

Architecting Ambient Knowledge in Enterprises

IT Enabled Enterprise Integration & Transformation

Problem

- From a systems perspective, large projects and enterprises have difficulty with communication and effective project design over the system life cycle.
- From a technical perspective data harmonization across software systems remains an open challenge.

Hypothesis

- High semantic distance between people/groups of people across the enterprise results in sluggish project performance.
- Through the use of information technology we can actively manage the semantic distance of an enterprise to make it more agile, efficient, and resilient.



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Semantic Distance

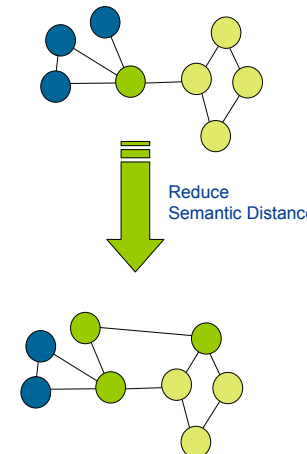
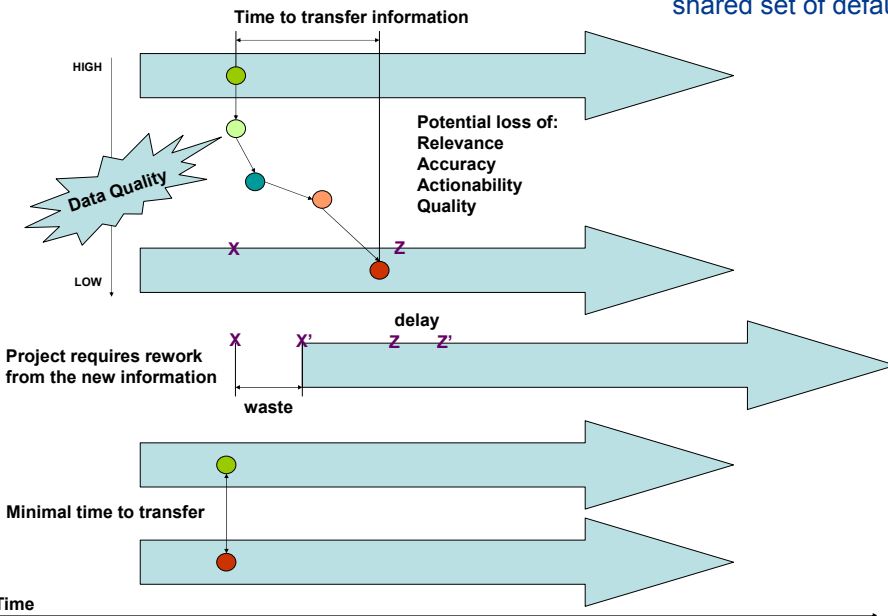
- Semantic distance is the measure of the difference in meaning, context, and representation of mental models between individuals, organizations, and software models.

Organizational Culture

- For this analysis we take a predictive view of culture, i.e. culture is used to define the emergent behavior of a group of individuals. Each individual can belong to multiple cultures that manifest themselves in different situations. A culture is defined as a group of people who have a low semantic distance, common beliefs, and a shared set of default actions.

Benefits to Industry

- Knowledge about the implicit value of individuals in the enterprise.
- Tools for analyzing enterprise and inter-enterprise interaction.
- Tools for actively managing fundamental properties of the enterprise, and their resulting emergent behavior.



Research Methodology

- Phase I: Preliminary literature review
- Phase II: Social networks/network science & organizational culture literature review
- Phase III: Tool construction & case study
- Phase IV Tool refinement & thesis

Interested In Participating?

Would your organization be willing to host a case study? I am looking for organizations wishing to better understand the fundamental dynamics of projects from the semantic distance perspective.

Research Timeline

