Providing best-of-breed device management to improve customer service and drive revenue.

One of the biggest barriers your company may experience in the adoption of new wireless data services is the complexity of provisioning and continuous device management. Typically, it would take 33 steps to configure the average mobile phone to send and receive multimedia messages. These steps don't include the myriad other settings you can manipulate to support personal settings, company applications, device maintenance and other configurations to enhance the user's experience. And with hundreds of mobile phones and smartphones from a range of vendors on the market, the challenges you must handle to support your customers only increase.
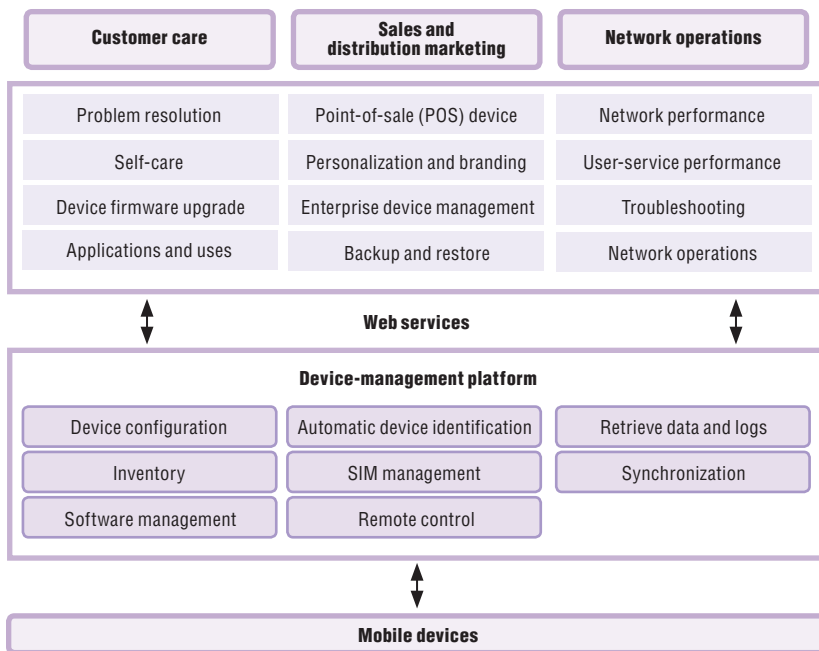
Your IT or customer-care staff may find that devices can't be supported because of an outdated operating system, missing software or an incorrect setting. Perhaps the new device is too complex for the mobile user to set up. Maybe the user doesn't know how to operate it properly and needs training to gain access to the service. Or it could be that connecting to the service is hampered by poor network and service performance. The result? Multiple calls to your customer-service center or help desk — and growing frustration, lost productivity and increased operating costs for both your customers and your employees.

A comprehensive device-management solution

IBM WebSphere® Everyplace® Device Manager provides device management for a broad range of devices.

- *Mobile phones*
- *Personal digital assistants (PDAs)*
- *Notebook and laptop computers*
- *Subscriber Identity Module (SIM) cards*
- *Vehicle telematics devices used in cars, trucks and trains*
- *SmartHome devices used to manage and network home appliances, utility meters and security systems*

The wireless networks that support mobile devices have increased in reliability and performance, making them critical to your employees' productivity — and your business success. But as technology progresses, devices increase in sophistication and reconfiguring them can be a frustrating task for less technology-savvy users.

Customer care	Sales and distribution marketing	Network operations
Problem resolution	Point-of-sale (POS) device	Network performance
Self-care	Personalization and branding	User-service performance
Device firmware upgrade	Enterprise device management	Troubleshooting
Applications and uses	Backup and restore	Network operations

Web services

Device-management platform

Device configuration	Automatic device identification	Retrieve data and logs
Inventory	SIM management	Synchronization
Software management	Remote control	

Mobile devices

WebSphere Everyplace Device Manager lets you manage a range of common functions.

A single management interface reduces cost

A robust device-management solution lets your customer-care staff ask an organized set of questions based on the customer's experiences. At the same time, the device-management solution is automatically checking the current configuration and settings of the customer's device and comparing them to what they should be. This combination of diagnostics can enable your customer-care staff to solve the problem on the first call—helping you save money and increase customer confidence in your data service.

To accommodate the components (such as SIM cards, operating systems and applications) of wireless devices,
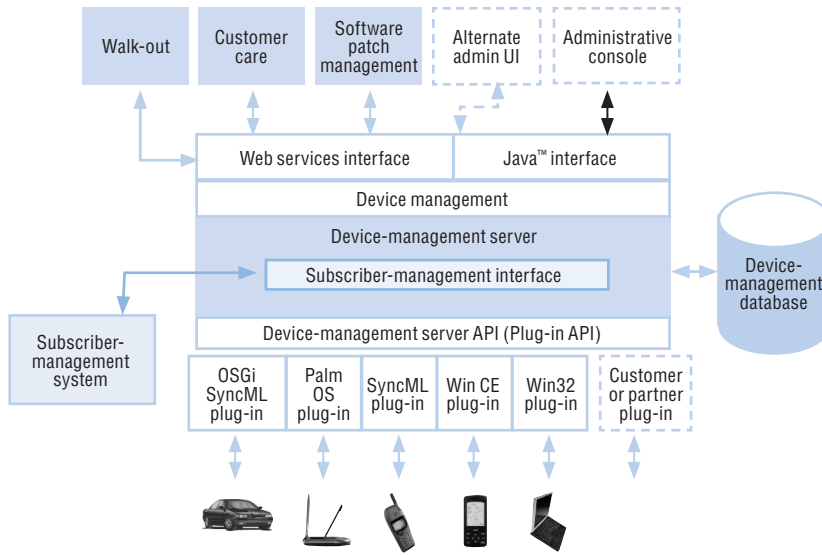
your organization may have developed point solutions to address a limited set of devices or particular management challenges. But with so many devices available in the marketplace, point solutions only increase the complexity of connecting people, processes and information.

