Example Project Outline 1

Informal Knowledge Management for Enterprise Architecture Models

Motivation:
Much time and effort is spent for generating initial EA models for even a relatively small, well-scoped division in an organization. Although rich details are captured using currently available EA models and frameworks, significant amounts unstructured knowledge is either discarded or is only available in simple recorded notes. Such ill-structured knowledge can be highly valuable in making EA models more effective. Yet, much of this knowledge is rarely represented, and when it is, it may be contained purely in notes of EA practitioners.

Effort:
This effort will both determine how such knowledge may be captured, and investigate practices that may be improve its retention, codification and use over current, informal techniques. Immediate results will be seen via suggestions for improvements in capture, sharing and use of such knowledge.

Question(s) to be answered:
• What are elements of informal knowledge about IT infrastructure and organizational operations gathered during the construction of EA models?
• What are the potential uses of such informal knowledge in conjunction of EA models?
• How can such informal knowledge be represented and shared with decision makers?
• What specific mechanisms may be used to structure such knowledge so that it can contribute to a larger repository that improves over time?

Deliverables:
• To identify what knowledge can be captured, what cannot be captured, and how to distinguish between the two.
• To identify one or more mechanisms that can be used to structure this knowledge.
• To evaluate current market offerings from EA vendors and elsewhere that may be appropriated for capture, representation and sharing of such knowledge.

Method:
The project will require intensive study of two or more EA efforts that may be underway in participating organizations. Specific techniques used for research will include participant observations, interviews with stakeholders, and study of notes and EA products as they are being constructed.

Access Commitment:
The research will require that the participating companies provide to the faculty and one student ongoing access to EA efforts within the organization. This will
result in at least two to three visits to the participating organizations from the lead faculty and the student, monthly phone calls, and regular sharing of EA documents and notes as they are generated.

**Schedule and Reporting:**
The work will proceed August 2010 through July 2011 to match the academic year with the following interim reporting requirements.

Interim Report 1: 30 Sept 2010 (problem understanding)
Interim Report 2: 30 Nov 2010 (method and initial data collection)
Interim Report 3: 28 Feb 2011 (second round of data and literature review)
Interim Report 4: 30 Apr 2011 (initial results from data collected)
Final Report: 30 June 2011 (final results from the data and recommendations)

Fall 2011: In-person presentation of results to the Research Committee.

**Resource Requirements (approximated):**

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<tr>
<td>Faculty Time (1 month)</td>
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<td>Travel Expenses</td>
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<td>Penn State Overhead</td>
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This version: September 2010. Sandeep Purao.

Feedback incorporated from
Con Kenney, Scott Bittler, John Sweitzer