



### Overview

**Country or Region:** Australia  
**Industry:** Professional services

### Customer Profile

Mint Wireless, based in Rozelle, New South Wales, Australia, develops and manages wireless technology products and services. The company was founded in 2005 and has 20 employees.

### Business Situation

The company wanted to create a mobile payment solution so that trades people and other mobile on-site workers could better manage their cash flow.

### Solution

Using Microsoft® technologies and a software + services approach, Mint Wireless developed a solution that supports mobile credit card payments, invoicing, and transaction integration with accounting systems.

### Benefits

- Improved cash flow and reduced administration
- Cost-effective subscription-based solution
- Ease of use
- Ease of maintenance
- Enhanced security

## Solution Developer Delivers Software + Services Payment System That Fits the Bill

“Our software-plus-services approach, our use of Microsoft technologies, and our innovative design all contribute to a solution that’s making a positive difference for our customers.”

Ross Gillies-Tuck, Senior Product Manager, Mint Wireless

Mint Wireless set out to provide a solution that could help on-site workers of all kinds—from mechanics to builders—immediately collect credit card payments from a customer. The company worked with Microsoft® Registered Partner Genexis Consulting to create the Mint Wireless Portable Payment System, which it implemented using a software-plus-services approach. Based on Microsoft technologies, the new solution delivers integrated functionality for small to large businesses who perform work outside of their office. The solution’s subscription-based nature offers users a cost-effective way to get started, and its intuitive user interface design makes it easy to use. Workers take advantage of the solution’s portability, flexibility, security, and customizability to reduce administrative time, improve cash flow, and better manage their business.



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### Situation

A plumber responds to a call to repair a leak, applying specialized tools and expertise to solve the customer’s problem. When the job is complete, the plumber presents the customer with an invoice and hopes that the customer will pay right away or send a check in the mail soon. Too often, though, collecting payment can end up taking more time than was spent doing the job. For the plumber, that is valuable time that could have been spent on another job.

Mint Wireless was founded in late 2005 to respond to a market need for a mobile payment solution that could solve the on-site workers’ cash flow issues and ease financial administration for them. The company sought to develop a solution that allowed anyone working on-site—whether a member of a large mobile sales force or a self-employed tradesperson—to accept and process credit card payments in real time from any location. “We wanted to help on-site workers reduce the need to track down payments after the fact,” says Ross Gillies-Tuck, Senior Product Manager for Mint Wireless. “The solution had to be secure and easy to use and provide a low cost of entry so that independent trades people and businesses of all sizes could afford to take advantage of it.”

What’s more, Mint Wireless was determined to support the full financial needs of mobile businesses, so the solution needed to not only link up with bank payment systems but also easily integrate with leading accounting software. “Our idea was for people to be able to use a mobile point-of-sale solution when visiting customers, but also be able to customize their product and service lists, add customers to their system, and verify payments working from their homes or offices,” explains Gillies-Tuck. “We wanted to capture the best of both worlds, going beyond what either a solely browser-based or client-based system could offer.”

