IDC TECHNOLOGY SPOTLIGHT

Mobility and ECM: Extending Document-Intensive Processes Beyond the Back Office

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The broad availability of inexpensive, connected commodity devices — that is, smartphones and tablets — is enabling organizations in every industry to transform their business processes. Organizations are providing mobile devices to salespeople, field service personnel, and others whose jobs take them away from the office. Mobility is improving worker productivity and team collaboration, and it enables organizations to streamline workflows, reduce cycle time, and improve customer satisfaction.

Many business processes are document intensive, making them ideal candidates for automation using an enterprise content management (ECM) system. ECM systems provide document management, eforms, and workflow and reporting capabilities and — combined with mobility — give field workers access to all of the information they need to make decisions and move business processes forward at the point of service.

ECM solutions differ, however, in their level of support for mobility. This paper examines the specific capabilities that ECM systems must provide for mobility. It also examines the role of ECM vendor Hyland Software in this strategically important market.

Introduction

Mobile devices have become ubiquitous over the past few years among consumers, and the use of both smartphones and tablets is growing quickly within the enterprise. In the United States alone, there will be 183.4 million smartphone users and 138.3 million tablet users by the end of 2013. By 2017, these numbers will grow to 222.4 million smartphone users and 262.1 million tablet users.

The "bring your own device" (BYOD) trend is one catalyst for this growth: Employees are clamoring to connect their smartphones and tablets to the corporate network so they can access email, documents, and other corporate information while on the go. In fact, as IDC research shows, the majority of information workers already use a mobile device today for work purposes.

Enterprises, however, are also recognizing the opportunity that the availability of inexpensive off-the-shelf connected devices gives them to transform their business processes, and they are provisioning smartphones and tablets to employees — including salespeople, field service personnel, insurance adjusters, case workers, and others — whose jobs take them away from the office. Today's mobile devices provide a computing platform with unique capabilities such as the camera and GPS that enable "smarter" apps and, ultimately, boost employee productivity. They also overcome all of the obstacles that proprietary hardware and networks posed to mobilizing the workforce just a few years ago: In place of proprietary hardware and break/fix maintenance headaches, today's mobile devices are commodity hardware that is easily replaced (and managed); and in lieu of proprietary networks with limited reach, today's mobile networks are cost effective and span the globe. Putting mobility to work on behalf of the enterprise requires only the apps that run on the devices.

Many of these apps are document centric: They give mobile workers access to the information they need and enable them to participate in workflows so they can move a business process forward and better serve their customers. For example, they might allow a case worker to quickly review newly received documents for a pending matter and make a decision; enable a claims adjuster to upload photos of a damaged car and attach them to the claim, speeding payment authorization; enable a public safety field worker to call up relevant documents for inspections; or give a home healthcare worker instant access to a patient's full medical history.

These are use cases that put content to work in the context of a business process, and they are perfect applications for ECM. After all, the automation of document-intensive business processes has been the sweet spot for ECM for many years. What's needed is an ECM solution with built-in support for mobility — one that lets the organization *extend* its ECM implementation to its mobile workers without requiring customizations or significant reconfiguration. Mobile workers are part of a broader team that needs to share the same documents and folders and participate in the same workflows, so building a separate system for them makes little sense.

Benefits

Extending the ECM system to mobile workers can dramatically shorten cycle time because workers no longer need to travel back to the office to collect the information required to complete assigned tasks or to submit the documents, photos, or forms required to move a business process forward. This makes individual workers more productive, improves team collaboration, reduces errors and rework as collaboration becomes more synchronous, and helps streamline the decisioning process — leading, ultimately, to happier customers.

ECM systems that have built-in mobile support let organizations take advantage of this opportunity without having to develop custom apps or undertake a separate implementation effort. A single ECM implementation provisions all users — whether they access the content management system using a desktop PC, laptop, smartphone, or tablet and regardless of whether they connect via the corporate LAN, the Internet, or their wireless carrier. That implementation includes folder hierarchies, configured workflows, role-based access and security, and so forth. Native mobile clients for popular smartphone and tablet operating systems (including iOS, Android, and Windows) take advantage of the unique capabilities of mobile devices (for example, leveraging the camera for information capture) and ensure good performance.

ECM solutions with strong mobile support also have a device database that keeps track of the specifications for the many different smartphone and tablet models. This database — combined with automatic device detection — enables the ECM system to dynamically adapt the mobile experience for the specific device's screen size and other hardware specifications and ensure an optimal user experience. Vendors that offer a device database can quickly support new smartphone and tablet models as they ship, allowing the organization to readily take advantage of technology advances and choose whatever device(s) make the best sense for users, taking specific steps to support them.

