



Major IT Provider Deploys Web Solution in the Cloud, Avoids Thousands in Costs

Overview

Country or Region: Spain
Industry: Engineering—Software engineering

Partner Profile

Established in 1997, SOFTENG has expertise in Microsoft technologies and specializes in the design and development of web projects.

Business Situation

The company created Softeng Portal Builder, an innovative solution designed to develop complex web applications that need to be hosted in a highly scalable, flexible, and agile environment.

Solution

SOFTENG deployed its solution on the Windows Azure platform, which efficiently solves its scalability challenges and provides for maximum performance, high availability, and agility in deployment.

Benefits

- Decreases costs
- Increases return on investment
- Speeds time-to-market
- Enhances customer confidence
- Expands innovation

“By using Windows Azure, we avoid investing heavily and constantly in hardware, software, and support personnel to maintain a classic data center. We’ve considerably reduced costs.”

Carlos Colell, Chief Executive Officer, SOFTENG

SOFTENG is a Microsoft Gold Certified Partner known for innovative technology. The company created Softeng Portal Builder, a solution that manages web development tasks, incorporates business processes, and analyzes user behavior. To deploy the solution, the company needed to host it in a data center environment that could support Microsoft .NET Framework technologies and handle complex scalability needs. It chose the Windows Azure platform for maximum performance, high availability, and agility in deployment. Seven employees spent 12 weeks to make Softeng Portal Builder compatible with Windows Azure, and the company took advantage of Microsoft SQL Azure. SOFTENG benefits from reduced costs, faster time-to-market, improved customer confidence, and opportunities to innovate, while its customers get a better return on investment.



“We offer the only software-as-a-service-based website management solution that operates on the Windows Azure platform. The cloud’s robustness and reliability enables us to start dozens of projects for the public and private sectors.”

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Figure 1 – Softeng Portal Builder integrates online marketing tools.

Situation

Based in Spain, SOFTENG is a Microsoft Gold Certified Partner that has been offering information technology solutions since 1997. It has successfully developed hundreds of projects and consolidated its market position as one of the top five Microsoft partners in Spain for projects requiring innovative technology—the Ministry of Science and Innovation and the Government of Catalonia have recently recognized SOFTENG for its research and development efforts. The company focuses on serving customers in three areas: web applications design and development, software integration and development, and systems and network engineering. In 2009, it achieved annual sales of U.S.\$2 million, with a growth forecast of between 20 and 25 percent over the next few years.

The company created Softeng Portal Builder—a web applications design and development solution built on the Microsoft .NET Framework—to empower customers to build public-facing websites,

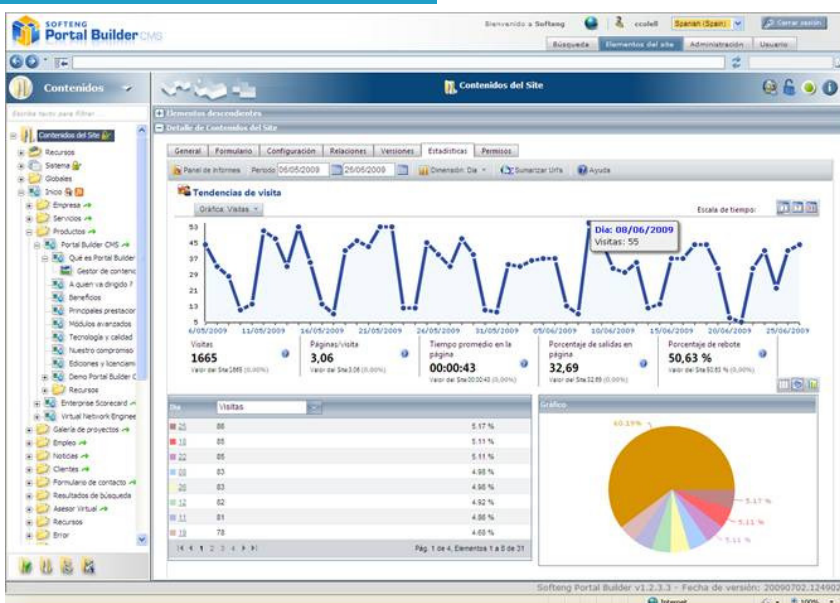
intranets, and custom web applications. First launched in November 2008, the newest version of the solution can be used to build web applications of varying degrees of complexity, and to integrate with enterprise applications such as Microsoft Dynamics business software and Microsoft SharePoint services.