Budgets are tightening even as the cost of supporting subscribers —and performance expectations— increase. Users are calling help lines more often, and the lengths of calls are getting longer. To reduce this time and expense, and increase user satisfaction as a result, you need to offer self-service options and to provide help-line representatives with easy access to device information.

But you can't risk the time and expense necessary to replace existing systems to accommodate various devices and their upgrades. Instead, you have to make the most of the systems you have—while considering future growth. By integrating the management of disparate devices through a single point, you can eliminate management islands that require separate deployment and maintenance efforts and skills, and that present a different user interface for each device—increasing costs in the process.

Open-standards-based WebSphere Everyplace Device Manager lets you route common device-management functions through a single interface. So you can reuse these common functions and platforms across a broad range of applications—rather than duplicating them for each separate application. This enables you to support user needs more cost-effectively by:

- *Enabling customer-care representatives to shorten call times because they can diagnose and resolve problems faster than before.*
- *Providing self-service management through a Web browser.*
- *Offering remote diagnostics to identify problems faster and to reduce the number of device returns.*
- *Delivering preventive maintenance through mass healing or mass reconfiguration of entire device fleets.*
- *Extending device lifetime through automated upgrades to new features.*

Walk-out | Customer care | Software patch management | Alternate admin UI | Administrative console

Web services interface | Java™ interface

Device management

Device-management server

Subscriber-management interface

Device-management database

Subscriber-management system

Device-management server API (Plug-in API)

OSGi SyncML plug-in | Palm OS plug-in | SyncML plug-in | Win CE plug-in | Win32 plug-in | Customer or partner plug-in

WebSphere Everyplace Device Manager supports a variety of device classes and protocols.

WebSphere Everyplace Device Manager also includes a Web service application programming interface (API) to support integration with outside components. You can:

- *Integrate partner components directly to build a coherent overall device-management solution.*
- *Invoke the API using adapters to access a hub, like IBM WebSphere Business Integrator, to integrate WebSphere Everyplace Device Manager with other operations support system (OSS) and business support system (BSS) processes.*
- *Add graphical user interfaces (GUIs) tailored to the specific needs of the various device-management participating parties, including in-house operations, user self-care and delegated administration.*

Improve the customer experience

Your telecommunications services have to be available 24x7. While device-management services may not be as critical, users still expect to find help at the time they need it. You can leverage WebSphere Everyplace Device Manager as an integral component in a self-care solution to help users diagnose and repair problems on their own — faster than going through your help desk. WebSphere Everyplace Device Manager also lets you make it easier for users to set up, personalize and provision software and device settings. You can upgrade devices over the air, so users can more quickly and efficiently download new applications and features — and you can avoid costly device service calls that can frustrate subscribers.

Security-rich access to devices

WebSphere Everyplace Device Manager includes, at its core, applications and user interfaces that enable users to access their business and personal information — everything from e-mail, corporate applications and stock quotes to ring tones, games and multimedia content. To help ensure that this information is kept safe, a subscriber-management system can be integrated with WebSphere Everyplace Device Manager to handle authorization and authentication requests before executing any action to help make certain that only authorized users have access to this service. Subscribers are allowed to manage only the devices they own, which can reduce fraudulent charges to stolen devices.

Drive new revenue streams

WebSphere Everyplace Device Manager includes a range of function that can help your organization develop and capture new revenue. The ability to enable devices remotely lets you drive revenue streams by helping you get your services to market ahead of the competition, using over-the-air (OTA) provisioning and configuration of applications and services.

Personalizing the device with a customer's company logo or customizing menu items can help you address each company's unique requirements—and support your marketing strategy as a result. And you can grow top-line revenue directly by being able to develop new services for all your users, offering enhanced managed services for larger businesses and providing device software maintenance for your device vendors.

Designed to meet the requirements of businesses of virtually every size
You don't have to install a host of function you don't need now to accommodate future needs. With WebSphere Everyplace Device Manager, you can start small and add function as your business needs evolve. The solution can run across a wide range of system sizes—from small implementations managing up to a few thousand devices, to high-end, multiserver environments that can handle millions of devices.

Because WebSphere Everyplace Device Manager is a modular solution, functions common to all management tasks are device-independent. So, instead of having to revamp your entire system to add a new device, all you have to do is add the plug-in specific to that device. This flexibility helps enable you to add new devices quickly and easily. And much more cost-effectively.

IBM WebSphere Everyplace Service Delivery family—foundation for flexibility
The WebSphere Everyplace Service Delivery family of offerings—which serves as the platform for WebSphere Everyplace Device Manager—offers expanded opportunities into the mobile on demand business world. With WebSphere Everyplace Service Delivery, you get a platform that allows you to purchase only the functionality you require—and delivers a consistent architecture to build on in the future. So you can meet a broad spectrum of varying needs, and satisfy customer demands as your business grows.

This comprehensive, versatile family of offerings provides you with many key benefits, including the ability to:

- *Leverage wireless technology to reach new markets*
  You can connect, adapt, manage, transform and scale cutting-edge Web applications for a wide range of pervasive devices.

- *Adapt content dynamically*
  You can extend business content to an almost limitless range of wireless and wireline devices, including wireless access protocol (WAP) phones, wireless personal computing devices, intermittently connected devices and digital settop boxes. Business content can also be extended to computers in cars, mobile equipment and household appliances. You can tailor content to match device software characteristics—such as screen size or graphics capabilities—to extend your market reach.