
13. 7475A RSL32Interface
14. 7475A-001

Model Number Solution



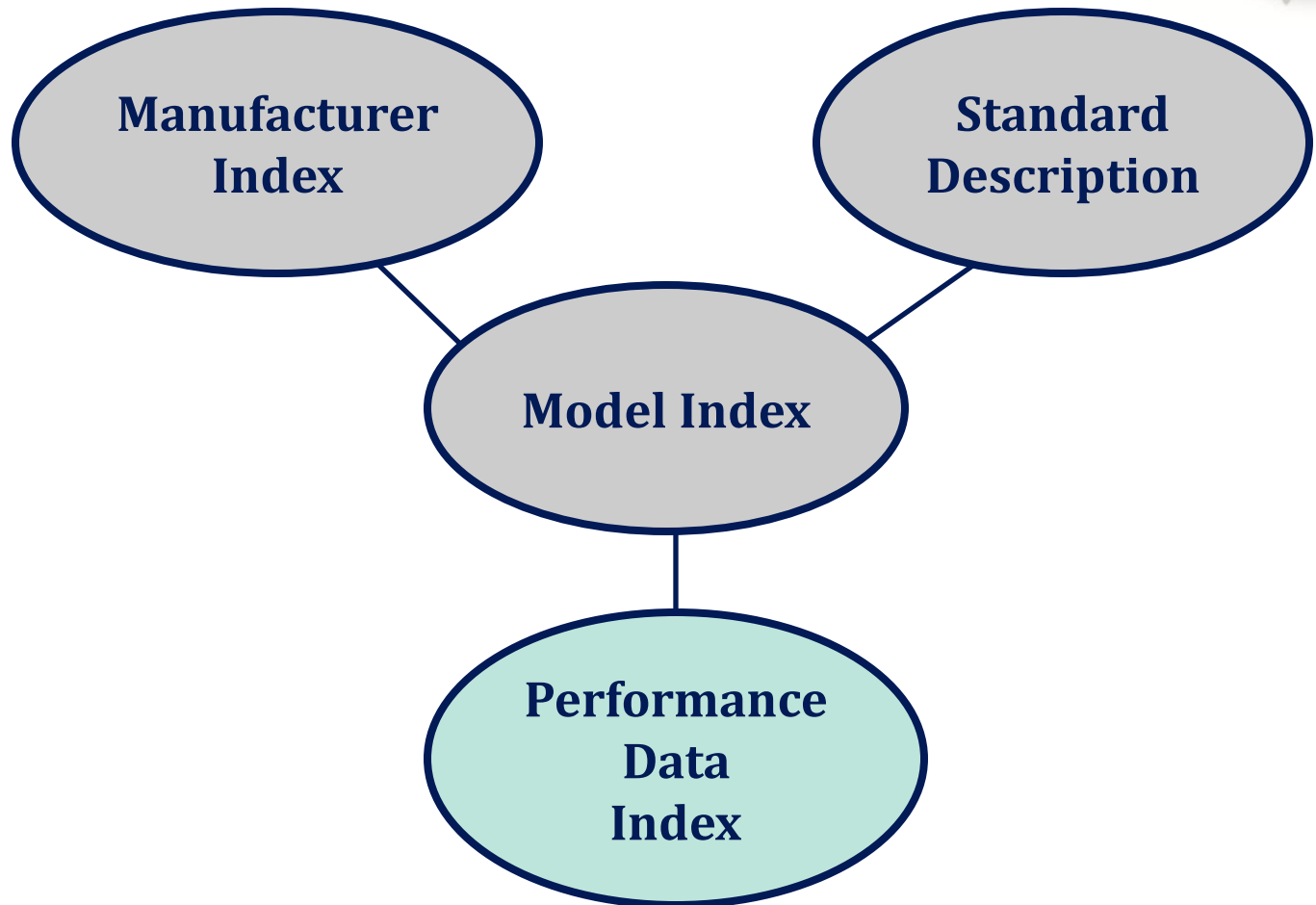
- Model Number Index
 - Structured Format
 - Series |Prefix | Basic (family) Number | Suffix
 - Rackmount/Form-Factor Code
 - Options and Accessories
 - Life-Cycle Data
 - Date Introduced, Discontinued, Unsupported
 - Catalog List Price, Est. Current Market Value

Specification Problems



- Model Number or Description alone do not fully describe product capabilities and options
- “Walking Database” Syndrome
 - Considerable human research required to evaluate or substitute equipment
- Manufacturer catalogs and data sheets are difficult to search or use for side-by-side comparisons
- Manufacturer web sites are not standardized and are frequently re-organized without advance notice

Performance Data Solution



Model Specification (EM58)



Display Model Performance

Catalog Reference:

Retrieve

Clear Form

Direct Navigation

PREV ◀ ▶ NEXT

Command

Single-Cycle Key(s) ▶

Manufacturer AGILENT TECHNOLOGIES INC **Mfr Code** 028482
Model Number E 3643 A-0E3 **Catalog Ref** 00163051
Description POWER SUPPLY, DC GENERAL PURPOSE **Noun Code** 06371 P

