



A FRIENDLIER, MORE FAMILIAR INTERFACE

Bridge360 delivered a turnkey solution to a major global auto manufacturer, whose growth plans included building new plants throughout Asia, as well as standardizing the software used in their existing Asian plants. The project entailed enabling the smooth implementation of a large mission-critical mainframe application into new markets, making it a more flexible, compatible, user-friendly part of the team.

The Challenge

The mission-critical manufacturing software used at the majority of the client's manufacturing sites was out of date and included a number of different systems. One such system, a mainframe-based application with decades of refinement and optimization, had the necessary intelligence to handle the technical demands of manufacturing workflow management, but needed to communicate like part of the team. It also needed to be usable by a pool of Asian workers with limited or no English skills. While the application already had support for single-byte languages such as Spanish and German, this was the first time the client's integration team had to tackle a project involving multi-byte Asian languages. The application needed a more common sense interface and the flexibility to work well in multiple operating environments as the company expanded its operations. The timeline for the project was months, not years, leaving little room for error — and the complexity of the application and the impact of change on business operations mandated that NO modifications to the existing code would be allowed.

“As soon as they told us, ‘You can't change our code,’ we knew this was going to be fun but challenging. But every project has its unique challenges, so I knew we would make it happen.”

Brenda Hall, CEO, Bridge360

Client

**GLOBAL
AUTOMOTIVE
MANUFACTURER**

Category

MODERNIZATION



THE GOAL:

A FRIENDLIER, MORE FAMILIAR INTERFACE

The Bridge360 assessment team met with key client team members to learn about the project, the business and technical challenges, and discuss potential solutions. After the on-site assessment, Bridge360 researched various technical issues and formulated a plan to address both the tactical and strategic goals for the project.



Objectives included:

- Develop a web re-facing for the application user interface, allowing users to use a web browser to connect to a web application that converted mainframe screens into web pages customized for users' desired language and preferences
- Develop a custom application to convert hard copy English-language reports generated on the mainframe into local language versions available via a standard web browser
- Given the manufacturer's planned global expansion, create a flexible solution for adding more languages and countries support

THE PROCESS:

TOOL SELECTION, VENDOR QUALIFICATION, IMPLEMENTATION AND KNOWLEDGE TRANSFER

The project spanned a year of consulting, planning and implementation in which Bridge360 and the client worked closely together.

Tool Selection

In order to keep costs low and meet the aggressive project schedule, Bridge360 evaluated commercial off-the-shelf (COTS) tools that could be used to meet the project's technical goals.

Bridge360 created and documented the proof-of-concept requirements and criteria for selection. After extensive evaluation, the project team selected a tool that enabled rapid development, provided basic translation support out-of-the-box, and supported application extensions via Java.

Implementation

Bridge360 led the project implementation, which included developing web versions of over 400 mainframe application screens and over 200 reports in three languages, while adhering to the strict information technology and CMMI level 4 standards of the client. The Bridge360 development team worked closely with the client to produce full architecture and design documents. The design called for customization of the COTS web re-facing tool in Java to handle the localized screens as well as a custom Java servlet to handle localized reports.

Knowledge Transfer

At the close of the project, a complete knowledge transfer ensured that the client's team could easily manage the new system. In addition to preparing written documentation and identifying the skills and responsibilities required to manage the upgraded system, Bridge360 designed a three-week training course covering system design, development, testing, translation and maintenance. Bridge360 continues to provide support on an as-needed basis.

THE RESULTS:

GLOBALIZED, LOCALIZED AND MARKET-READY

The new, flexible web-based solution includes a web re-facing for a localized, user-friendly interface that supports multi-byte Asian languages. The Bridge360 team delivered the project on time - and without modifying a single line of the original source code - so that factories could open and users could be productive in their native languages.

The entire system was deployed in a load-balanced, clustered **WebLogic** environment running on multiple **Sun** servers. Additional scripting was done with **JavaScript**, **Python** and **UNIX** shell scripts.

“We knew the implementation would be challenging, with its many stakeholders & aggressive schedule. But our client had a problem to solve, and we pulled out all the stops to make it happen. That, in a nutshell, is the Bridge360 approach.”

BRENDA HALL, CEO, Bridge360