Realizing a Vision for 21st Century ECM

By Ralph Gammon

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In today's market, traditional ECM functionality is table stakes. According to noted IT market consultant and *Crossing the Chasm* author Geoffrey Moore, enterprise content management (ECM) has historically been classified as a system of record. And because most organizations have already made their investments in these types of back-office applications, Moore believes there is little competitive advantage that can be gained by throwing more money at them. Instead, Moore suggests that going forward, successful businesses will focus their IT investments on improving their "systems of engagement."

Systems of engagement are applications that manage interactions. These interactions can come from outside sources, such as vendors, customers and partners, or internal sources like employees. In an Internet-connected world, where real-time response is increasingly expected, effectively managing these interactions can make or break a business. How fast an organization responds to a query can mean the difference between a making a sale and losing a customer.

According to an onboarding study conducted by Cornerstone Advisors for the banking industry, only 10% of potential customers who start a new account application process finish it.[1] Obviously, current systems of engagement could use some improvement. One way of doing that is by effectively connecting them with ECM systems.

ECM systems are designed to serve as repositories for managing unstructured content like documents, e-mails and other records related to transactions. According to Moore, ECM, enterprise resource planning (ERP) and customer relationship management (CRM) applications are used to "capture every dimension of our commercial landscape, from financial transactions to HR to order processing to inventory management to CRM to supply chain management to product lifecycle management, and on and on."[2] Obviously, these systems contain vital business information — which is often needed to successfully complete transactions initiated through systems of engagement.

And, what good is a system of engagement to a business if it is not leading to a transaction? The definition of "transactions" can vary based on market, but they include signing up new customers for services, selling products or just capturing information that can be used for future product marketing decisions.

According to AIIM (www. aiim.org) "Enterprise Content Management (ECM) is the strategies, methods and tools used to capture, manage, store, preserve, and deliver content and documents related to organizational processes." This technology is used in virtually every industry to optimize processes and meet compliance requirements, while saving time and money. Understanding the future of ECM is a competitive imperative in most industries.

Building a Bridge Between Engagements and Transactions

Capture and workflow represent two key elements of ECM — especially if it is going to be leveraged to improve systems of engagement. Historically, capture applications have been used to manage the input of scanned and electronic documents, as well as their associated metadata, into ECM. Once this input is ingested, workflow is used to route it to the appropriate destinations.

While effective at what they do, most capture applications account for only a small number of the potential input avenues associated with systems of engagement. Especially as more Millennials who grew up depending on computers enter the workforce, traditional forms will continue to become a less popular means for collecting information. Rather, Web sites, mobile apps and new types of means for electronic interaction will continue to evolve and replace paper forms as the standard for doing business. As a result, e-forms are clearly the wave of the future.

Because of their intelligence, modern e-forms can be designed once and optimized to display on whatever type of device they are being accessed on. They can also be packaged in mobile apps. Because of their versatility, e-forms can be utilized by internal sources like call center employees, as well as external users like customers and partners.