OUTPUT MAX VOLTS	OUTPUT MAX AMPS	V-REG LOAD % (LINE %)	RIPPLE % OR MV RMS	TRANSIENT RECOVERY TIME MS	I-REG LOAD % (LINE %)	RIPPLE % OR MA RMS	ADDITIONAL NOTES/DATA
35	1.4	.01% +	1 MV	.05	.01% +	4 MA	SINGLE-OUTPUT DUAL RANGE
60	.8	3 MV	8 PP		.25 MV		OTHER: 60V @ .8A
		(SAME)			(SAME)		GPIB/RS-232 STD
							PROGRAMMABLE SCPI
							OVERVOLTAGE PROTECTION
							OPT. -0E3 230 VAC +/-10%
							OPT. -0E9 100 VAC +/-10%
							OPT. -0EM 115 VAC +/-10%
							OPT. -0L2 EXTRA MANUALS
							OPT. -1CM RACK-MOUNT KIT
							OPT. -UK6 COMMICAL
							E3600A-100 TEST LEAD KIT



Performance Data by Noun

Search Models By Performance

Noun Code:
 Noun Major: METER (VOA)
 Noun Minor: MULTIMETER,DIGITAL

Direct Navigation

PREV



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	DC VOLT RANGE MAX VOLTS	DC VOLT RANGE MIN VOLTS	AC VOLT RANGE MAX VOLTS	AC VOLT RANGE MIN VOLTS	OHMS MAX MGOHM MIN KOHM	AMMETER MAX AMPS	NUMBER OF DIGITS	Manufacturer	Model Number	Catalog Reference
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A	00161066
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	AGILENT	3458A-001-0	00400731
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-002	00161068
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-001	00161069
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-700	00161070
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-W30	00161071
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-001-W30	00161072
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-907	00161073
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-908	00161074
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-909	00161075
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-005	00161076
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-1BP	00161077
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-002-W30	00161078
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	HP	3458A-002-1BP	00161079
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	AGILENT	3458AB	00162010
	1000	.1	1000	.01	1000	1 AC/DC	4.5 TO	AGILENT	3458A-001	00162011

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How Do We Get There?



- Install Catalog Software
- Interface Test Equipment Records
- Content Driven Application
 - Initial Data Population - Major Investment
 - Look for Pre-Populated Master Catalog

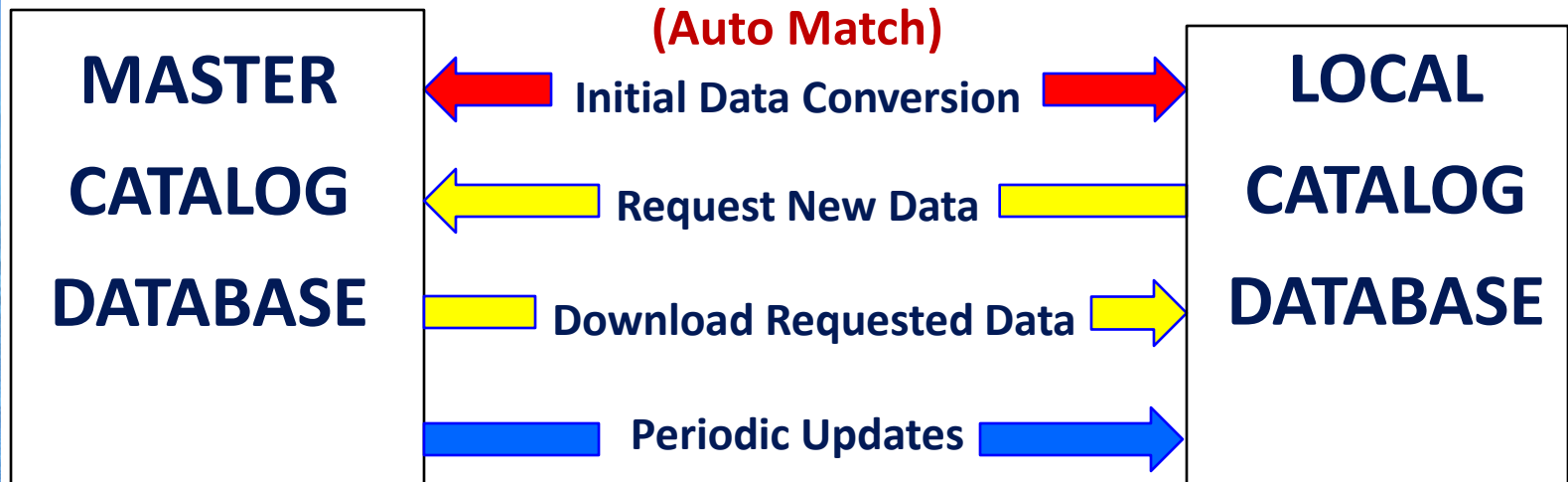
Typical Subscription Model



← INTERNET →

Vendor

Customer



Typical Content Subscription Service



1. Initial Data Conversion
2. Web-Based New Item Request Form
3. Automated Data Updates Pushed to Your System:
 - Updated Manufacturer Data
 - New Noun Descriptions
 - New Models
 - Performance Data
 - Header Definitions/Templates
 - Model Performance
 - Manufacturer Data Sheet/Photo Links

Advantages of Structured Cataloging



1. Institutes nomenclature standardization – common language across all asset systems/records
2. Eliminates “GIGO” syndrome (Garbage In – Garbage Out)
3. Identifies technical capabilities and substitutes
4. Enables responsive Customer Support – simple, powerful search capabilities; self-service
5. Facilitates management and analysis reporting by equipment model or type groupings
 - Reliability and obsolescence
 - Optimal calibration/PM intervals
 - Rental chargeback rates
 - Requirements vs. availability
 - Total cost of ownership (TCO)



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