Using Ontologies for More than Information Categorization

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Ahren E. Lehnert, Senior Manager, Text Analytics Solutions
Synaptica, LLC
Ahren E. Lehnert
Senior Manager, Text Analytics Solutions

Synaptica, LLC, producing enterprise software solutions since 1995 that build and manage taxonomies, ontologies, and crosswalks; design and deploy knowledge organization systems; annotate, index and enrich content; and optimize search, navigation and discovery.

@ahrenlehner
ahren.lehnert@synaptica.com
www.synaptica.com
Project Management  Product Management

At the intersection of Project Management and Product Management, there is calm, order, predictability, and…

Requirements
Planning
Time-Based
Roadmaps & Milestones
At the intersection of Project Management and Product Management, there is calm, order, predictability, and…

kicking a football (Association) into your own face
Ontologies for Product and Project Management

The Needs

• Product and project management to
  - Manage our internal requirements and product development
  - Integrate Agile Software Development into daily work
  - Respond to rapid change in requirements, resources, budgets, schedules, expectations, and priorities

The Solution

• Use our own Graphite ontology management software
  - For project and product management
  - To map the Agile Software Development Lifecycle to project management activities using ontology structures
  - To test our work through ongoing product use
  - To try to avoid embarrassing fails
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#failing
Ontologies

• Interconnected
  - Ontologies include individuals (concepts) connected and defined by relationships
  - Any given model defines a domain but can connect to other models where domains overlap

• Complex
  - Models can manage huge numbers of individuals with more than one relationship between any two points

• Flexible
  - In our environment, even complex, interconnected ontologies are flexible enough to handle change

• Foundational
  - Taxonomy and ontologies are foundational within an organization, so using them for project and product management sets a precedent for other areas
Product Management Ontology

Ontology

Class

Scheme

Individuals (Concepts)

Relationships

Audit Trail
Mapping Methodologies

Ontologies
- Ontology
  - Class
  - Scheme
  - Individuals (Concepts)
  - Attributes (Properties)
  - Relationships

Agile
- Epics
- Stories
- Sprints
- Requirements (Tasks)
- Product Backlog
Properties

Ontologies

- Ontology
- Class
- Scheme
- Individuals (Concepts)
- Attributes (Properties)
- Relationships

Agile

- Epics
- Stories
- Sprints
- Requirements (Tasks)
- Product Backlog
Glossary

• Part of the product management structure is a glossary of terms
  - Used for reference between business and developers
  - Easier than going through product documentation
Scrum Sprint Planning

Agile

Process Workflows
Process Workflows

Agile

Scrum Sprint Planning

Daily Stand-Ups
Process Workflows

Agile
- Scrum Sprint Planning
- Daily Stand-Ups
- Development
Process Workflows

Agile

Scrum Sprint Planning
Daily Stand-Ups
Development

Testing

- <Module X-Text Analytics>
  - <Sprint Module #> Sprint #: YYYYM
    - <Completed: YYYYMMDD>
    - <In Development: YYYYMMDD>
  - <Testing: YYYYMMDD>
    - Name of the sprint task

- <EPICS & USER STORIES>
  - Epic Module
    - Epic 1: Module Functionality Epic
      - User Story 01-01: Epic User Story

- <GLOSSARY>
- <OPEN QUESTIONS>
- <PRODUCT BACKLOG>
- <RESOURCES>
- <TAP VERSIONS>
Process Workflows

Agile

- Scrum Sprint Planning
- Daily Stand-Ups
- Development
- Testing
- Complete

#winning
In Summary

• Project and Product Management are separate but overlapping disciplines which are supported through the use of software tracking systems

• It is possible to use ontologies and ontology management software to manage the various aspects of project management and product development

• Advantages
  - The flexibility of ontologies allows for linking project and product activities to other schemes, such as documentation and customers
  - Managing activities alongside content descriptions provides a centralized view
  - Tracked tasks and concepts allow for better product roll outs
Questions?

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