An ECM solution that has good mobile support will also include the ability to work offline, so employees can be productive when they can't connect to a network. Situations often arise where network connectivity is unreliable or completely unavailable. For example, employees may need to review contracts or case files while on a plane, visit a patient at home, or travel to a rural area to meet with a customer. An offline "briefcase" ensures that mobile workers always have a local copy of all the documents they need on their smartphone or tablet (or laptop for that matter). The offline "briefcase" also ensures that any changes they make to local documents are propagated back to the server once the network connection is restored so that all users have up-to-date information. It's important to note that this is more than simple file sync and share: The offline "briefcase" essentially replicates the users' ECM environment, enabling users to work the same way whether they are connected or disconnected.

Trends

Over the past several years, ECM has become increasingly strategic to the enterprise as it has evolved beyond limited, departmental applications to enterprisewide use. Today, ECM not only provides the central repository or system of record that ensures "one version of the truth" for enterprise content but also is a platform for managing and optimizing content-intensive business processes across the organization.

ECM solutions are frequently excluded from discussions about business process management (BPM); however, they combine document management, eforms, and workflow and reporting capabilities, making them ideally suited for this task. Many transaction- and case-driven processes are content intensive and require a highly integrated approach to document and process management. Examples include cross-industry scenarios such as invoice processing, employee onboarding, and legal contract life-cycle management and industry-specific scenarios such as insurance claims processing and underwriting, mortgage loan processing, patient information management, application review in higher education admissions departments, grants application management, and so forth.

In some cases, the ECM system automates a standalone business process. Often, it integrates with one or more business applications and plays a supporting role wherever documents (and document-driven workflows) come into play. Innovative ECM vendors have developed integration technologies that make it quick and easy to plug their solutions into customers' existing applications, whether vendor provided or custom built.

More recently, mobility has become an important topic as organizations need to extend their business processes — including their document-driven workflows — to mobile users. IDC believes the rise of mobile computing gives organizations new opportunities to leverage their ECM investments and streamline their document-driven business processes.

Vendor Profile: Hyland Software

As one of the 10 largest ECM vendors in the world (and one of the fastest growing), Hyland Software has focused on managing document-intensive business processes for many years. Hyland's flagship offering, OnBase, is an ECM software platform that natively combines document and process management capabilities in a single product.

Hyland made its name selling OnBase to midmarket organizations with limited IT resources, primarily through its reseller channel, and OnBase was designed from the start to be highly configurable and easy to integrate — minimizing or eliminating the need for costly customizations that can also make upgrades difficult. OnBase readily integrates with all of an organization's business applications — whether vendor supplied or custom built — via Hyland's Application Enabler Live, Enterprise Integration Server, APIs, and Web Services.

Hyland has continued to address the needs of midmarket customers even as the company has steadily moved upmarket over the past decade, building up a direct sales force that targets specific industries (such as healthcare and higher education) and transforming OnBase from a departmental imaging product to a content and process management platform that is capable of meeting the high-performance requirements of larger enterprises. The company backs its direct and indirect sales channels with a sizable professional services organization staffed by employees with business process and industry domain expertise.

Hyland's heritage in the midmarket serves the company particularly well with regard to mobility: The company's mobile clients enable smartphone, tablet, and laptop users not only to access the ECM system on the server and participate in workflows but also to leverage all of the configuration that has been done on the server. This means organizations can easily add mobile users to their existing OnBase implementation because no extra effort is required to enable them; and it makes OnBase an attractive choice for new ECM customers planning to extend ECM access to mobile users.

Hyland has been supporting mobility for about four years — it provides mobile clients for iOS, Android, and BlackBerry — and was the first vendor Microsoft worked with to build mobile apps for Windows 8 tablets. (Microsoft invited Hyland to showcase its Windows 8 tablet apps on stage at the recent Microsoft BUILD conference.) Hyland's excellent understanding of mobile use cases and their requirements is reflected in the company's product design. The company's mobile clients let users capture and upload information; retrieve, change, and create documents; participate in workflows; and monitor business processes while on the go.