Traditional web development solutions are limited to creating, updating, and managing corporate websites. Customers can use Softeng Portal Builder to manage tasks including developing complex web applications, incorporating enterprise business processes, creating search engine optimization, and converting site visitors to customers. The solution incorporates this functionality simply, productively, and autonomously—and customers can use it without having any specialized technical knowledge.

The solution includes marketing tools that make websites visible to the major search engines and generate business opportunities. It also includes powerful content management and editing tools, automatic translation capabilities, and a user-behavior analysis system. (See Figure 1.)

For example, a customer can analyze visits to its corporate website because Softeng Portal Builder provides graphic visualizations of visitor behavior. (See Figure 3.) The solution can identify website elements (such as sales opportunities) that are working well and suggest areas for improvement.

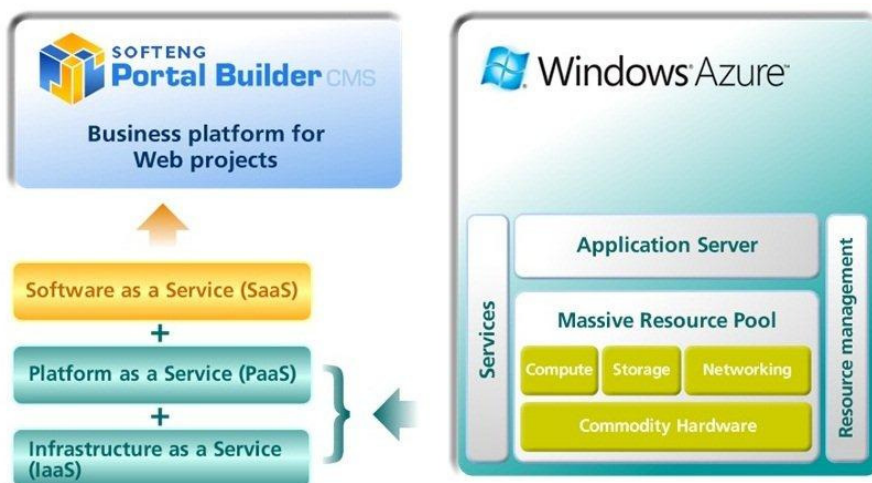
The solution serves three types of businesses: those that need to manage business content; those that want to create more dynamic websites, increase the number of visitors, improve sales conversions, and minimize dependency on



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Figure 2 – The Windows Azure platform supports the Softeng Portal Builder Software-as-a-Service solution



technology providers; and those that need to connect their websites with other corporate applications and automate business processes.

When the company delivers Softeng Portal Builder to a customer, it typically provides support and services that include consulting engineering, software subscription, and software infrastructure. To deploy the solution, the company considered installing and hosting it on the servers of its own data center, on its customers’ servers, or on the servers of an Internet service provider (ISP) that is capable of supporting technologies based on the Microsoft .NET Framework.

“The diversity of customer scenarios made the work of harmonizing deployment processes and version updates very difficult,” says Braulio Megías, Project Manager at SOFTENG. “With the added complexity of scalability, it would have been impossible to predict peaks in service demand.”

The company wanted to reduce the costs of developing applications and delivering IT support. It also wanted to eliminate the need to invest significant resources in building and managing technology infrastructure. “It’s difficult for a software vendor to calculate pay-per-use fees because it requires the constant calculation of costs incurred for each project and resources consumed by each customer,” says Carlos Colell, Chief Executive Officer at SOFTENG.

Solution

SOFTENG realized it could maximize its investment if it deployed Softeng Portal Builder in the cloud. The company participated in the Microsoft Metro Early Adopter Program and implemented the solution on the Windows Azure platform. It chose Azure because it wanted to use state-of-the-art technology, avoid capital investments, and reduce deployment costs. It also realized that the Microsoft cloud computing infrastructure could efficiently solve its scalability challenges.

The Windows Azure platform is a set of cloud computing services that lets software vendors rapidly reach market using a pay-as-you-go subscription model. Windows Azure is the development, service hosting, and service management environment for the Windows Azure platform. It provides developers with on-demand, pay-as-you-go compute and storage to host, scale, and manage web applications on the Internet through Microsoft data centers.

SOFTENG believed that Windows Azure would help support the maximum performance, high availability, and agility that the company, and its customers, demands from the solution. SOFTENG delivers its solution in two scenarios: in the cloud or in a combination of cloud-based and on-premises data center.

