



## Microsoft Windows Mobile Customer Solution Case Study



## Facilities Management Firm to Increase Service Delivery Efficiency

### Overview

**Country or Region:** United States

**Industry:** Professional services

### Customer Profile

Grubb & Ellis is one of the world's leading commercial real estate services firms. With 5,300 employees, it serves 100 markets and is the primary facility services provider for Microsoft campuses in the United States.

### Business Situation

Grubb & Ellis wanted to increase work order efficiency for its field service technicians at the Microsoft Redmond campus to efficiently handle increased square footage with only a minimal increase in staff.

### Solution

The company pilot-tested the DataSplice Mobile Integration Suite on Windows Mobile® powered Sprint smart devices to automate the work order process for field service technicians.

### Benefits

- Improved customer satisfaction
- Increased capacity with minimal staff increase
- More comprehensive maintenance data

“The DataSplice application and the Windows Mobile powered devices should allow us to do more work, more effectively, with the same number of people.”

Mickey Allen, Account Executive, Grubb & Ellis

As the primary facility services provider for Microsoft campuses in the United States, Grubb & Ellis needs to maintain a high level of service for steadily growing square footage, while controlling costs. To address that challenge, the company pilot-tested a mobile, automated work order solution, consisting of the DataSplice Mobile Integration Suite that runs on Windows Mobile® powered Sprint smart devices and integrates with the Maximo Enterprise computerized maintenance management system. With this solution, Grubb & Ellis anticipates quicker response times for enhanced customer satisfaction, faster resolution of work orders, and more self-generated work orders. The firm also expects to handle a significant expansion of the Microsoft property portfolio with a relatively small increase in staff, while collecting additional data to support more proactive services and solutions.



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Michael Pilch, Director of Client Services,  
Grubb & Ellis

## Situation

Whether the task is as complex as supporting a department during a move, as urgent as fixing a leaky roof or broken air conditioning system, or as simple as replacing a bank of lights, Grubb & Ellis Management Services is an acknowledged leader in facilities management. The company has built a stellar reputation for maintaining cost-efficient operations and delivering superior levels of service for a variety of owner-occupied facilities nationwide. Key to its service delivery is the Grubb & Ellis Client Service Center, which provides technical support, centralized reporting, Web-based management tools, and a call center and help desk that are available 24 hours a day, seven days a week.

As of 2006, Grubb & Ellis provided facility management services at multiple locations for more than 55 corporate clients. It manages a combined total of nearly 160 million square feet, ranging from corporate headquarters to data centers and industrial complexes. Approximately 9 million square feet of that total belongs to Microsoft, whose campuses are located primarily in the Puget Sound area of Washington State, but also in other locations around the United States.

Cost efficiency and superior service are two high priorities for Grubb & Ellis as it continually seeks to enhance overall customer satisfaction. In fall 2005, Grubb & Ellis began to look specifically at its work order process related to maintaining the Microsoft campuses. Three types of work orders can be generated within its Maximo Enterprise computerized maintenance management system (CMMS):

- Customer-generated work orders created by any Microsoft employee who needs something done, such as a white board installed or the room temperature adjusted.

- Preventive maintenance work orders, which are set up on a routine schedule with a list of tasks that the technician is to perform.
- Self-generated work orders from technicians who notice a situation that needs attention, such as a bank of lights that are burned out. Technicians can generate a work order to capture the time and material associated with resolving the problem.

Historically, work orders were printed at the Grubb & Ellis office, where approximately 100 Microsoft-dedicated Grubb & Ellis technicians came to pick them up each morning and sometimes at other times throughout the day. Each technician carried a cell phone that doubled as a radio, so if an urgent problem came up in the middle of the day, the technician could be notified. However, technicians still had to return to the office to get work orders that had the details of the job. Also, in the course of completing a work order, if technicians saw a situation that required attention, such as lights that needed to be replaced, they would have to call the office and have a work order generated, and then go pick it up or find a PC where they could access the work order and print it.

With more than 355 acres and 90 buildings on the Microsoft Redmond Campus alone, these back-and-forth trips to gather work orders and equipment histories and to check for available replacement parts reduced the technicians' efficiency. In addition, at the end of the day, technicians were spending from 30 minutes to an hour entering the work order data into the Maximo Enterprise system.

