

RISK ASSESSMENT TOOL FOR KNOWLEDGE SHARING IN INTER-ORGANIZATIONAL NETWORKS

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1. Introduction

Organizations are increasingly using collaboration technologies such as WIKI's, blogs, and online communities to move towards collaborative inter-organizational network structures. While collaboration has many benefits, risks pertaining to knowledge sharing may arise when exposed valuable knowledge assets are transferred to other projects that may benefit competitors. Thus, the critical issue in such scenarios becomes the identification and assessment of knowledge sharing risks to help organizations design effective knowledge sharing strategies and protect strategic knowledge assets.

In this paper we describe a prototype DSS that implements our risk assessment framework for assessing knowledge sharing risks in inter-organizational networks (Aljafari and Sarnikar, 2009). It implements multi-criteria decision analysis algorithms to help rank strategic knowledge assets and probabilistic algorithms to help estimate risks.

2. Risk Assessment Framework

The risk assessment framework lays the foundation for a systematic process through which project managers can identify, value, and secure their knowledge assets. The following table illustrates a summarized description of the framework and the corresponding components and functionality of the prototype DSS.

Table 1. Risk assessment framework for knowledge assets

KM Risk Assessment Processes	Prototype DSS Components and Functionality
Identify Inter-organizational Knowledge Sharing Practices	Knowledge asset questionnaire and knowledge-base
Identify and value knowledge assets	Asset rating system and MCDA based algorithms for ranking strategic assets
Identify collaboration technology	Technology Knowledge Asset Matrix
Identify vulnerabilities/threats to knowledge assets and evaluate risk	Knowledge-based approach to identifying vulnerabilities and probabilistic algorithms for estimating risk

3. Prototype DSS

We have implemented a Decision support system that automates the risk assessment process through capturing, organizing, and analyzing important information about specific knowledge sharing scenarios. The prototype is implemented on a .NET platform using VB.NET and offers analytical capabilities such as ranking valuable knowledge assets and evaluating risks associated with sharing these assets. The tool helps evaluate knowledge sharing risks given particular business processes, collaborators, and collaboration technologies. In addition to implementing the previously described risk assessment process, the DSS also consists of a knowledge base for helping managers assess knowledge sharing risks.

References

Aljafari, R. and Sarnikar, S. (2009). "A Framework for Assessing Knowledge Sharing Risks in Inter-Organizational Networks". In proceedings of *the 15th Americas Conference on Information Systems*, San Francisco, California.