Highlights of OnBase's mobile capabilities include:

- **Mobile capture.** OnBase mobile users can use their mobile devices to capture photos and annotate them for reference. They can also take advantage of OnBase eForms, which automatically resize to fit the form factor of the particular device.
- **Ability to work offline.** OnBase mobile apps have offline capabilities built in so users can continue to work and be productive even when they have no network connection. OnBase automatically pushes content to a mobile "briefcase" so users have all the content they need on their device. They can review, update, and create documents; fill out forms; and upload photos while offline. When a network connection is reestablished, changes are automatically synced with the OnBase server.

The OnBase server also manages the central repository, so there is never any risk of information loss in the event that an employee loses a device or a device needs to be wiped. The OnBase server also manages all configuration information, so mobile access to content is managed in accordance with OnBase user rights and with full concurrency management.

In addition to its mobile ECM clients, Hyland provides two fully featured vertical apps for Microsoft Windows 8 tablets: one for the insurance industry and another in healthcare to enable hospital/clinic patient interaction. The OnBase Insurance Field Adjuster App for Windows 8 gives the property and casualty insurance adjuster real-time access to customer information using a tablet. The app immediately notifies the adjuster about a new damage claim and provides driving directions. The adjuster can capture witness statements and upload photos, annotating them to highlight important details of the loss for future reference. The app lets the adjuster submit an estimate for approval and payment, making the estimate instantly available to approvers in the home office. An integrated esignature capability also allows the adjuster to meet with the customer and complete the adjustment process on the spot — transforming a process that typically takes days or weeks into one that takes minutes or hours and turning an unhappy event into a positive customer experience that brings peace of mind and builds loyalty.

Hyland believes Windows 8 tablets are seeing success in the enterprise because customers can choose the device that best fits their budget (from a wide variety of hardware manufacturers), and they can run their existing Windows applications — in addition to new, purpose-built apps — on the devices. For example, insurance companies can load their repair estimate calculators and diagramming tools on the devices and run Microsoft Office. Users can also run multiple apps at the same time, docking the OnBase app momentarily and then returning to it. They can even pin a specific folder to the tablet's start screen for quick access. Full OnBase functionality is also available on Windows tablets — including an Outlook integration that lets users work directly in their email to trigger OnBase workflows, upload emails and attachments, or retrieve documents and send them as attachments.

Challenges

The biggest challenge for Hyland lies in replicating its success outside the United States as it seeks to grow internationally and within new segments as it seeks to expand its target market. With its recent acquisitions, Hyland has expanded its presence to the Nordics and has branch offices in Brazil, London, Switzerland, and Tokyo, as well as support organizations in Australia, Canada, France, Germany, India, Italy, Singapore, South Africa, and Spain.

Still, the company lacks the global operational infrastructure of the large IT platform vendors and will need to be selective when picking its battles internationally. Hyland will need to leverage its domain expertise in industries such as healthcare and insurance and focus on growth in specific regions. Hyland also has an opportunity to leverage its OnBase Online cloud services to jumpstart its penetration of targeted international markets.

Conclusion

Today, organizations of all sizes and from every industry have a compelling opportunity to transform their document-intensive business processes — eliminating inefficiencies, reducing cycle time, and improving customer satisfaction — using an ECM solution with built-in support for mobility. Every organization that sends workers into the field can benefit. Every industry has mission-critical use cases, from insurance claims processing to patient-clinician interactions to public safety inspections.

Equipping field workers with mobile content apps ensures they have all of the information they need at their fingertips to complete tasks and move business processes forward wherever they are, whether they are connected to the network or working offline. This eliminates costly, manual steps in the business process that result in significant delays and — often — errors.

IDC believes that out-of-the-box support for mobility should be a key requirement for any organization investing in ECM today. Customers should look for a solution that is easy to configure: Mobile clients must be able to leverage the organization's ECM implementation and extend document management and workflow capabilities to mobile users without significant configuration or mobile app development efforts. Solutions that entail mobile app development or that require significant effort to configure for different mobile devices will be costly to maintain. The ECM vendor should offer native mobile clients for all of the popular mobile operating systems and support the broad array of devices/form factors.

Vendors with deep mobile expertise are increasingly bringing industry-specific mobile apps to market — whether for insurance adjusters, mobile healthcare workers, or others. These offerings may be vendor supplied or come from the vendor's partner ecosystem. (The broader the partner ecosystem, the better, as no one vendor can supply solutions for all of the diverse needs across many industries.) They can provide customized experiences out of the box.

However mobility is achieved, it is quickly becoming an important driver for the expanded use of ECM in organizations of all sizes and in all industries. Organizations should assess how mobility can help them transform their customer-facing business processes and ensure customer satisfaction, and they should choose an ECM vendor that offers strong mobile capabilities.
