



A Strategy for Wireless Data Management

Increasing Revenues and Margins for Wireless
Network Operators

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Executive Summary

Network operators are continually looking for ways to stay ahead of the competition. Today, the proliferation of new smartphones and advanced wireless devices combined with the widespread adoption of high-speed wireless access have propelled wireless “push” email to the forefront of carrier and network operator strategies across the globe. The ability to offer wireless email, PIM, data and file synchronization across multiple devices and applications is a critical requirement for leading network operators.

But there’s more to the data management question than email. Successful strategies require a wide range of wireless email synchronization and enterprise mobilization capabilities.

Forecasts predict that total service-provider-retained revenues for 3G services in 2010 alone will reach US \$322 billion.

The Trillion Dollar Market

Research commissioned by the Universal Mobile Telecommunications System (UMTS) Forum reveals that 3G services represent a cumulative revenue opportunity of one trillion dollars for mobile services providers between now and 2010.

Taking a conservative approach, forecasts predict that total service provider-retained revenues for 3G services in 2010 alone will reach US\$322 billion. Of those revenues, 66 percent will come from 3G-enabled data services. The consumer segment will contribute about 65 percent and the mobile professional segment will grow from 1 percent today to 35 percent by 2010. (Source: UMTS Forum - 3G how to exploit a trillion dollar revenue opportunity)

In the United States, Verizon Wireless has launched the first 3G wireless broadband network in the US based on CDMA2000 1xEV-DO radio frequency in Washington DC and San Diego. Operating a mobile professional services portfolio to offer wireless enterprise email and high-speed mobile Internet; this service is generating an average US \$79.99 per month per subscriber for Verizon Wireless. (Source: VerizonWireless.com)

In Asia, NTT DoCoMo has been operating its 3G networks since 2001, and has established 33.8 percent of its total FOMA 3G revenues from commercial data services, becoming by that the leading global success story in mobile data services’ revenues. (Source PMN Publications)

In Europe, the UK-based Open Mobile Alliance (OMA) organization has consolidated all service-level standards for the wireless industry and launched global operations. Within two years, OMA has rationalized direction for all core mobile standards - Multimedia Message Service (MMS), Digital Right Management (DRM), SyncML Data Synchronization (OMA DS), SyncML Device Management (OMA DM), Push-To-Talk (PTT) among others. OMA’s credibility is evidenced by the backing of 500 members representing most wireless operators and device manufacturers in the telecom industry.

The New Wireless Data Strategy

These trends confirm one key conclusion: mobile data services are the new revenue opportunity for wireless operators. With the increasing demands for “anytime, anywhere access” to data, mobile data management is at the core of subscriber demands worldwide. However, in order to maximize this opportunity operators must:

- Increase Data Services ARPU
- Deliver Higher Margins on Data Services
- Reduce Device Support and Repair Costs

To capture share and revenues in the highly competitive and dynamic communications market, network operators must consider a three-pronged approach.

Provide Wireless Email and Data Push

‘Push’ email and PIM services as well as corporate data and multimedia content push are essential to enable both consumers and mobile enterprises. But the solution must be optimized for a wide range of smart devices and SyncML compliant terminals. Through wireless email and data push services, wireless operators can increase margin and penetration in enterprise mobility.

Offer Seamless Mobile Device Management

Mobile device provisioning, servicing and customization that enhance overall user experience while building customer loyalty and lowering operating and support costs will become a key competitive advantage in the next two years.

Ensure On-Demand Data Access

Remote network access that allows business users to browse enterprise and home networks, share data and take advantage of local, remote and over-the-air synchronization services will separate leading network operators from the rest of the pack.

This white paper will explore these three key areas of wireless data and device management in greater detail.

Wireless Email and Data Push

It is no surprise that email is the new killer application. In Europe alone, wireless email services will grow from a US \$30 million market in 2003 to over US \$3.5 billion market by 2008. (Source: Analysis Research)

To address this market opportunity, network operators need the industry's most robust, reliable, and manageable data push solutions for their customers, solutions that enable customers to better manage and extend the functionality of mobile information on a real-time basis.

For over a decade, Intellisync has been a leading provider of Mobile Data and Device Management Solutions. Pioneering the vision of Mobility Unlimited™, Intellisync provides Network Operators, Service Providers and Device Manufacturers with a strategic portfolio of products and to capture more of the growing mobile data services market.

