

# Role of Ontologies in Master Data Management

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# Business Drivers and Business Challenges

- Most of the people listening to this presentation are engaged in developing ontologies
- Most of us have a role in what I would call the business infrastructure – developing a solution that helps to solve a business problem
- Most of our expertise is in designing and building the solution, which in many cases may be a well-formed ontology
- In the end, though, the ontology is not a project standing alone but is a solution which is used to solve a business problem

# Talking to the Business

- To effectively make the case for constructing and using an ontology, it is important to focus on the role that the ontology is playing in the business context
- Administrators only care about whether your proposed approach is going to solve their business problem - if you want to win the argument, your solution will not be a generic, rather a business specific
- Always focus on the “end game” – how does the ontology fit into the larger business solution
- We need to have multiple stories ready for different players
- There are multiple levels of conversations you need to have within the organization – the IT folks, the EA folks and the user experience design folks are not yet convinced that an ontology is the best solution to their problems

# Case in Point - MDM

- Master Data Management is an area where ontologies can play a key role
- By master data management (MDM) we mean those methods and tools that help us to manage both structured and unstructured data, specifically the authoritative control values the organization defines
- The purpose of MDM is to provide authoritative control over the collection and management of data to facilitate access, quality-assurance, traceability, maintenance and reliability across the organization, and in particular across all of its many applications
- Master Data Management generally focuses on the core entities of an organization and defines a standard set of attributes and values for those entities
  - Examples: country, regions, employee ID, organizational unit, business process, strategic initiatives, products and product lines

# Value of Ontologies to MDM

- Two simple truths
  - While every organization may need MDM, not every organization can afford MDM because it cannot afford a large technical team
  - While we'd like every ontology to be universally applicable, a well developed ontology can be business specific
- An easy win for moving ontologies into the mainstream function in organizations is to use them to manage the organization's master data
- Ontology tools and methods very closely mirror MDM tools and methods but at a substantially reduced level of investment
- MDM is a way of enticing an organization to consider ontologies

# Example

- Country Ontology
  - Build and maintain it in Oracle data sets and classes where access (use) is highly restricted, where the user interface is not terribly easy to work with, where there are a very limited dimensions for building out the ontology, and where rules must be built in another application and linked
  - Build and maintain it as an Ontology where classes and rules can be developed by non-programmers, where access may be permissioned for different types of users, where there is a visual interface and generally a more user-suitable working environment, and where rules can be integrated into the structure and exposed for others to see

# Example

- In the last year I've worked with two organizations developing ontologies intended to provide a bridge between internal documents management systems, intranet and external web
- Making the case to the technology team hinged upon the technology team's seeing a broader use for – and a more cost effective solution in – the ontologies
- Making the case was easy once they saw the relevance – without the business relevance, though, there was no way the case would be made and the struggle for funding and support would have been very significant

# End Game Strategy

- Always speak to the advantages of using an ontology to accomplish the goals – the end game for business
- Be ready to translate what an ontology does and how it does it to the way the business sponsor thinks – what they're familiar with – understand the business context and find the ontology role
- If you never say the word ontology or if you only say it once in your spiel, that's okay
- Make the case in comparison to what they are using today – make the case that this approach will be more cost effective, and carries a lower risk to the organization because it is accessible to (and sustainable by) a larger community of people
- Stress the role of ontologies in achieving interoperability

Thank you!

Questions and Comments:  
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