

Intelligent or Not?

Designing an Item Numbering Scheme for ERP Systems

Mani Kumar Manda
Rhapsody Technologies, Inc.

17th August, 2012

NCOAUG Summer Training Day

Drury Lane Conference Center
Oakbrook, IL

Item (or Part) Numbering – Multiple Numbers

1. Use of single Item Master or MDM solution
2. Smaller Item Numbers
 - Preferably less than 7 characters
3. Can be Numeric or Alpha-Numeric
 - Numeric is easier for data entry
4. Build more robust Search capabilities
5. Use of Cross-references



Agenda

1. About Presenter
2. About Rhapsody
3. Item Numbering – What is it?
4. Item Numbering Intelligence – Background



About My Self



Mani Kumar Manda
Rhapsody Technologies, Inc.
Naperville, IL, USA



- ❑ Founder and Chair for OAUG CDM SIG
 - <http://cdmsig.oaug.org>
 - <http://groups.yahoo.com/group/cdmsig>
- ❑ President of Rhapsody Technologies, an Oracle partner with specialization in implementing Oracle's MDM applications
- ❑ Frequent speaker of topics associated with Oracle's MDM products – Customer Data Hub, Product Hub, Site Hub and Supplier Hub
- ❑ Working with Oracle Applications for over 18 years and has implemented Technology Solutions for clients in many industries.



About Rhapsody

Founded in 1998

Managed by a team of veterans with over a century of collective experience

A player in MDM space even before the term “MDM” was coined

Preferred MDM Partner of Oracle

Services

- Assessments / Audits
- Business Case Development
- Strategy and Architecture
- Implementation Roadmaps
- Implementations / Upgrades
- Data Governance Initiatives
- Data Quality Initiatives
- Enterprise Information Management (EIM)
- Training and Workshops
- Turn-Key Service Offerings

Products

ERP / CRM / SCM / HCM

E-Business Suite (R12)

Fusion Applications

Oracle MDM Hubs & related Products

Customer Hub (CDH & UCM)
Fusion Customer Hub

Product Hub (PIM / PDH)
Fusion Product Hub

Supplier Data Hub
Supplier Life Cycle Mgmt.

Site Hub

Hyperion DRM

Enterprise Data Quality
– Party (EDQ)

Enterprise Data Quality
– Product (EDQP)



About Rhapsody – Other Offerings

Turn-Key Solutions

Oracle DQ Discovery

Oracle Data Quality Search Optimization

Oracle TCA Functional Support

Semantic Business Models

Modeling Workshops

Implementation Health Checks

Training Offerings

Executive MDM Seminars

MDM Overview Boot Camps

Oracle Customer Data Management Functional Fundamentals

Oracle Supplier Data Management Functional Fundamentals

Oracle Product Information Management Functional Fundamentals

Data Steward Training

Representative List of Customers



FORSYTHE



HAWORTH®
change by design



Item (or Part) Numbering – What is it?

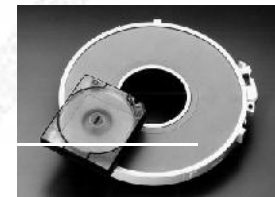
Item or Part numbering is a differentiator

- ❑ It allows to identify one item as different from all other Items (or Parts) in IT applications
- ❑ It facilitates to differentiate
 - Raw Material vs. Finished Goods
 - Plated vs Unplated Part
 - Branded vs. Private Label
 - Etc.



Item (or Part) Numbering – Background

- Punched Card (78 columns)
- Unique Identifier
- Limited Data Storage
- Need to group Items for ease of operational use
 - Grouping by families based on similar characteristics



Lead to

The idea of putting intelligence into Item numbers



But Why?



Item (or Part) Numbering – Background

So that users can easily identify an Item (Part) easily based on its number.



Is this practice still Good?



Screaming NO!!!

Why?

Because this practice is
obsolete.