The Intellisync solution for wireless email and data push solutions guarantees wireless operators:

- Higher margins on commercial deployments with wireless push email services.
- A higher adoption rate for services because of its device and network agnostic architecture.
- The greatest degree of flexibility allowing mobile enterprises to customize a solution that best fits their business deployment needs, with any type of information, over any network, and with any device.

Intellisync offers several deployment models for wireless operators.

Any Information - With Intellisync wireless email and data push services you can offer your customers wireless access to both corporate (MS Exchange and Lotus Domino) and personal (POP/IMAP) email from their wireless devices. The email solution offers push synchronization of email with subfolders, calendar, meeting requests, contacts, notes, tasks, and global

address book/distribution lists when available. Files (i.e. MS Word and MS Excel) are available for viewing on devices, and users are provided with backup and restore features. A single, consistent client is provided to users, regardless of deployment model, making it easy for wireless operators to migrate individual users to enterprise-ready deployments.

Any Device - Intellisync offers true, network-based push email and PIM synchronization, along with file access and device security, for a broad set of wireless devices including Microsoft Windows Mobile for Pocket PC and Smartphone, Palm OS, Symbian OS, and wireless tablet PCs or laptops.

Any Connection - Intellisync wireless email and data push services are optimized for performance over any radio frequency such as CDMA, TDMA, GSM, GPRS, EDGE, and WiFi networks. Intellisync wireless email and data push services can also be integrated into wireless operator billing and provisioning systems, which offers custom authentication and branding options. Intellisync data services are offered in several deployment models to accommodate any business model required by wireless operators and include:

- **An Individual Mobile Professional and Prosumer** - A Personal Email and PIM Monitor for individuals.
- **An SMB and division of large enterprises** - A Monitor for division of large companies and SMB to deploy without IT involvement.
- **A Large Enterprise**
- **A Hosted Enterprise Solution** - Hosted by the network operator on behalf of the enterprise.
- **Behind-the-Firewall Solution** - Hosted by the enterprise behind its firewalls to accommodate highest level of corporate data control.
- **Internet Users** - Hosted for POP/IMAP service for individuals or in conjunction with corporate deployments.

Mobile Device Management

Form factors are exploding: smartphones are getting smarter as users become more demanding. This creates an enormous challenge for enterprise mobility officers.

The Enterprise Systems Management market to develop into a single mobile technology standard over the next several years which will generate from \$141 million in 2003 to \$914 million by 2008 for wireless operators in North America. (Source: Gartner)

Mobile Device Management (MDM) is an infrastructure solution that enables the customization, personalization, and servicing of personal devices such as mobile phones and personal digital assistants across wireless and wired networks. Eventually, this management of devices will extend to embedded appliances in cars, homes, and elsewhere. MDM allows wireless network operators to:

- Deploy popular revenue generating services such as wireless data insurance packages to back up and restore device information and capabilities.
- Upgrade the user experience on existing terminals through provisioning of personalized services.
- Increase customer satisfaction with OTA diagnostics and repairs.
- Provide immediate access to new services when OTA provisioning is available on the operator's network.
- Save on support costs when repairs, troubleshooting, and software updates are completed OTA.

For device manufacturers, MDM guarantees:

- Savings on after-sale device support costs with OTA repairs.
- Shorter device release cycles when software and firmware updates can be performed after releasing terminals to network operators and before market launch.

Mobile Device Management is an infrastructure solution that enables the customization, personalization, and servicing of personal devices.

Intellisync Mobile Device Management solution guarantees interoperability, scalability, and global support of any device across any deploying networks. Intellisync leadership in the definition of the SyncML standard and breadth of relationships with device manufacturers have been a key enabler to its early successes with this solution.

Based on SyncML DM, Intellisync Device Management solution is a Java-based engine for over-the-air device discovery, provisioning, and management. It natively supports leading terminals, such as Samsung, Nokia, Motorola, and Sony Ericsson and allows for real-time support of any new device type through a dynamic device setup console. The device setup console allows customers to immediately offer support for new released device models without having to upgrade their systems.

This solution supports a carrier's local network settings and roaming agreements guidelines to enable continuous device management operations, which allows network operators to save on terminal support costs regardless of where users roam, as well as increase revenues as data services are provisioned wherever users roam.