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In addition, because they can be created within an ECM application, they can be attached directly to a workflow. This eliminates the extra step associated with collecting traditional forms and running them through a capture application. Capturing data from traditional forms can also be manually intensive, while e-forms data is automatically captured when the forms is completed.
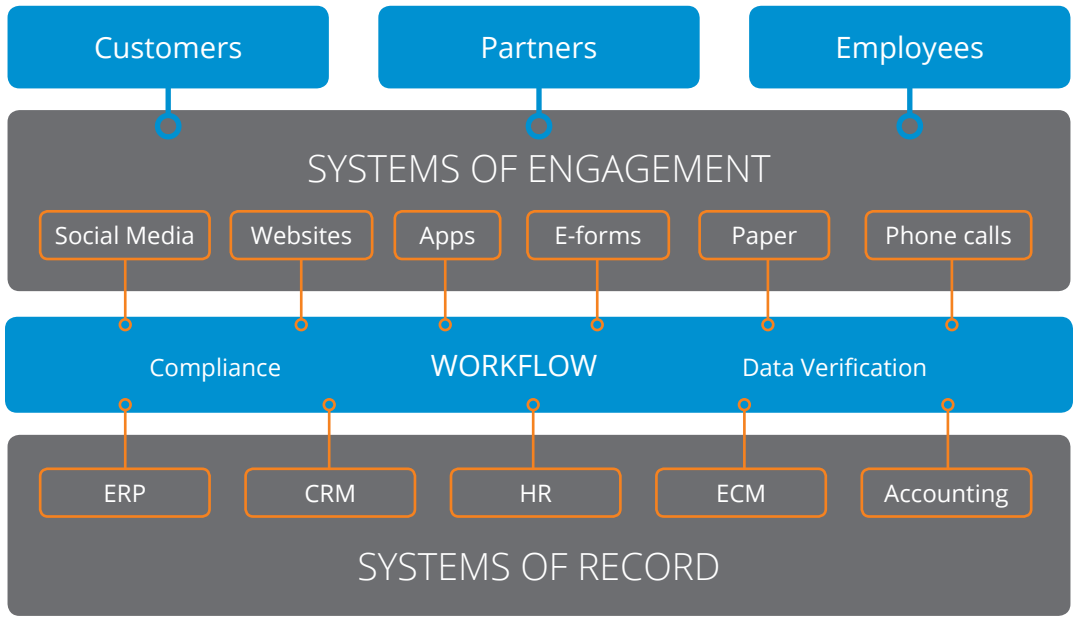
Workflow kicks in after a document is captured or an e-form is submitted. It determines how the forms will be processed. For example, an insurance claim might be automatically routed to a claims adjuster for review. Which adjuster receives it might depend on the amount or type of claim. A claim cannot be settled until its workflow has been completed and data has been entered into an adjudication system.

Like a traditional ECM system, the adjudication system is regarded as a system of record. Because ECM systems have historically had to connect with other systems of record, as well as ingest information (through capture) from outside sources, they make an ideal bridge between systems of engagement and systems of record. And workflow represents the network through which information can flow between both sides.

Let's look at the example of a mortgage application. The system of engagement might be an e-form accessed through a bank's mobile app. The mobile app might also include functionality that enables the user to take a picture of any supporting documentation like W-2s and other tax forms. All this is submitted to an ECM system, which could automatically audit the package for completeness and then either ping the applicant for additional information or pass it on to an underwriter for consideration. At the same time the documentation is being stored for regulatory compliance.

The metadata could also be analyzed and used to determine the likelihood that a loan would be issued. If the likelihood falls above a certain threshold, based on business rules, workflow could be used to notify the customer of their impending success, while feeding the data into a loan origination system, where it will receive a final review. This type of automated workflow could be used to reduce the time it takes to secure a customer from days to a matter of minutes. In addition, it can ensure that the entire loan process is in compliance with regulations.

Customers	Partners	Employees

SYSTEMS OF ENGAGEMENT

Social Media	Websites	Apps	E-forms	Paper	Phone calls

Compliance	WORKFLOW	Data Verification

ERP	CRM	HR	ECM	Accounting

SYSTEMS OF RECORD

Workflow technology can be used to create connections between systems of engagement and systems of record — ensuring compliance and data verification, as well as more efficient interactions, which should lead to improved transactions, processes and business results.

The bottom line is that leveraging ECM to connect systems of engagement with a system of record addresses multiple hot points:

• It creates a smooth flow of information between the two systems.

• It enables the system of engagement to take full advantage of information stored in a system of record for purposes such as data completion and verification.

• It can ensure that only transactions with a complete set of information are ultimately submitted to a system of record, reducing the risk of non-compliant transactions and the number of exceptions that have to be dealt with downstream.