Aware that Microsoft was expecting to add another 3 million square feet of facilities in the Redmond area over a three-year period, Grubb & Ellis, in conjunction with the Microsoft Real Estate and Facilities Group,

began to research ways to increase efficiency in the face of increasing work orders. In particular, the team decided to look at adding a mobile component to Grubb & Ellis's work order system.

The goal for the mobile solution is to supply real-time information to technicians and eliminate several steps in the work order process. The increased efficiency is expected to allow Grubb & Ellis to handle the added demand for services resulting from the increased size of Microsoft campuses while adding few employees.

"By adding a mobile solution, we hope to serve that larger campus and a higher number of work orders while adding far fewer technicians than would normally be expected," says Michael Pilch, Director of Client Services for Grubb & Ellis.

## Solution

Grubb & Ellis set three major requirements for its mobile solution. The mobile component to its CMMS solution needed to help the company:

- Continue to meet its Service Level Agreement with Microsoft as square footage increases by up to 30 percent.
- Deliver an even higher degree of customer satisfaction.
- Communicate work order status more quickly to its Microsoft customers.

After looking at various proprietary solutions and solutions based on Windows Mobile® software, the Microsoft Real Estate and Facilities Group and Grubb & Ellis decided to pilot-test the DataSplice Mobile Integration Suite. DataSplice, a Microsoft® Gold Certified Partner, emerged as the leading choice because of Grubb & Ellis's prior experience with the company as well as the speed of implementation and rapid integration of its mobile solution with the CMMS. Based on the Microsoft .NET Framework, the DataSplice

solution is highly configurable, so it can be quickly modified to provide users with remote access tailored exactly to the way they work.

The pilot solution began with designers from DataSplice sitting down with some of the on-site facilities team from Grubb & Ellis to define the high-level requirements for the system such as views, fields, and navigational requirements. "We started with our best practice mobility template for the kind of field service solution we were looking for," says Scott Kunze, President of DataSplice Mobile Computing. "Then we modified that template to match the specific requests of the Grubb & Ellis technicians."

The resulting prototype solution was deployed on a Sprint PCS Vision Smart Device (PPC-6700) running Windows Mobile 5.0 for Pocket PC Phone Edition. DataSplice also developed all the training materials, manuals, and online tutorials for the solution and provided three days of on-site training for the Grubb & Ellis pilot team. When training was complete, the pilot team technicians at the Microsoft Redmond campus began to use the device to connect to the Grubb & Ellis Maximo development environment to work on simulated work orders.

After testing the DataSplice mobile application for two months in the development environment, Grubb & Ellis redirected the application to the firm's production environment so that the pilot team could work with live customer work orders. At that point team members also began to offer feedback on enhancements and changes they would like to see. Some of the initial feedback included requests to simplify the interface and to increase database performance.

"The technicians provided the feedback necessary to make their own use of the smart devices more productive," says Michael

Gropi, Senior Vice President and National Director, Engineering and Facility Resources Group for Grubb & Ellis. Some of the particular advantages pilot users noted included the real-time access to work order information and the ability to get more work done in the same amount of time.

In addition, a few months after the DataSplice pilot started, Grubb & Ellis technicians participating in the pilot were invited to download a beta version of Microsoft Office Communicator Mobile, which extends the reach of Microsoft Office Live Communications Server 2005 to Windows Mobile powered devices. The pilot participants used Office Communicator Mobile to easily check who was online and send them instant messages, or have conversations about particular work requests through their handheld devices.

“Now that the technicians have the functionality they need to do all aspects of their jobs, we can start to measure the results,” says Mickey Allen, Account Executive for Grubb & Ellis.

### Benefits

Grubb & Ellis expects to report on the pilot results at the end of the third calendar quarter of 2006. However, initial feedback indicates potential benefits in customer satisfaction, increased productivity, reduced cost, and from gathering more comprehensive data.