Item (or Part) Numbering – Rationale

This practice is obsolete because

- No longer using Punch Cards
- Data Storage is Cheap (virtually unlimited)
- Can have huge number (unlimited) of attributes
- Advances in Business Applications
- Advent of Data Management Hubs
- Find an Item easily per its characteristics



An Example from Textile Industry

1. Historically Cotton is one of the key raw material
2. Cotton is made into Thread
3. Thread is woven into Cloth
4. Patterns/Colors are applied to Cloth
5. Cloth is cut into Specific Shapes
6. Different Shapes are sewn into Garments
7. Garments are packaged into Singles or Multiples
8. Packages are bundled with other Apparel Items

Cotton type, Crop, ...

Thread fineness, Strength

Number of Threads per Inch

Color, Pattern

Shape

Garment Type, Design, Size

Garment Type, Design, Size, Number

Garment Type, Design, Size (?)



An Example from Textile Industry

1. Historically Cotton is one of the key raw material

Cotton type, Crop, ...

2. Cotton is made into Thread

Thread fineness, Strength

3. **What happens when this**
4. **company acquires another firm?**

5.

6.

Say a Sportswear Company

7.

Multiples

Number

8. Packages are bundled with other Apparel Items

Garment Type, Design, Size (?)



Item Numbering – Other Challenges



Item (or Part) Numbering – Changing a Number

What happens when an Item Number is changed?

- ❑ This is the Age of Global Supply Chain
- ❑ Inform Customers and Suppliers about the change
 - Is it easy to Inform?
- ❑ Customers and Suppliers need to make a change in their IT systems
 - Is it easy for them?



Item (or Part) Numbering – Changing a Number

Should Item number change when any of Form, Function, Fit changes?

- Probably not
- Many situations can be accommodated with the same Item Number using
 - Revision Management
 - Lot Numbers
 - Serialization
 - Effective Dates



Item (or Part) Numbering – Multiple Numbers

What about use of multiple Item numbers for different Customers? Is it advisable

- Definitely not
- Today's IT applications such as ERP, PLM are far more capable
- Many answers can be obtained by looking at the Customer Orders, BOMs, Work Orders, etc.
- There is really no need to create multiple Item Numbers for the same item



Item Numbering – Ramifications of putting an Intelligence?



Item (or Part) Numbering – Challenges with Intelligence

1. Rate of change of Technology
 - Obsolescence – Doomed for it from get-go
2. Increase in Error Rate
3. Made sense when Search capabilities were primitive, but no longer
4. Appear to make the operational use as easy, but more time consuming, error prone and hard to maintain and of course very expensive to sustain with this approach



Item Numbering – What are the current best practices?



Item (or Part) Numbering – Multiple Numbers

1. Use of single Item Master or MDM solution
2. Smaller Item Numbers
 - Preferably less than 7 characters
3. Can be Numeric or Alpha-Numeric
 - Numeric is easier for data entry
4. Build more robust Search capabilities
5. Use of Cross-references



Conclusion



Item (or Part) Numbering – Conclusion

1. Sooner this practice is taken out from operations, the better and easier the day to day operational processes become
2. But these operational processes need to be supported with robust capabilities such as MDM applications, Product Data centric Data Quality tools
3. Intelligence won't completely go away due to Global Syndication
 - ISBN Numbers for example



A large, stylized graphic featuring the letters 'Q' and 'A' in a black, serif font. An orange ampersand (&) is positioned between them. The text 'QUESTIONS' is written in a light gray, sans-serif font across the top of the 'Q' and ampersand, and 'ANSWERS' is written across the bottom of the ampersand and 'A'. The entire graphic is set against a background of a light gray, curved brushstroke and a faint grid pattern.

QUESTIONS
&
ANSWERS





Mani Kumar Manda
Founder & President
Email: Mmanda AT @RhapTech DOT com
Phone: 630-487-5801 x101
Direct: 630-717-1809

MDM Resources:

- ⦿ <http://www.rhaptech.com/resources.html>

Special Interest Groups:

Customer Data Management SIG

- ⦿ <http://cdmsig.oaug.org>
- ⦿ <http://groups.yahoo.com/group/cdmsig>
- ⦿ <http://groups.yahoo.com/group/ucmsig>

Product Data Quality SIG

- ⦿ <http://tinyurl.com/29xocwv>

Supplier Life Cycle Management (SLM) & Supplier Data Hub (SDH) SIG

- ⦿ <http://tinyurl.com/2v2yyct>

Oracle Fusion Applications

- ⦿ <http://tinyurl.com/3232emw>