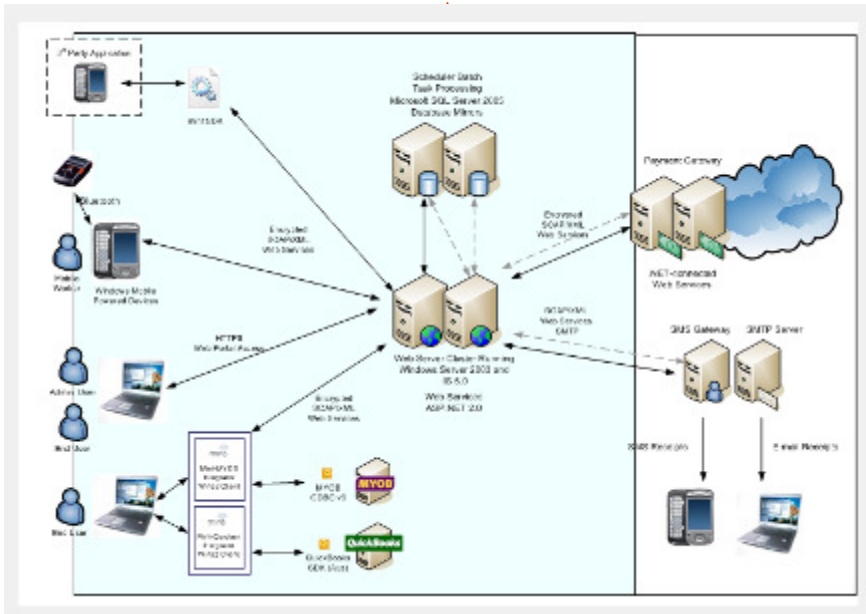
### Solution

Mint Wireless decided that it would develop its Portable Payment System on Microsoft® technologies. “We wanted to use progressive products from a company that could offer us good long-term support,” says Gillies-Tuck. “It made sense for us to base the Portable Payment System on a well-established operating system and product suite, and we liked that we could use Microsoft technologies to develop our entire system with a single, integrated technology suite.”

The company also opted to take a software-plus-services approach so that it could provide a comprehensive, adaptable set of connected experiences for users. “We designed our solution so that on-site workers could use a wireless mobile device to bill customers when on-site and can use a computer to manage accounts through a rich client or Web portal,” says Gillies-Tuck. “Choosing the software-plus-services approach also gives us the flexibility to extend our solution for other user experiences as needed.”

### The Design and Development Process

In 2006, Mint Wireless selected Microsoft Registered Partner Genexis Consulting to help design and develop the Portable Payment System. The first phase of development ran from December 2006 through February 2007. Genexis used the Microsoft Visual Studio® 2005 development system, Microsoft .NET Framework 2.0, .NET Compact Framework 2.0, Microsoft ASP.NET, and Microsoft Visual Studio using the C# language to create the server and Web portal component of the solution and the point-of-sale system for mobile devices. Says Frederick Yip, Managing Director for Genexis Consulting, “The actual development took very little time; it was made easier because we were able to develop all aspects of the solution through a single development environment. The set of technologies and



Mint Wireless released the integrated QuickBooks and MYOB functionalities in October and November 2007, respectively. Genexis also created a Mint Wireless SDK to support interoperability with other third-party systems. Says Gillies-Tuck, “Genexis has been and continues to be a most competent and capable strategic software development partner.”

### The Solution at Work

The completed wireless Portable Payment System uses server computers running the Windows Server® 2003 operating system in a secure data center. Its “multi-headed” client (see figure 1) makes it possible for customers to interact in different ways, depending on the customer’s role at that moment.

On-site workers use the Portable Payment System on a range of Windows Mobile® powered and other mobile devices—including smartphones and PDAs—to pull up pricing information or lists of their customers, products, and services. With a few clicks, workers are able to quickly put together an invoice to present to the customer. They then can swipe the customer’s credit card, capture the customer’s signature directly on the device, verify in real time that the payment is accepted, and print a tax invoice with transaction details such as the approval signature—all by using their mobile device and the small Mint Wireless credit card reader with high-speed printer (see figure 2).

The reader device encrypts and transmits the customer’s credit card information to the mobile device which then sends it using Web services to the Mint Wireless hosted server cluster. From there, the solution transmits the encrypted information to a third-party payment gateway, and that gateway sends the transaction to the appropriate bank for processing. The bank typically transfers funds to the on-site worker’s account within 24 hours.

Figure 1 - The Mint Wireless solution supports “multi-headed” connections, which means that users can interact with the system through a range of mobile devices, a computer, and third-party products.

business requirements drove us to design a software-plus-services solution approach. ” By the end of the first phase, Mint Wireless had the solution in production and was processing customer transactions with the help of a Microsoft SQL Server™ 2005 database.

