Ontology and Business Value

Track 3: Value Metrics, Value Models & the Value Proposition

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Feb 17, 2011
Context and Presentation Goal

- **Context**: Examples, not a comprehensive treatment of all business areas impacted by development and application of ontologies
- **Goal**: Identify elements of a value model comprised of exemplary business areas impact of use of ontologies
Business Areas Affected by Enterprise Ontology

1. Common Understanding of Enterprise Shared Information
2. Extensible Business Model Representing Knowledge of Operations
3. Enables Actionable Business Intelligence Knowledge
4. Detection, Representation and Reasoning of Complex Business Events
5. Collaborative Operations & Processes enabled by Interoperable Exchange of Consistent Ontology Information
6. Extensible Ecology of New Interoperable Services Utilizing Subsets of Enterprise Ontology
# Value Model - Ontology and Business Area Relationships

<table>
<thead>
<tr>
<th>1. Common Understanding &amp; Interoperability (Ontologies)</th>
<th>Metric: % Consistent % Interoperable</th>
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<tbody>
<tr>
<td>2. Business Model (Customer Satisfaction)</td>
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<td>3. Actionable Business Intelligence (Accuracy, Comprehensiveness, Relevant)</td>
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<td>4. Complex Business Events (Accuracy, Composability)</td>
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<td>5. Collaborative Operations (Errors, Resource utilization, Supply Chain)</td>
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<td>6. Interoperable Business Services (Value to enterprise, Reuse in Workflows)</td>
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1. Common Understanding of Enterprise Shared Information

• Enterprise level ontologies enable interoperability and consistent understanding of shared information across enterprise model consisting of workflows, actionable intelligence, complex events, operations, and services.

• Metrics of success include:
  – % of organization business elements such as workflows and collaborative processes and services compliant with enterprise ontologies.
2. Business Model

• Better understanding of business model entities and external dependency relationships, i.e., customers, market conditions, products and services offered, internal operations, etc.

• Customer Impacts
  – Increased customer satisfaction due to improved customer knowledge (CRM)
3. Actionable Business Intelligence

• Enterprise Ontology enables improved knowledge and reasoning of relevant extraction and analysis of external market events

• Mapping and merging of information into a common ontology from all supporting organizations across the enterprise enable more comprehensive and accurate knowledge of business performance
4. Complex Business Events

- Ability to evolve knowledge of complex business events enables the enterprise to adapt to changing conditions by combining and leveraging expertise of individual organizations

- Individual organization events can be combined to create new complex enterprise level business events that inform business level intelligence
5. Collaborative Business Operations

• Common ontology elements and models reduce errors of interpretation for workflows and processes

• Improved understanding of workflow information exchanges, events, and dependencies between different enterprise organization processes

• Supply Chain Information improvements resulting in lower inventory, increased resource utilization, faster and more accurate order fulfillment
6. Interoperable Business Services

• Improved knowledge and understanding of value added services offered by each organization sales, marketing, manufacturing, engineering to the enterprise

• Improved service interoperability due to common enterprise vocabulary, data element definitions, and interpretation from each enterprise organization’s perspective