• It increases the speed transactions are completed, which improves customer service, whether the "customer" is a consumer, patient, student, business partner, internal employee or anyone else. This encourages more return business and reduces the number of lost customers, offering a better return on marketing investments spent cultivating those customers in the first place.

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A Future Vision for ECM

So what should the next generation of ECM look like?

Obviously it needs to have a strong workflow component. Workflow is the glue that connects multiple steps in a process. Historically, workflow has primarily been deployed within ECM to manage back office processes which rarely change. But, as workflow moves closer to customer engagements, it needs to become more flexible. This will help it address the constantly evolving nature of systems of engagement — which require that workflows be able to change with them.

For example, what if in response to a Tweet that has gone viral, a bank receives an explosive volume increase in online loan applications? Or a natural disaster overwhelms an insurance company's mobile claims channels? To best serve their customers and prevent bottlenecks, these organizations are going to require workflows that can be adjusted on the fly.

In relation to workflow, a modern ECM system also needs a strong data analytics component. This will enable users to determine when their workflows need to be changed. Because if you don't know that something is backed up or non-optimized, it's impossible to fix it.

In addition, workflow analytics can be used to help manage other applications. For example, to optimize its accounts payable system, it helps if an organization knows how much the invoices that it currently has in process are worth and when those amounts are due for maximizing early pay discounts.

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A modern ECM system should also be cloud-based. This will enable it to meet the increasing desire of businesses to license hosted applications, which reduces the burden on their IT departments while increasing their deployment flexibility. Today's ECM also needs to be able to run across multiple devices and OS to meet increasing diversity in these areas.
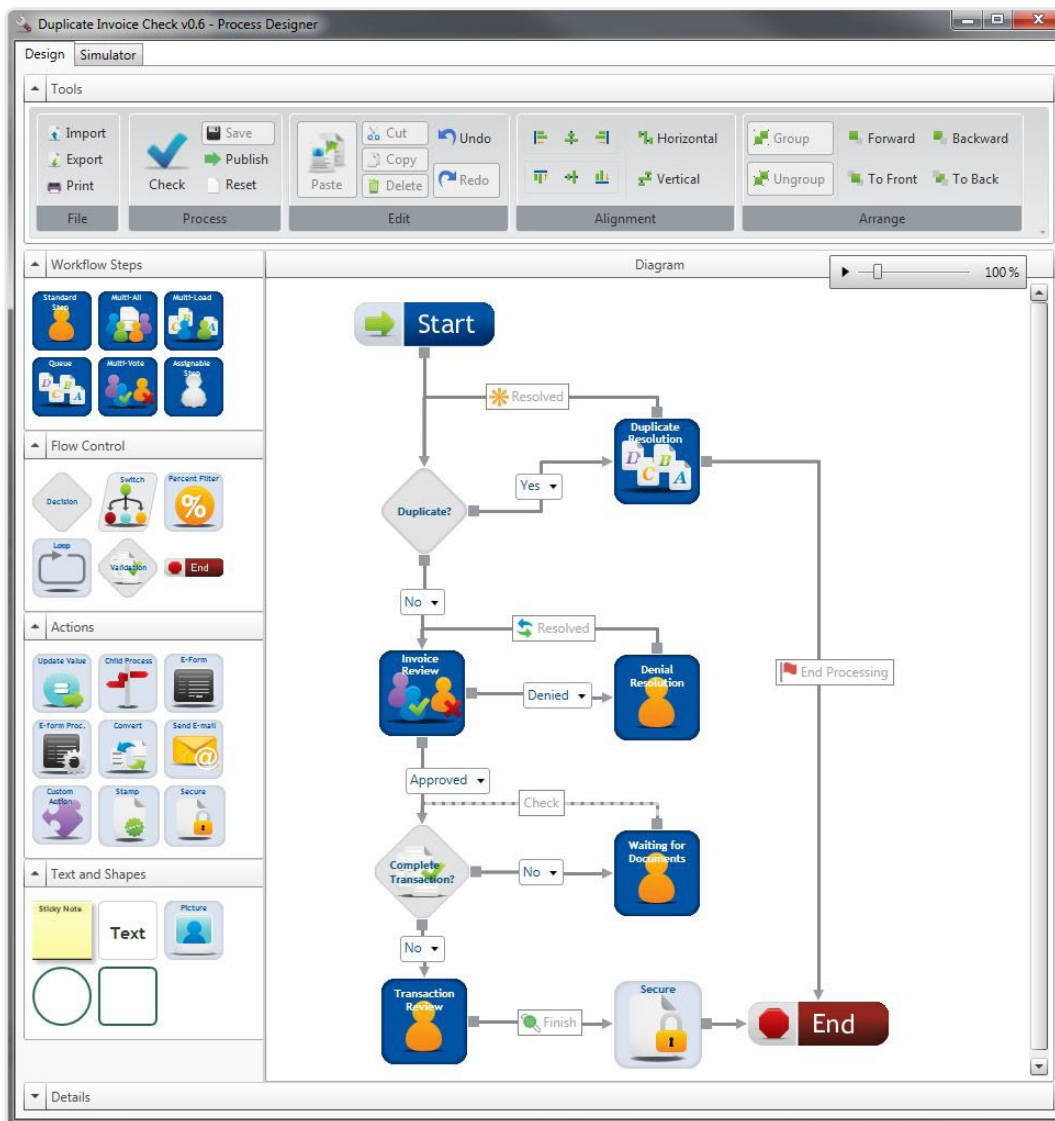
That all said, an organization also wants all the functionality of a traditional ECM application. This includes capture, search, security and records management — as well as e-forms to help users capture documents before they are even printed.