Phase two of the project lasted from April through July 2007. Genexis analyzed application programming interfaces (APIs) and software development kits (SDKs) for two of Australia’s most widely used small-business accounting systems, QuickBooks and MYOB. “We needed to figure out the best ways to expose an API, using Web services, to interact with those systems so that mobile on-site workers could easily synchronize payments with their preferred accounting systems. By using .NET technologies and by designing the solution with an extensible software-plus-services foundation, we were able to integrate the system naturally and seamlessly with QuickBooks and MYOB,” says Alfred Wong, Technical Director for Genexis Consulting.



status. For those using other accounting systems, Mint provides a link between those systems and the Portable Payment System.

As of November 2007, Mint Wireless has approximately 150 customers, some of which have up to 2,500 individual users. For instance, the company Jim's Group, one of Australia's largest home-services franchises, offers consumers services that range from carpet cleaning to bookkeeping to paving. Franchisees subscribe to the Mint Wireless service to ease the payment-collection process. "Because we're affiliated with a company such as Mint Wireless, our franchisees gain the opportunity to capture their monies owed immediately combined with a full payment solution, whilst offering an added convenience for all Jim's clients," says Jim Penman, owner of Jim's Group. "Mint Wireless has provided us with a flexible payment solution that we can use across all of our divisions with ease, and we look forward to a rewarding and long business relationship."

### Benefits

The solution from Mint Wireless makes it easy for on-site workers to be more efficient with their time, get paid for work more quickly, safeguard their customers' financial information, and integrate payment information into their existing accounting systems. "We're providing a straightforward solution that is accessible to many different users in a variety of ways," says Gillies-Tuck. "Our software-plus-services approach, our use of Microsoft technologies, and our innovative design all contribute to a solution that's making a positive difference for our customers."

### Improved Cash Flow and Reduced Administration for On-site Workers

By using the Portable Payment System, on-site workers gain opportunities to save time and effort when it comes to collecting and

Figure 2 - The compact size of a Windows Mobile powered device with the Portable Payment System and the Mint Wireless credit card reader/high-speed printer makes them convenient for on-site use.

If a device is lost, a worker can purchase another one and easily download the Mint Wireless software from the Web portal by typing in his or her existing user name and password. Because the solution stores each worker's data on the hosted server rather than on the individual client, all information remains secure. Workers have access to the same, complete, up-to-date information that they had previously—regardless of the device they use to access it.

Back in the home or corporate office, workers can log on through the Mint Wireless Web portal to quickly customize the Portable Payment System software to match the specifics of their business. They can add products and services, view and reprint invoices, modify price lists, add customers, and review transactions. Those who handle the financial accounts (often the on-site workers themselves) can synchronize all Mint Wireless transactions with either their QuickBooks or MYOB accounts for an integrated view of their current financial

“By facilitating interaction with other applications and between different types of clients and the server, we’re increasing our value to customers and extending our market reach.”

Ross Gillies-Tuck, Senior Product Manager,  
Mint Wireless

processing payments. Rather than waiting for customers to mail checks and having to follow up on overdue invoices, workers can swipe a credit card on-site and get paid quickly for the work that they’ve completed. When using the administrative features of the solution through the Web portal, they have access to detailed online reports that keep track of payments and transactions in real-time. And workers save additional time and hassle because they can export the online reports into their accounting systems with no manual data entry necessary.

#### **Cost-effective Subscription-based Solution**

The solution was implemented using software-plus-services as an approach to getting the best of both worlds, so Mint Wireless customers can make the most of both hosted and on-site solutions. “The majority of our prospective customers already own a mobile device because they’re critical to running the business,” says Gillies-Tuck. “With the Portable Payment System, mobile businesses are making fuller use of their existing technology investments.”

