

# Mobile Superstores



## One-Stop Shopping for Mobile Data Services

By Brian Kinane

### Arrival of the Mobile Superstore

While revenue from mobile data services such as ringtones, music and games is growing rapidly, mobile service providers continue to wrestle with the fragmented nature of their supply chain, retailing systems and delivery mechanisms. Various approaches have included “walled-garden” portals, i-mode and reverse-billing premium SMS, to name a few. What operators are beginning to recognise, however, is that selling goods through mobile commerce is no different than selling goods through “real” commerce or Internet commerce. Just as Amazon was successful by modifying WalMart’s business strategy for Internet consumers, winning strategies in mobile data services will be an extension and modified application of the Amazon, I-Tunes and WalMart business models. **Enter the Mobile Superstore.**

The Mobile Superstore is a one-stop shopping location for a large subsection of like-minded consumers seeking similar goods and services. In the physical world, WalMart harnessed the purchasing power of these consumers by consolidating a range of goods - clothing, electronics, etc. - under one roof to simplify the buying process. In the virtual world, Amazon similarly consolidated a range of goods applicable to Internet consumers - books, CDs, electronics, etc. - and used advances in technology to offer convenience and lower prices to build customer loyalty. In the mobile world, service providers now have instantaneous access to like-minded consumers seeking similar goods and services - news, ringtones, MP3 music, games etc.

Winning businesses in the mobile world will be those who best evolve the Internet model for the particular characteristics of the wireless domain i.e. those who consolidate fragmented suppliers of mobile media and entertainment, overcome new technical challenges to provide the optimal user experience and build customer loyalty through brand recognition.

### Evolution of the Superstore Business Model

The “superstore” business model continues to improve with advances in technology as each new delivery channel expands on previous achievements. In the physical world, WalMart increased profits by increasing benefits to the consumer through vendor consolidation, supply chain rationalisation and offering one-stop shopping convenience. Amazon capitalised on the mass-market adoption of the Internet by not only replicating the WalMart business model, but also by exploiting advances in technology to offer increased consumer benefits. One unique customer benefit was Amazon’s ability to track consumers purchasing habits and preferences in order to offer a highly personalised shopping experience. Both these companies have since expanded their retail channels to combine digital and physical retailing - a combined physical/digital retail model for physical goods.

In the last year, Apple launched I-Tunes - a sophisticated e-commerce portal for the retailing of MP3 music downloads. This model has extended the current consumer e-commerce model to include delivery of digital products direct to the consumer device. As a consequence, digital rights management (DRM) systems have been incorporated into the I-Tunes mechanism to ensure rights and copy protection for purchased content.





The mobile domain presents similar challenges as those facing Amazon and I-Tunes when they both extended traditional business models to the new Internet domain. With mobile commerce, suppliers must overcome the consumer's limited ability to search for information. Ease of information access and navigation will be crucial to increasing wireless data usage. Additionally, service providers must recognise that consumers will be accessing content and services across a wide range of mobile devices. The service providers' ability to transform content and

optimise its presentation on each unique device will be vital to mass-market adoption of mobile data. Furthermore, content suppliers must protect mobile data through DRM. While these requirements, which are unique to the mobile industry, are challenging, each new challenge presents an opportunity to combine existing software infrastructure with advanced mobile software solutions to present a compelling consumer experience that will yield substantial profits to the leading mobile data suppliers.

Feature	Physical Store	Internet Domain Physical Products	Internet Domain Digital Products	Mobile Domain
Supply Chain Disintermediation	✓	✓	✓	✓
Branding & Convenience	✓	✓	✓	✓
E-Payment	✓	✓	✓	✓
One-Click Purchasing		✓		✓
Order fulfilment	✓	✓	✓	✓
Consumer Personalisation		✓	✓	✓
DRM			✓	✓
One-Click Navigation				✓
Digital Delivery			✓	✓
Device Management				✓



## Implementing the Mobile Superstore Solution

Of all the players in the wireless data market, mobile operators are uniquely poised to become the Mobile Superstore. Clearly, mobile operators have the greatest control of and access to the mobile consumer. They can easily consolidate and rationalise the fragmented supply chain to offer an easy-to-find, one-stop shopping experience. Moreover, they can best secure consumer loyalty having already built a trusting relationship with their subscribers. While some mobile operators such as Vodafone and T-Mobile have begun to implement the superstore business model, many have yet to capitalise on this opportunity.

