



University of Wisconsin-Madison

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Project Report

Developing Global Applications: Key Considerations and Leading Practices

Project Sponsor

CUNA Mutual Group

Authors

Amr Alshihabi

Lirim Ashiku

Thomas Butt

Steven Crowley

Anshuman Guha

Matt Schwenkner

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Executive Summary

The primary goal of this project was to research essential considerations and leading practices associated with developing global Web applications. The report contains three common approaches companies use to globalize Internet offerings for their customers. Research into both localization and globalization is included to give CUNA Mutual a better understanding of issues associated with developing a Web application efficiently for multiple countries, particularly those in North America, the Caribbean, Europe, and Australia. We have also compiled insights from five member companies of the UW E-Business Consortium (UWEBC), explaining their approach internationalization of Web applications, and lessons that they have learned from their approach. This report also includes a competitive analysis of six companies that operate in geographical locations suggested by CUNA Mutual.

Internationalization, localization, and regulatory requirements must be considered in the development of global Web applications. Internationalization is the broad process of ensuring the application has the capabilities to localize. Localization involves specific issues (such as address format and currency format) which differ based on country and region. Regulatory requirements are country specific and govern key issues such as the information a company is allowed to collect and store.

The approach a company takes to internationalize their Web applications can vary depending on the company's Web technology, products and services, and their customers. The three approaches identified in this report include *Separate*, *Single (with conditional compiles)*, and *Modular* application approaches. The *Separate* application approach involves each country's local branch developing separate Web applications. The *Singular* approach (with conditional compiles) involves developing one wireframe application at the corporate level and allowing local branches to customize the application for their customers. The *Modular* approach is managed completely from the corporate level using a Content Management System, with feedback given by the local branches. We discuss the pros and cons of each approach, and provide recommendations for CUNA Mutual for their approach to global Web applications development.

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Other Project Team Members:

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- Kevin Miller – VP Information Technology
- Mark Molitor – VP IT Consumer Products
- Deb Casurella – Lead International Operations and Technology
- Ababacar Ndiaye – Business Analyst
- Mary Johnson – Senior Business System Consultant
- Greg Puleo – Self Service Manager

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Thank you,

Amr Alshihabi

Lirim Ashiku

Thomas Butt

Steven Crowley

Anshuman Guha

Matt Schwenkner

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