



Overview

Country or Region: Australia and New Zealand

Industry: Financial Services

Customer Profile

Paymark, owned by leading Australian and New Zealand banks, is the main operator of New Zealand's electronic transactions infrastructure.

Business Situation

Paymark was looking to increase transaction revenue by adding a remote payment capability to its Electronic Funds Transfer at Point of Sale (EFTPOS) service.

Solution

Paymark chose Microsoft Certified Partner M-Com to deploy its mobile payment platform, which enables real-time remote payments using the Microsoft .NET Framework leveraging Microsoft® Windows Server® 2003 and Microsoft® SQL Server 2005.

Benefits

- Rapid installation.
- Time and cost savings.
- Increased flexibility.
- Better client service.
- Enhanced consumer experience.

Microsoft technology helps New Zealand banks take mobile payments

“We considered a Microsoft solution to be a good investment. We knew the company was going to be around for the long term, which gave us the certainty and sustainability we were looking for.”

Simon Tong, Chief Executive Officer, Paymark

Paymark operates New Zealand's Electronic Funds Transfer at Point of Sale (EFTPOS) infrastructure. Paymark's two key functions are to authenticate credit and debit card payments and transfer funds to retailers' bank accounts at the point of sale. The company wanted to extend the service to a wider range of merchants by introducing a remote payments capability, enabling consumers to make real-time bill payments using their mobile phones. Paymark selected Microsoft Certified Partner M-Com's PayAnywhere mobile payments solution built on the Microsoft® .NET Framework. The flexible and seamless Microsoft development environment allowed the solution to be created quickly and cohesively. This provided cost savings and enabled Paymark to get the solution to market faster. The Paymark Remote service, as it is known, allows Paymark's customers to offer mobile payment services to New Zealand consumers through their mobile phones.



Situation

Paymark is owned by four leading Australian and New Zealand banks – ASB, Bank of New Zealand, Westpac and ANZ National. It is the main operator of the country's electronic transactions infrastructure, which enables real-time credit and debit card payments based on the Electronic Funds Transfer at Point of Sale (EFTPOS) system.

Today, Paymark handles nearly 75 percent of all electronic payment transactions in the retail market on behalf of more than 50 card issuers and acquirers, including Paymark's four owner banks and some 15 other financial institutions. More than 65,000 merchants and 80,000 checkout terminals are currently linked to the network, whose Paymark brand (also used for Internet payments) is the nationally recognized symbol for secure electronic payments.

Following its establishment in 1989, Paymark's centralized switch had handled more than 6 billion EFTPOS transactions by the middle of 2007.

In 2005, Paymark's member banks and New Zealand's two mobile operators, Telecom New Zealand and Vodafone, encouraged it to create a national mobile payments capability. Paymark was ideally positioned to do this because of its extensive links with retailers, banks and consumers across the country.

"In the competitive payments world, merchants and banks alike are always looking for new ways to deliver convenience and immediacy to consumers," says Simon Tong, Chief Executive Officer, Paymark. "Our customers were telling us that they wanted to exploit the mobile channel."

Tong adds that Paymark perceived a commercial opportunity in widening EFTPOS participation to organizations such as mobile phone providers that bill their customers

rather than simply charging for goods and services at checkout terminals on their premises.

To achieve these aims, Paymark sought to develop a remote authentication and payments capability. The idea was that consumers would no longer have to be physically present at a point-of-sale terminal, or near an Internet-enabled computer, to make real-time payments using their credit or debit cards.

"We realized that if we were going to take advantage of this new opportunity, and make essential services available to all our customers anytime and anywhere, we'd need to widen the EFTPOS net with a remote payments capability," says Tong.

The mobile phone, being ubiquitous, seemed like the ideal conduit for a remote bill payments service, while the handset's short messaging service (SMS) and browsing capabilities meant a phone's keypad could easily be used to authenticate and activate real-time payments.

"The mobile phone in the hands of a consumer is basically a payment terminal waiting to be turned on," Tong says.

Paymark began talks with mobile payment vendors with a view to addressing this business opportunity. Although mobile payments of various kinds are available around the world, an open and networked approach to the infrastructure had never before been deployed successfully.

It was the first time anywhere such a business model had been attempted.

Solution

After considering proposals from a number of mobile payment vendors, Paymark selected the PayAnywhere solution from Microsoft Certified Partner M-Com, whose experience delivering banking-grade technology platforms was appealing.

M-Com built PayAnywhere from the ground up using the Microsoft .NET Framework 1.1 and 2.0, which leverages the Microsoft Windows Server System™ and Microsoft SQL Server 2005. The Microsoft .NET Framework provides a single development environment that allows seamless integration across the back-end, operating system and device layers of the payment application.

A key factor in Paymark's choice of M-Com was the company's strong relationship with Microsoft. M-Com uses Microsoft development tools exclusively in its mobile payments solutions. Tong explains that it was important that the remote payment solution be located within a robust, flexible and scalable development architecture.

"We considered a Microsoft solution to be a good investment," says Tong. "We knew the company was going to be around for the long term, which gave us the certainty and sustainability we were looking for. Also, for such a critical service, it was vital that the technology foundation was solid."