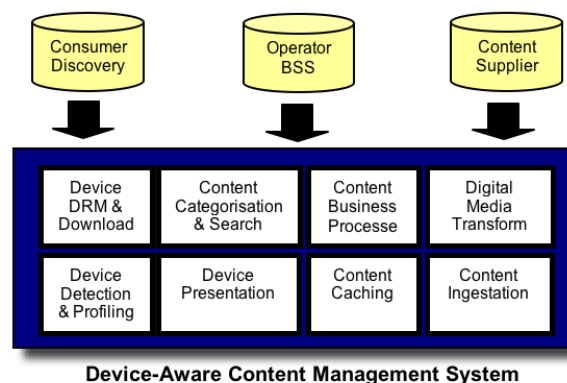
The following seven simple steps are an extension of the business models employed by WalMart and Amazon that a mobile operator can take to become a Mobile Superstore:

1. Create an open, scalable, services-oriented architecture platform with open APIs that makes it easy for third-party content providers and content aggregators to deliver mobile data services across a network
2. Create a mobile portal with strong brand management capability, excellent automated customer self-service and sophisticated community and consumer segment management. The mobile portal should, at all times, be configured to assist the consumer in finding and purchasing products
3. Offer a sophisticated catalogue that allows efficient introduction of new products as well as manage related metadata and associations. The catalogue should support easily navigated product categories, be searchable against a range of consumer criteria and support combinations of different product types against specific themes and promotions. In addition, the catalogue should be device-aware and only present products that are suitable for the target device
4. Fully leverage individual and consumer personalisation to ensure most relevant products and offers are presented to the consumer
5. Employ a standards-based software infrastructure platform (application server, portal, content management system, BSS) to offer a unified, fully-integrated framework for services discovery, delivery, billing, and order management. Extending the existing infrastructure rather than creating separate mobile infrastructure, can best accomplish this
6. Ensure robust, protected, tailored and traceable delivery management of digital content to any mobile device
7. Ensure maximum availability of the catalogue to the subscriber device base. Guarantee access to content in various formats (WML, XHTML, SMS, MMS, MP3, etc.) from a range of mobile devices (smartphone, PDA etc). Deliver a high-quality presentation experience and one-click purchase capability across all mobile devices.

It is difficult for operators to effectively implement the modern mobile superstore as they currently operate many disparate systems for different types of content, services and users. This has resulted in high capital expenditure, high operational costs and difficulty in adapting the superstore to support new consumer needs and new product lines. In order to make substantial progress in driving revenue and reducing associated cost, operators need to move towards one integrated solution for managing the consumer purchasing process.

## Migrating to a Device-Aware Content Management Approach

A new class of integrated platform, known as the device-aware content management system, has emerged to address the business challenges facing mobile operators in their quest to become leaders in the wireless data market. This platform extends existing content management solutions to enable operators to exploit the full power of Internet retailing techniques and methodologies, while simultaneously addressing the challenges of presentation and download across the diverse mobile device community.



The standards-based nature of the system allows operators to reduce their internal IT operation costs by merging the separate content and delivery systems into one platform. The unified nature of the system enables a much more seamless purchase experience for the consumer and enables content suppliers to efficiently supply timely products to operators. In addition, operators can drive purchasing activity by quickly introducing new products and promotions without facing prohibitive operational costs. The end result is a highly personalised consumer shopping experience, which not only results in increased revenues, but also generates unrivalled customer loyalty.

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## Mobile Content Delivery

The Mobile Content Delivery Solution (MCDS), brought to market through a collaboration between BEA, EMC Documentum and MobileAware, enables mobile operators to drive revenue and improved customer satisfaction through the efficient delivery of rich media content, such as applications, games, ringtones and images, to any mobile device.

Operators deploying MCDS get revenue from each successful content download. Content Providers receive a share of the revenue from each download, providing an incentive to publish compelling content to an operator's MCDS.

MCDS is built on a core set of market-proven components on to which the content delivery business processes of the operator are mapped:

- **BEA WebLogic Platform:** providing the User Portal framework for discovery of available content and the facilities to enable rapid integration with an operator's existing billing and messaging platforms
- **EMC Documentum Content Management Solution:** providing full content lifecycle management from submission and acquisition, to cataloging and verification, to publishing and eventual retirement of digital media
- **MobileAware Mobile Interaction Server (MIS):** providing device recognition, optimal device rendering of discovery portlets and maintaining profiles of devices and the digital media formats they support
- **MobileAware Fulfillment Manager:** providing delivery of downloadable content across a range of access channels by determining the appropriate download mechanism based on content type and target device and subsequently ensuring completion of the download itself.

## About BEA Systems

BEA Systems, Inc. (Nasdaq: BEAS) is a world leader in enterprise infrastructure software, helping enable companies to improve business responsiveness through service-oriented architecture (SOA), a software design approach that more closely aligns IT with business objectives. With 15,000 customers worldwide, including the majority of the Fortune Global 500, BEA and its WebLogic® and Tuxedo® brands are among the most trusted names in business technology. Headquartered in San Jose, Calif., BEA has 75 offices in 36 countries. More information on BEA products and services is available at [www.bea.com](http://www.bea.com)

## About EMC Documentum

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## About MobileAware

MobileAware is a leading provider of mobile business solutions. The company's software products enable web-based content to be delivered to all mobile devices - allowing for easier creation, better presentation, and greater accessibility of mobile content and services. MobileAware customers include mobile carriers seeking to create and deliver compelling mobile services to increase wireless data traffic; media and entertainment companies seeking to extend their brand and develop new revenue streams by delivering existing web-based content to their mobile customers; and cross-vertical enterprises seeking to extend real-time business information to their mobile workforce. Headquartered in Dublin, Ireland, MobileAware is a privately held company and is on the Web at [www.mobileaware.com](http://www.mobileaware.com)