On-site workers subscribe to the Mint Wireless service, which covers the Mint Wireless card reader/printer and the monthly cost of the software on the mobile device. From there, they pay based on transactions. “Our solution is more cost-effective than traditional systems, which require businesses to make a considerable up-front investment,” says Gillies-Tuck. “Plus, it’s easy to deploy. There’s no need for any on-site installation—users just click on a URL to download the software, which takes a minute or two, and then they’re ready to go.”

#### **Ease of Use**

Because most of the on-site workers don’t spend a great deal of time with computers, it’s important that using the Portable Payment System requires minimal technical

proficiency. “We made sure that our solution wouldn’t be intimidating to our potential subscribers,” says Gillies-Tuck. “That’s part of the reason that we chose to base it on Microsoft technologies. People are comfortable using Microsoft programs, which lend an intuitive nature to our solution. Familiar pull-down menus and a touch screen help make the solution easy to navigate, and that increases user productivity.”

#### **Ease of Maintenance**

For Mint Wireless, taking a software-plus-services solution approach provides a natural alignment with its subscription-based approach. “It’s easy to update the solution for our subscribers because we use Web services to add new features and functionality, which we deploy to the mobile devices when subscribers log on,” says Gillies-Tuck.

The company also enjoys flexible and predictable infrastructure planning. “We’ve configured the solution with load balancing and redundancy so that server-side management tasks can take place without affecting our subscribers’ ability to conduct business,” says Gillies-Tuck.

#### **Enhanced Security**

Because the Mint Wireless solution deals with customers’ financial information, it’s critical that it includes adequate security measures. Transaction data is never stored in the mobile device, and all credit card details are encrypted before they’re sent to the server. “Even if a device is lost, there’s no danger of financial information being available to others,” says Gillies-Tuck. “We’ve made sure that it’s safe and secure for users’ customers to provide their financial information. There’s not a problem for Mint Wireless subscribers in accepting the responsibility for financial information because we’ve minimized the risk of charge-backs and fraud.”

## 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](http://www.microsoft.com)

For more information about Genexis Consulting products and services, call (61) (2) 8003 3328, or visit the Web site at:

[www.genexis.com.au](http://www.genexis.com.au)

For more information about Mint Wireless products and services, call (61) (2) 8752 7888, or visit the Web site at:

[www.mintwireless.com.au](http://www.mintwireless.com.au)

## Interoperability and Extensibility for Greater Customer Choice

Mint Wireless is committed to making the Portable Payment System as flexible as possible for greater adoption and user satisfaction. The company uses Web services for the solution's payment gateway, designed the solution to integrate with existing accounting systems, and provides its own SDK for third-party interoperability with other systems. The software-plus-services nature of the solution also supports extensibility because it's easy to continually introduce new components and client applications to address needs as they arise.

"It's important to us to keep extending our solution and supporting interoperability. We've taken the joint API/SDK approach and made our solution fully compatible with popular finance, accounting, and mobile sales force applications—based on the Microsoft .NET Framework or Java. By facilitating interaction with other applications and between different types of clients and the server, we're increasing our value to customers and extending our market reach," concludes Gillies-Tuck.

## Microsoft Software + Services

Software + Services is Microsoft's approach for the next generation of computing. By bringing together the best of both software and services, we maximize capabilities, choice and flexibility for our customers. The broad Software + Services approach unites multiple industry phenomena including software-as-a-service, service-oriented development and Web 2.0 under a common umbrella.

### Software and Services

- Microsoft Server Product Portfolio
  - Windows Server 2003
  - Microsoft SQL Server 2005
- Windows Mobile 5.0
- Windows Mobile 6
- Microsoft Visual Studio
  - Microsoft Visual Studio 2005
- Technologies
  - Microsoft ASP.NET 2.0

- Microsoft .NET Compact Framework 2.0
- Microsoft .NET Framework 2.0
- Microsoft .NET Framework 3.0
- Windows® Presentation Foundation
- Web Services
- Software + Services

### Partner

- Genexis Consulting

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