



Company Creates Dynamic, Highly Scalable Software with Cloud Environment

Customer: Shoothill

Website: www.shoothill.com

Country or Region: United Kingdom

Industry: Professional services—
Software engineering

Customer Profile

Shoothill is a leading Microsoft Certified Partner based in Shrewsbury in the United Kingdom. Founded in 2006, the company is a global leader in developing web-based Microsoft software applications.

Software and Services

- Windows Azure platform
- Technology
 - Microsoft Silverlight

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Shoothill developed a product called Megafiche, based on Microsoft Silverlight Deep Zoom technology, which allows the creation of giant Deep Zoom images and mosaics from user-generated content. The company needed a scalable, cost-effective way to serve Megafiche, and chose to deploy it as a cloud-based service running on the Windows Azure platform. Since its deployment in the cloud, Megafiche has been used in high-profile marketing campaigns across the world, including MSN coverage of the British Royal Wedding in April 2011.

Business Needs

Shoothill develops dynamic web-based mapping and visualisation applications that customers use to interact with their audiences. The company—nominated for the 2009 Microsoft World Partner of the Year in the Data Visualisation category—recently created a product called Megafiche, which is based on Silverlight Deep Zoom. The application transforms millions of images into digital mosaics, and presents customers with excellent interactive promotional and advertising

opportunities. For example, the mosaics can be projected onto the walls of buildings at large-scale events, or form the basis of online interactive marketing campaigns.

In the campaign for MSN for the British Royal Wedding in 2011, Shoothill provided users with the opportunity to submit photographs of themselves online from a mobile phone or computer, which were automatically incorporated into a mosaic featuring a photograph of the royal couple on their wedding day. Participants could

purchase a printed copy of the mosaic as a memento when the event was over, along with a link to their place in the digital image.

Megafiche uses Silverlight Deep Zoom to present users with large, clear pictures—each image that's uploaded has to be analysed and embedded in the correct position within the mosaic. This can be a time-consuming process, so it's essential that the technology serving the application is highly scalable and capable of processing huge amounts of data quickly. Rod Plummer, Managing Director of Shoothill, says: "We scale our application to handle millions of cell images, and the finished mosaic can reach terabytes in size. It's important that content—pictures, photographs, or documents—is rendered in perfect detail."

Solution

To achieve the high levels of scalability required for Megafiche, Plummer chose to host the solution on the Windows Azure platform. He says: "There are three main reasons why we base the product on the Windows Azure platform—performance, scalability, and pricing."

The cloud platform supports delivery by processing large files quickly, and providing reliable performance and scalability regardless of user volumes. Windows Azure is based on a pay-per-use financing model, which supports Shoothill in running the application cost effectively. The company pays for the bandwidth, storage, and computing power that its customers use, and can develop pricing to suit its customers' projects.

Plummer says: "Even if you have a fast internet connection, uploading an image

that could be a terabyte in size will take a significant amount of time if it's provisioned on a local server. Being able to produce the image in the cloud in the first instance is important to our business because it saves a lot of upload time."

Shoothill can also set up its server provisioning to deliver the best performance for customers. Plummer says: "Microsoft has data centres all over the world, so we can quickly increase or decrease server capacity and bandwidth depending on user volumes. This is especially important when usage is hard to predict and helps us deliver great user experiences regardless of where a participant is located. We can also configure it to add extra bandwidth or servers when user numbers reach a certain point."

Benefits

The Windows Azure platform delivers the scale and performance Shoothill requires to construct mosaics from millions of files of user-generated content in a short time frame. "It would be expensive for us to deliver Megafiche if we had to provide it in any other way than on the Windows Azure platform," says Plummer. The cost-effective technology is helping Shoothill create unique marketing campaigns for high-profile customers across the world.

- **Financing supports business model.**

Plummer's costs for running Megafiche are based on three variables—bandwidth, storage, and computing power. He receives monthly reports from Microsoft on all these variables. "I like the way we pay for Windows Azure. I can see how much of each variable we use, create accurate costs, and explain to customers how they're billed. It's a

transparent, cost-effective system," he says. The pay-per-use model also means that Shoothill isn't paying for services it doesn't use.

- **Scalable platform ensures consistently high performance.**

Throughout the Royal Wedding 2011 promotion, Plummer regularly checked on the performance of the application for MSN. But it didn't matter how many people accessed the site or uploaded photographs, performance remained consistently good. "Without Windows Azure, I'd have to set up servers and support from local hosting providers to get the same level of performance. Even then, I couldn't guarantee that the application wouldn't slow down in some parts of the world," says Plummer. With the MSN royal wedding project, users from South Africa and Australia experienced the same performance speed as users in the U.K.

- **Interactive technology attracts high-profile customers.**

Megafiche has already been used in a number of high-profile marketing campaigns, including a promotion for an album by singer Kylie Minogue, and a campaign highlighting endangered species around the world. "All of these projects would have been impossible without Windows Azure," says Plummer.