

Outdoor Advertising Manager

The Client is a South Africa and Dubai based independent software developer and vendor providing asset management solutions for the outdoor advertising industry. The objective of this project was to develop a new version of the application with latest technologies, scalable architecture and support for third party integration.

Challenges

The Client had a web-based application developed in ASP for managing outdoor advertising assets like billboards, digital signboards with features and functions for advertisers, asset owners, advertising agencies and land owners. With growing business and emerging business requirements, the client wanted to preemptively upgrade the application to a scalable platform with online/offline support.

Solution

The following major architecture and technology considerations were applied to decide application architecture and technologies to be used:

- Utilize Microsoft centric technologies so that existing hardware and software infrastructure can be reused
- Adhere to latest Microsoft technologies to ensure longer life of the system as far as technology obsolescence is concerned
- Develop an architecture so that application can function in both online and offline mode with Intranet as well as Internet access with same look-and-feel in both environments
- Distribute the complete system into multiple modular applications instead of mammoth single web application following the principle of "separation of concern" for different types of users to achieve easier maintainability and enhancements in future
- Extensible support for third party integration
- Support for limited customization in form of user defined fields

The technical architecture has three different contexts:

- **OAM Domain:** The main production environment managed by OAM, and used to setup customer's context by OAM Administrator
- **Customer Domain:** The client's local area network and consists of their central server installation as well as OAM client application running across multiple workstations
- **Public Domain:** An internet environment; all users can use the application from internet environment in case they are outside of their office network

Technology

.NET Framework 3.5, Windows Presentation Foundation, Workflow Foundation, SQL Server 2008, Office 2007, and Virtual Earth 6.1 SDK.

Conclusion

This project was started with all Microsoft technologies being in beta release. Successful technology and architecture implementation with extremely limited technical documentation / support is the most important achievement of this project. e-Zest's approach of technology and architecture proof-of concept implementation before full blown execution was greatly appreciated by client as it mitigated risks associated with beta stage technologies. This project proved e-Zest's leading edge in using the latest Microsoft technologies.