Questions for the Community

Ontology Summit 2012
Cross-Track A1 Sesson 2012.02.23
"Implementing Ontology Quality Measures in Big Systems Engineering"

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Instructions

- Each question will be up for 1-2 minutes.
- During that time, please type your answers into the chat.
- It's fine that many people will be typing simultaneously. Probably everyone won't have time to read everyone else's answers during the session, but all will be preserved in the chat transcript for later review.
- Presenters: If you have presented on a particular application example or use case, please answer with respect to that case.
- Non-presenters: Think of an application or use case on which you are currently working, have worked recently, or for which you are in the preparatory, thinking stages. Please answer with respect to that case.
- If you are thinking of a current or pending case, please interpret past tense questions to refer to the project currently, or as it is currently being considered or planned.

Question #1

Which of the following describes the case you have in mind? If more than one option fits that case, it is fine to respond with multiple answers.

- A) One or more ontology artifacts are integrated into a large system as components
- B) Ontological analysis is integrated into the systems engineering process
- C) An ontology is being used directly by machine to provide some system-internal functionality
- D) An ontology is being used to process human-generated input so that it can be machine-interpreted
- E) An ontology is being used to output that can be human-interpreted
- F) An ontology is being used to enable interoperation across data from different sources
- G) An ontology is being used to enable reasoning about some data.
- H) Other?

Question #2

a) In the case you have in mind, was ontology built in to the system design (or systems engineering process) from the beginning?

b) If not, at what point of system (or systems engineering process) maturity was the incorporation of ontology introduced?

Question #3

a) Was the incorporation of ontology designed and specified with the same level of rigor and precision as other system components?
b) If not, why not (in your best estimation)?

Question #4

a) After any decision to incorporate ontology artifacts or ontological analysis into the system or systems engineering process, were ontology requirements identified and documented?
b) If so, please list what aspects of the ontology those requirements specified, as best you can remember.
c) If not, why not (in your best estimate)?

Question #5

a) Was ontology development performed in-house, specifically for this effort?
b) If so, what ontology evaluation tools and methods, if any, were available to ontology developers to use during development time?
c) Was this work done by ontology specialists, or were other staff tasked to learn and perform ontology development?

Question #6

a) Was existing ontology found and reused?
b) If so, what ontology evaluation tools and methods, if any, were available to those finding and selecting from existing ontologies?
c) Was this work done by ontology specialists, or were other staff tasked to learn and perform ontology evaluation and selection?

Question #7

What evaluations, formal or informal, were performed on the ontology, and when (development time, delivery completion, ...?)

Question #8

a) In your opinion, did the ontology evaluations or assessments adequately measure whether the ontology was fit for the intended purpose?
b) If not, what was missed?

Question #9

a) Did you encounter problems resulting from use of ontology that was not fit for the intended purpose?
b) If so, what kinds of problems?
c) If so, how do you know that the ontology was the (or a) source of the problem?

Question #10

a) In the case you have in mind, did the incorporation of ontology produce significant benefits?
b) If so, what kinds of benefits?
c) If so, how do you know that the ontology was the (or a) source of the benefits?

Question #11

a) In the case you have in mind, were some ontologies or ontology standards tried and abandoned?
b) If so, were they replaced by different ontologies and/or ontology standards, or were ontologies abandoned altogether?
c) If the original ontologies or ontology standards were replaced by new ones, were the new ones better? What problems led to the original abandonment, and were those problems fixed by the replacement?
d) If the original ontologies or ontology standards were replaced by new ones, what methods were used to identify or select the replacements? Were these methods more informed or more rigorous than those used the first time around?

Question #12

Do you have any lessons learned, regarding ontology quality management in large systems, that you think are especially important? This could be something we have, or haven't mentioned yet.

Question #13

What particular difficulties did you run into during ontology development, selection, or adaptation? What processes seemed to be hardest to get through or seemed to bog down the most?

Question #14

What didn't we ask here that you think we should have? Alternatively, what question(s) related to ontology quality management in large systems contexts would you like to ask the other summit participants?