On-Demand Data Access

The evolution of mobile access began with voice-only networks and has evolved to include data networks featuring carrier-closed portals. At the same time, there are now early examples of open mobile portals becoming available. As the future unfolds, new services will be becoming available including:

- Remote and mobile networks' access and browsing services.
- Mobile networks' data management and remote control capabilities.
- Personal Mobile Networks where any user is connected to all their information systems regardless on which fixed or wireless networks they are on.

For network operators, Intellisync has been driving thought and product leadership through the creation of an on-demand data management platform, which is designed to offer:

- Remote data browsing of email, PIM, Intranet data including mapped network drives and enterprise servers.
- Across-networks data-sharing and file uploads/downloads.
- On-demand PIM, email, and any data synchronization whether this is required locally, remotely, or over-the-air. This solution complements Wireless Data Push, in that it provides users who don't want to pay for continuous data delivery a solution for data pull - where they pay per usage for the data they choose to receive.

Intellisync on-demand data management solution is by far the most adaptable solution available.

- Operates from any browser-based device, a clientless solution that lowers the barrier to subscriber adoption.
- Doesn't require any changes to firewalls and proxies, yet offers the benefits of a software-based VPN system.

**As the future unfolds,
new services will be
becoming available.**

Currently deployed globally, Intellisync on-demand data access solution delivers two core extensible platforms:

1. Remote email and intranet browsing powered with secure VPN (sVPN): a Java-based system providing remote browser-based access to email, IM data, files, folders, and mapped network drive content, allowing sharing and access right for groups' access. It also provides host clients for access into home and enterprise networks without any firewall or proxies changes.
2. Multi-point, over-the-air SyncML compliant synchronization of PIM, email and any data types: a Java-based system providing local, remote, and OTA synchronization against Microsoft Exchange, Lotus Domino, Web mail systems and any third-party groupware system. It also operates against any email and PIM clients, such as Microsoft Outlook, Outlook Express, Lotus Notes, and more. It also offers native support for any SyncML compliant device and operates against any database system.

Conclusion

As network operators deploy data services, they will evaluate new wireless solutions on the value they return. This value will be defined in the form of increased Average Revenue Per User (ARPU) and profitability, optimized user experience, reduced churn, and a lower Total Cost of Ownership (TCO).

Intellisync solutions provide wireless operators with measurable business value via optimal user experience, higher deployment margins, standards adherence, carrier-grade security, performance, and scalability that is proven in global live deployments.

Millions of mobile consumers and thousands of global companies now turn to Intellisync for mobility solutions. Our award-winning services have become the de-facto global standard - enabling unlimited mobility.

Intellisync has reinvented synchronization for the mobile industry through the vision of Mobility Unlimited™, and has delivered on this vision with a modular platform of Mobile Data and Device Management Solutions.

In summary, there are three advantages that demonstrate Intellisync's value-added business proposition for network operators:

- Higher margins on data services. The Intellisync wireless data solutions operate on any mobile device, with many flexible deployment models enabling wireless operators with greater pricing flexibility that translates into higher margins.
- Reduced device support and repair costs. Only Intellisync has an interoperable, standards-based device management platform that can reduce overall mobility costs and establish new revenue opportunities for wireless operators.
- Increased data services ARPU. New and extended data services for multi-device synchronization, mobile back-up and restore, remote network access and file sharing deliver competitive differentiation and new revenue opportunities.

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About Intellisync Corporation

Intellisync Corporation provides organizations with a comprehensive suite of software products and services that synchronizes and distributes critical information to employees, customers, or partners. Intellisync Corporation's solutions effectively address the growing number of devices, access points, and data sources utilized by the typical mobile worker in today's enterprise, allowing organizations to maximize productivity while minimizing complexity. As a result, enterprises are able to optimize their existing investments, without having to add costly mobile infrastructure. With Intellisync Corporation's enterprise offerings, organizations can extend the usefulness of their devices, plug network security holes to promote safe exchange of sensitive information, and Web-/mobile-enable a variety of data sources.



Contact Us

To request more information on how Intellisync mobility solutions can help increase revenue, and guarantee subscriber satisfaction, call 00.800.7862.8324 internationally and 408.321.3823 in the US.