



University of Wisconsin-Madison

UW E-Business Consortium

"Helping Industry Gain Competitive Advantage Through E-Commerce and E-Business"

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Project Report

Improving the Effectiveness of Requirements Management in Software Development Life Cycle

Project Sponsor
CUNA Mutual Group

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Executive Summary

The objective of this project was to help CUNA Mutual Group improve the requirements management within their software development lifecycle (SDLC). The main goal of our project was to analyze the best practices for requirements management in the software development process and identify tools that would assist Business Analysts and IT analysts to easily manage end to end requirements. It was important that the tools identified be simple to use with easy to follow procedures for usage, have traceability of requirements through the entire project life cycle, have metrics associated with requirements in order to measure success/failure of a project, and have an education program to facilitate the understanding of the process and usage of the tools.

In order to fulfill the requirements of the project, the University of Wisconsin – Madison student team used three main methods for acquiring the information required. These were the following:

- Identify SDLC requirements best practices by doing research through books/articles
- Interview UWEBE member companies in order to acquire details on their requirements management processes
- Contact requirements management software vendors in order to gain information of their products such that a competitive analysis can be carried out

It is difficult to recommend one tool that satisfies and solves all of the CUNA Mutual Group's problems. It is for this reason that the team looked to not only identifying the strengths and weaknesses of the tools, but also looked to comparatively quantify the differences between them. All the work was done keeping CUNA Mutual Group's current situation in mind. Thus, the team did not recommend just one "best" tool, but hopes that the study herein provides the CUNA Mutual Group the ability to pick tool(s) that will be appropriate for them given their culture and current situation.

Although the project mainly focuses on requirements management tools, we have considered the SDLC process as a whole, from the requirements definition phase to closure of a project, and its relation to requirements management.

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