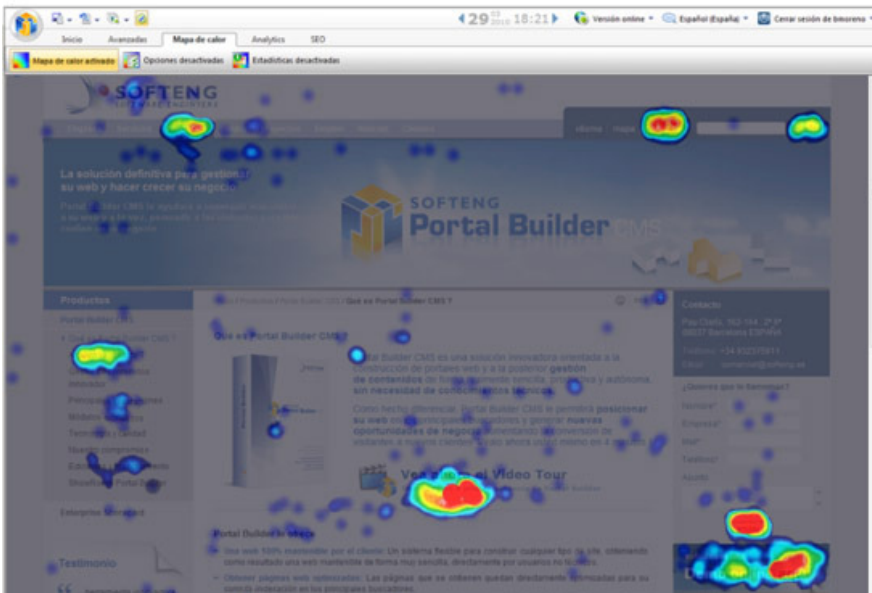


Figure 3 – Softeng Portal Builder provides visual user behavior analysis that can display where users commonly click on a website.

SOFTENG Software Architect David Ferrucci details the effort required to migrate the solution to the cloud. The company employed five software engineers and two testers who worked approximately 3,000 hours over a 12-week period. They took 700 hours to re-code the solution and ensure compatibility, 300 hours to develop a backup tool, and 900 hours to develop tools for updating the solution to a software-plus-services offering. The company also had to integrate Apache Lucene.NET, the C# port of an open-source information retrieval software library, which required 600 hours. The company spent an additional 500 hours testing the solution. (See Figure 2.)

To implement Softeng Portal Builder in the cloud, the company deploys a variety of Windows Azure platform services. It uses web roles—that is, a virtual machine or instance of Windows Azure—to deploy and scale the Softeng Portal Builder web application. It extends the capabilities of

Microsoft SQL Server data management software into the cloud as a web-based, distributed relational database by using Microsoft SQL Azure. (Depending on the customer’s needs, the solution can require at least a 1-gigabyte instance of SQL Azure.)

SOFTENG is making use of Windows Azure Storage, a data storage service that can be scaled according to demand and offers high tolerance against faults. It employs cloud storage to host Lucene.NET-based indexes, application information, diagnostics, and backup databases. SOFTENG engineers employed the Windows Azure Development Fabric to simulate the Windows Azure environment on local machines, which made it possible to test Softeng Portal Builder before deployment.

The solution uses Windows Workflow Foundation 4.0 to implement long-running processes as workflows within .NET applications. “Whatever the degree of complexity, the workflow modeling technology offers our customers power, flexibility, and interoperability with corporate applications,” says Colell.

Additionally, the company adopted standards in service-oriented architecture, web services, and content management interoperability services so that Softeng Portal Builder can connect with customers’ line-of-business tools, including enterprise resource planning systems, customer relationship management systems, collaboration technologies based on Microsoft SharePoint Server, and content repositories.

SOFTENG will continue developing Softeng Portal Builder to make use of Windows Azure technologies. It plans to expand horizontal scalability, incorporate roles and

queues to manage asynchronous tasks, and enhance workflow support. It intends to adopt Windows Identity Foundation so that developers can integrate external authentication and authorization systems into the solution.

Benefits

Softeng Portal Builder is the first enterprise offering for web projects to be certified as a "Microsoft Hosted Solution." The company has benefited from significantly reduced costs, faster time-to-market, improved customer confidence, and opportunities to innovate. Its customers also realize a better return on investment.

"We offer the only software-as-a-service-based website management solution that operates on the Windows Azure platform," says Colell. "The cloud's robustness and reliability enables us to start dozens of projects for the public and private sectors."

Decreases Costs

SOFTENG benefits from cost savings

because Softeng Portal Builder solution doesn't require on-premises deployment and maintenance. Over the next three years, it expects to save an estimated \$61,770, a savings of 7.1 percent. (See Figure 4.) "By using Windows Azure, we avoid investing heavily and constantly in hardware, software, and support personnel to maintain a classic data center," says Colell. "We've considerably reduced costs."

