

Wizard3D Case Study

Wizard3D S.A. specializes in the creation of Rich Internet Applications and non-traditional advertising solutions. The company integrates technologies and disciplines, such as augmented reality, computer graphics, computer vision, 3D animation and engineering to create highly interactive, user centered experiences.



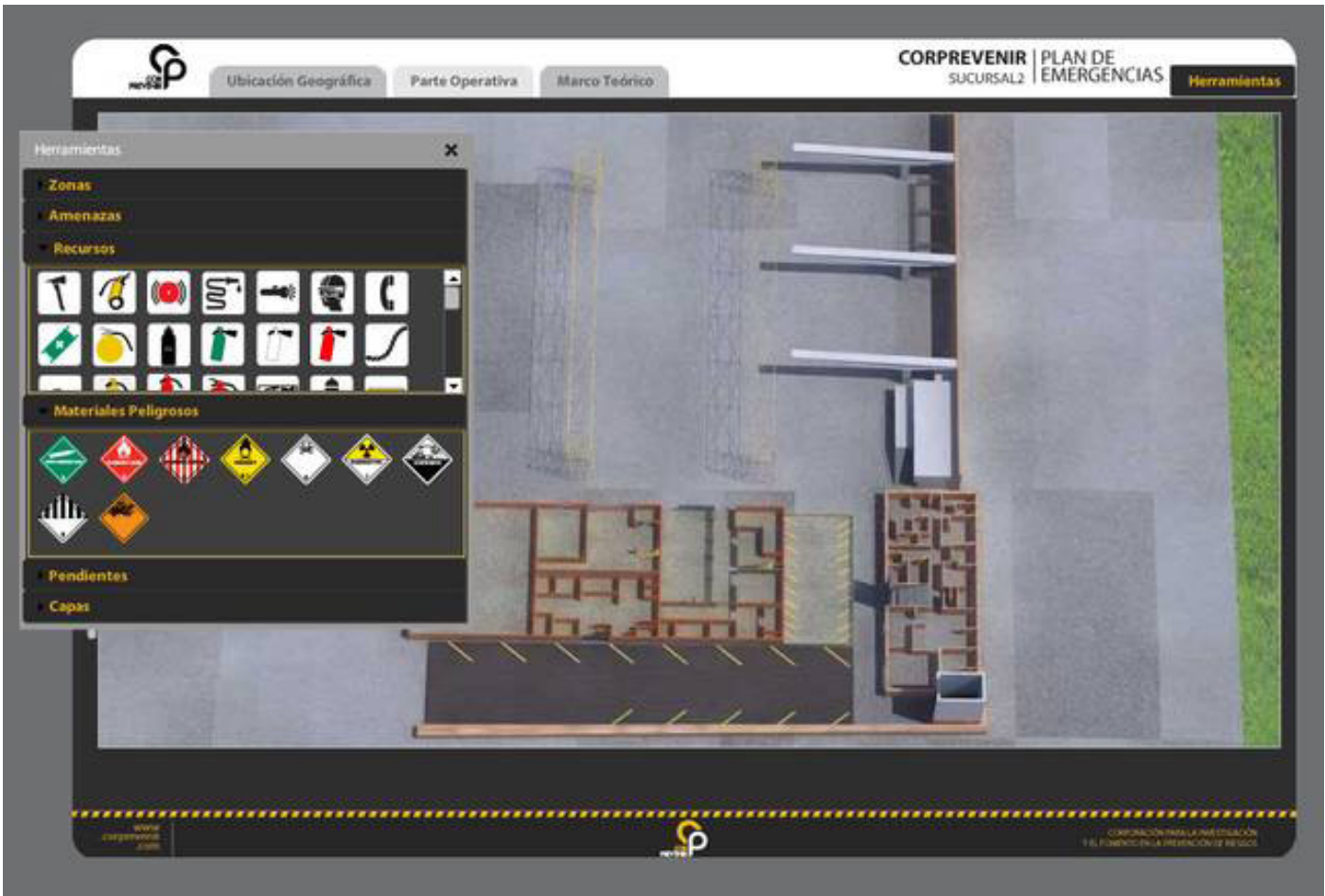
Business Situation

Columbia is considered a volatile country plagued with both natural disasters and an internal conflict that is enmeshed in the war on drugs. Natural disasters alone in 2010 affected over 1.5 million people in 627 municipalities. In 2009, approximately 7.1 percent of Columbia's population (3.3 million people) were displaced due to natural disasters and internal conflict. The ability to manage the displacement of people and resources was difficult at best. One emergency response expert identified that having an online system could enable organizations to be better prepared for emergencies, avoid hazards and improve aid worker response times in the event of emergencies.

Application Description

Wizard3D was contracted by this emergency response expert to build a Risk Management Plan tool. This tool is used to collect and digitize information about the physical and organizational structure of businesses, which aids in the development of emergency response plans.

This tool enables organizations to perform hazard evaluations, generate 3D maps, directories and graphical reports that show everything from potential threats to the location of resources and staff. Having this information digitized and online makes it easy for organizations to keep its content up to date, train employees on emergency response preparedness and share this information with response workers in times of emergency. It also helps organizations comply with occupational safety and health requirements specified by Columbian regulatory agencies.



Problem Definition

While the Wizard3D team had client-side design and development expertise, it lacked deep knowledge in server-side programming. Fortunately, the development timeline was relaxed, giving the team some time to acquire PHP, .NET and Java programming experience. They learned all three backend programming environments, because they perceived they would eventually need to port their Flex application to all three based on customer requirements. One thing they didn't want to have to learn was how to integrate their application to all three, which is why they searched for an AMF gateway.

The Solution

Wizard3D evaluated AMFPHP, but found that they wouldn't be able to connect their Flex client to .NET. WebORB was the only solution that enables connectivity to PHP, .NET and Java backends. Some of the other features the team found valuable included:

- Support for PureMVC - this is a popular software development framework.
- Invocation Test Drive - this enabled the team to test their services using the WebORB management console, rather than having to run the full application.
- AMF Remoting - is a binary protocol that provides very fast transfer of data.
- Simple Deployment - WebORB comes with deployment instructions that are very simple to follow.
- Type Mapping - WebORB provides a very robust mapping system that includes client/server field/property mapping and data table row class mapping.

Benefits

Wizard3D and its customer receive the following benefits as a result of using WebORB:

- Application Portability - Since WebORB supports Java, .NET and PHP, Wizard3D can easily port their Flex application to all three environments to meet customer requirements.
- Faster Response Times - The speed with which WebORB marshals data across the Internet will make it possible for emergency and hazard workers to respond more quickly to emergencies.
- Easier Development - WebORB was designed to make integration super easy for developers. As a result, it comes with developer productivity tools, documentation and examples - all of which help reduced development time and cost.

- Reduced Testing Time - WebORB provides an efficient workflow that enables developers to test their services before deploying. This makes it easier to troubleshoot and fix earlier, rather than deploying and having to step through the entire application to find problems.

Solution Stack

- Apache, PHP and MySQL
- IIS7.0, C# and MS SQL Server
- WebORB for PHP
- WebORB for .NET