#### **Improved Customer Satisfaction**

Customer satisfaction is measured upon the completion of work orders. Microsoft customers get a notice that the work order has been completed along with an attached survey that they can use to rate service on that work order. Grubb & Ellis has consistently received high customer satisfaction scores from its Microsoft clients, but the firm

continues to look for ways to improve. The DataSplice field service software and the Windows Mobile powered devices are expected to fuel the company’s success by helping technicians complete work orders faster and document that fact to the client sooner. In addition, the ability to open work orders on-site without having to go back to the office will support more proactive service.

“Technicians now have the ability to create a work order wherever they are, which we expect to reduce customer-related work orders and prevent problems, which in turn will help improve the environment for Microsoft employees,” says Pilch.

#### **Increased Capacity with a Minimal Increase in Staff**

By adding this mobile solution to the work order process, Grubb & Ellis expects to increase the efficiency of information throughput and maximize the field time of its technicians. Instead of having to make multiple trips to the office to collect work orders and spending up to an hour at the end of each day entering that work order information into the system, technicians will be able to spend more time in the field completing work. Remote access to more information is also expected to reduce downtime and time spent communicating with others because technicians will be able to get the information they need from their own devices. These capabilities are expected to help technicians respond quicker to work orders, shorten their time to complete a work order, and as a result, increase the number of work orders they can complete per day.

“The DataSplice application and the Windows Mobile powered devices should allow us to do more work, more effectively, with the same number of people,” says Allen. “We expect that putting useful information at the fingertips of the folks performing the service will make us more productive, so we can accom-

moderate the growth in space as well as in the scope of services with only a minimal increase in staff, which should help reduce cost for Microsoft.”

**More Comprehensive Maintenance Data**

The DataSplice Mobile Integration solution provides a standardized way for technicians to collect more data in the field—such as equipment details, mission-critical readings, maintenance data, and new work orders and repair issues—when the information is fresh in their minds. Grubb & Ellis expects to use this added data to perform trend analyses for Microsoft and provide more comprehensive reports. This can help Grubb & Ellis enhance preventive maintenance and provide specific service metrics for its Service Level Agreement. This approach to data management will provide a more effective workflow process; reduce duplication, data reentry, and transcription errors; and require fewer overall hours spent on the task and follow-up paperwork. And it will help Grubb & Ellis be even more competitive in the marketplace.

Grubb & Ellis expects to report on the pilot results by September 2006 and make a recommendation to Microsoft at that time. Based on the pilot results, Grubb & Ellis will establish specific criteria for using this technology, both for Microsoft and potentially for other customers. “In general, we would expect to apply this technology in situations that involve a large, dispersed portfolio of properties,” says Groppi. “We also are more likely to apply this technology to new assignments.”

## For More Information

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For more information about DataSplice products and services, call (800) 377-1974 ext. 1732 or visit the Web site at: [www.datasplice.com](http://www.datasplice.com)

For more information about Grubb & Ellis products and services, call (312) 698-6753 or visit the Web site at: [www.grubb-ellis.com](http://www.grubb-ellis.com)

## Microsoft Windows Mobile

Windows Mobile brings the power of the Windows® operating system to mobile devices, helping businesses and their mobile employees stay connected while on the go. Windows Mobile runs mobile versions of Microsoft programs, including Microsoft Office Outlook® Mobile, Internet Explorer Mobile, Pocket MSN®, Windows Media® Player Mobile, and Microsoft Office Word Mobile, PowerPoint® Mobile, and Excel® Mobile. With Windows Mobile, information workers get powerful software combined with the familiarity of Windows. Combined with available service plans and connectivity options, Windows Mobile-based devices, available from 42 device makers and 68 mobile operators in 48 countries, can be used to make calls, send e-mail and instant messages, surf the Web, and access critical business information even when users are away from the office.

More information about Windows Mobile can be found at: [www.microsoft.com/windowsmobile](http://www.microsoft.com/windowsmobile)

### Software and Services

- Windows Mobile 5.0 for Pocket PC Phone Edition
- Microsoft Office System
  - Microsoft Office Communicator Mobile
  - Microsoft Office Live Communications Server 2005
- Technologies
  - Microsoft .NET Framework

### Hardware

- Sprint PCS Vision Smart Device (PPC-6700)

### Partner

- DataSplice Mobile Computing
  - DataSplice Mobile Integration Suite

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