Increases Return on Investment

By committing to a cloud-based solution that uses a subscription model, SOFTENG can include in the subscription fee the platform costs, support services, incident resolution, and version updates. This means that customers' return on investment increases because they don't have to purchase on-premises software and the installation fee costs less than that of other major solutions.

"In using Windows Azure, we are offering a more economical solution than on-premises offerings, including those based

Figure 4 – Total cost of ownership of Windows Azure over a three-year period

Table 1. Total Cost of Ownership of Windows Azure Over a Three-Year Period

	Windows Azure Costs (U.S.\$)	On-Premises, Virtualized Costs	Savings with Windows Azure (U.S.\$)	Savings with Windows Azure (%)
Web and worker computing	\$13,140	\$54,486	\$41,346	75.9%
Storage (non-relational)	\$12,228	\$12,463	\$235	1.9%
Database computing, licensing, and storage	\$493,361	\$275,038	(\$218,323)	(79.4%)
Service Bus connections	\$288	\$0	(\$288)	0.0%
Access Control transactions	\$216	\$0	(\$216)	0.0%
Bandwidth	\$70,515	\$121,066	\$50,551	41.8%
IT administration and support	\$7,356	\$55,269	\$47,913	86.7%
Facilities and overhead	\$0	\$36,894	\$36,894	100.0%
Setup and delivery	\$209,313	\$312,971	\$103,658	33.1%
Total Cost Over Three Years	\$806,417	\$868,187	\$61,770	7.1%

“Customers don’t always have full confidence in a provider that offers its own hosting infrastructure for its solutions. Opting for Windows Azure gives our customers greater peace of mind.”

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on open source,” says Colell. “We have thus been able to eliminate the costs of version migration and the loss of opportunities during downtime between versions.”

Speeds Time-to-Market

Because SOFTENG engineers were already using Microsoft technologies, it took the company only 12 weeks to prepare Softeng Portal Builder for the Windows Azure platform. Its customers benefit from an agile infrastructure that scales to meet demand and, on which, developers can quickly and easily create web services. Says Colell, “Even complex web projects can be ready in a matter of weeks thanks to the ‘out-of-the-box’ services.”

Enhances Customer Confidence

SOFTENG believes that it has chosen the best platform for balancing flexibility and control in deploying its solution. By using Windows Azure, it’s easier to address a customer’s specific business problems quickly. “Customers don’t always have full confidence in a provider that offers its own hosting infrastructure for its solutions,” says Colell. “Opting for Windows Azure gives our customers greater peace of mind.”

Expands Innovation

The company’s strong commitment to continual innovation motivated SOFTENG to move its solution to the Windows Azure platform. “We want the market to perceive Softeng Portal Builder as a leader, positioned at the cutting-edge of technology,” says Colell. “Windows Azure contributes in no small measure to creating this perception.”

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers in the United States and Canada who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:

www.microsoft.com

For more information about SOFTENG products and services, call +34 93 237 59 11 or visit the website at: www.softeng.es

Additional Resources:

Training: [Channel9 Windows Azure Training Course](#)

Download: [Windows Azure Training Kit](#)

Download: [Windows Azure SDK](#)

White paper: [Security Best Practices for Developing on the Windows Azure Platform](#)

Windows Azure Platform

The Windows Azure platform provides an excellent foundation for expanding online product and service offerings. The main components include:

- **Windows Azure.** Windows Azure is the development, service hosting, and service management environment for the Windows Azure platform. Windows Azure provides developers with on-demand compute and storage to host, scale, and manage web applications on the Internet through Microsoft data centers.
- **Microsoft SQL Azure.** Microsoft SQL Azure offers the first cloud-based relational and self-managed database service built on Microsoft SQL Server 2008 technologies.
- **Windows Azure platform AppFabric.** With Windows Azure platform AppFabric, developers can build and manage applications more easily both on-premises and in the cloud.
 - *AppFabric Service Bus* connects services and applications across network boundaries to help developers build distributed applications.
 - *AppFabric Access Control* provides federated, claims-based access control for REST web services.
- **Microsoft "Dallas."** Developers and information workers can use the new service code-named Dallas to easily discover, purchase, and manage premium data subscriptions in the Windows Azure platform.

Software and Services

- Windows Azure Platform
 - Windows Azure
 - Microsoft SQL Azure
 - Windows Azure Storage
 - Windows Azure Development Fabric

- Technologies
 - Windows Workflow Foundation 4.0

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