Paymark was also drawn to M-Com's PayAnywhere solution because it supported multiple interface formats, including messaging, browsing and a downloading application for platforms including Microsoft® Windows Mobile® and Java 2 Mobile Edition (J2ME). All of these formats could be used to authenticate, process and transfer payments between accounts.

The PayAnywhere solution required minimal software development effort from Paymark,

which helped reduce the risk associated with the project. Paymark was also able to reuse its existing interfaces with New Zealand's retail banks and their customers, minimizing the cost and complexity of introducing a mobile channel. Tong says the project was never about changing Paymark's core technology, but about adding a new capability to its Paymark brand for the long term.

"PayAnywhere was first launched commercially in New Zealand in September 2002 and has remained a leading technology since then," says Adam Clark, Chief Executive Officer of M-Com. "It was the first pure mobile payment implementation in the world that made use of Microsoft technologies on all server elements."

The new service, branded Paymark Remote, allows real-time payments from consumers to the country's mobile operators, Telecom New Zealand and Vodafone, including topping up prepaid phone credit. The PayAnywhere platform is also being developed to allow real-time payments for online services (as a distinct payment instrument) and to give access to other billers such as energy retailers.

Paymark Remote is also being extended to enable integration with 'proximity payments' technology like near-field communications (NFC) and radio frequency identification (RFID), so consumers can use their mobiles to pay for inexpensive items such as coffee and parking.

Benefits

The cohesiveness and flexibility of the Microsoft .NET Framework helped Paymark get the Paymark Remote service to market quickly, while delivering significant cost savings that could not have been achieved otherwise.

Speed to market

M-Com's ability to work within a single development environment meant Paymark was able to deploy its mobile payments service as much as 25 percent faster than if it had needed to integrate development tools from different vendors across three different application environments – which would have required much more extensive testing.

Getting the mobile banking solution up and running earlier meant Paymark could exploit sooner the increased revenue from the swelling number of payment transactions that Paymark Remote makes possible.

"Only two single-processor physical servers were required for the deployment, since the Microsoft architecture allowed all three application tiers to be deployed on a single server," says Clark. "This also reduced the total cost of ownership for Paymark and minimized the operational impacts of the implementation.

"Paymark's existing systems infrastructure and technology assets were also reused, which enhanced the speed-to-market and enabled the organisation's member banks to leverage the new platform as quickly as possible."

Cost savings

Paymark makes savings by hosting PayAnywhere exclusively on Microsoft Windows Server technology, including Microsoft® Internet Information Services 6.0 and Microsoft SQL Server 2005 for the database.

"The use of standard Microsoft technology in PayAnywhere allows enterprise users to leverage existing industry-standard technology management tools and practices, reducing development costs dramatically," says Clark.

The Microsoft .NET architecture also insures Paymark's mobile payments application for the future, since improvements and upgrades can be sourced easily and reliably.

Greater flexibility

The Microsoft architecture is flexible enough to support the varying technical demands of integrating the Paymark Remote system with banks' and retailers' servers. It is possible, for instance, for banks to choose to implement a manual or online registration process for Paymark Remote.

"Or the same bank might wish to migrate from a manual registration system to an online one without disruption, which is also possible" says Clark. "Bringing new banks and retailers onto the PayAnywhere platform is equally straightforward."

Improved client service

Paymark's customers, including New Zealand's retail banks, can now offer mobile payments through existing payment infrastructure. The Paymark Remote service has also made life easier for the bill-paying consumer, who can now authorize payments at the press of a button.

"Retail banks, retailers, billers and the average New Zealander all see the value in our investment," says Tong.

Paymark also has plans to enable Internet purchases using Paymark Remote in the future, for people who are uncomfortable using credit and debit cards online.

The new payment mechanism has helped keep Paymark at the forefront of new payment technology and paved the way for the company to secure more revenue from payment transactions, its core business.

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 who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. 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 M-Com products and services, call +64 9 377 9220 or visit the Web site at: www.mobilecommerce.co.nz

For more information about Paymark products and services, call +64 9 356 8088 or visit the Web site at: www.etsl.co.nz

Microsoft .NET

Microsoft .NET is software that connects people, information, systems, and devices through the use of Web services. Web services are a combination of protocols that enable computers to work together by exchanging messages. Web services are based on the standard protocols of XML, SOAP, and WSDL, which allow them to interoperate across platforms and programming languages.

.NET is integrated across Microsoft products and services, providing the ability to quickly build, deploy, manage, and use connected, secure solutions with Web services. These solutions provide agile business integration and the promise of information anytime, anywhere, on any device.

For more information about Microsoft .NET and Web services, please visit these Web sites:
www.microsoft.com/net
msdn.microsoft.com/webservices

Software and Services

- Products
 - Microsoft SQL Server 2005
 - Microsoft Windows Server 2003 Enterprise Edition
 - Microsoft Windows Mobile
- Technologies
 - Microsoft .NET Framework
 - Microsoft Internet Information Services 6.0

Hardware

- 2 HP DL380 servers

Partner

- M-Com