FileBound, a member of the Upland Software family of enterprise work management applications, is offering all this as part its ECM application.

Workflow for the Masses

To address the need for greater flexibility as workflow is increasingly integrated with dynamic systems of engagement, FileBound has simplified its set up. To achieve this, it has included a wide range of drag-and-drop and wizard-based workflow configuration capabilities. Many workflow products require coding to set up and make changes — meaning users typically have to work with reseller partners or another IT resource. By contrast, FileBound's workflow is designed to be controlled by a line of business manager, such as the head of an accounts payable department.

Duplicate Invoice Check v0.6 - Process Designer

Design | Simulator

Tools

Import | Save | Cut | Undo | Horizontal | Group | Forward | Backward
Export | Publish | Copy | | Vertical | Ungroup | To Front | To Back
Print | Check | Reset | Paste | Delete | Redo

File | Process | Edit | Alignment | Arrange

Workflow Steps

Standard Step | Multi-All | Multi-Load
Queue | Multi-Vote | Assignable Step

Flow Control

Decision | Switch | Percent Filter
Loop | Validation | End

Actions

Update Value | Child Process | E-Form
E-Form Proc. | Convert | Send E-mail
Custom Action | Stamp | Secure

Text and Shapes

Sticky Note | Text | Picture

Diagram | ► | 100%

Start

Resolved
Duplicate Resolution

Duplicate? — Yes

No

Resolved

Invoice Review — Denied — Denial Resolution

Approved — Check

End Processing

Complete Transaction? — No — Waiting for Documents

No

Transaction Review — Finish — Secure — End

Details

An auto-simulator also makes set-up easier, as it enables users to test workflows without having to go into production. In addition, a series of steps from one workflow can be grouped together and copied and pasted into a different process. Further, there is an undo/redo command that enables users to easily reverse design mistakes.

Another feature designed for ease of use is editable grids that can be customized by individual users. The grids are in a spreadsheet format with metadata listed in columns. These columns can be arranged by individual users to match the order in which the user is comfortable viewing the data — and they will maintain that format for future use. The users can also make changes to the metadata in the grid, bypassing the need to open files.
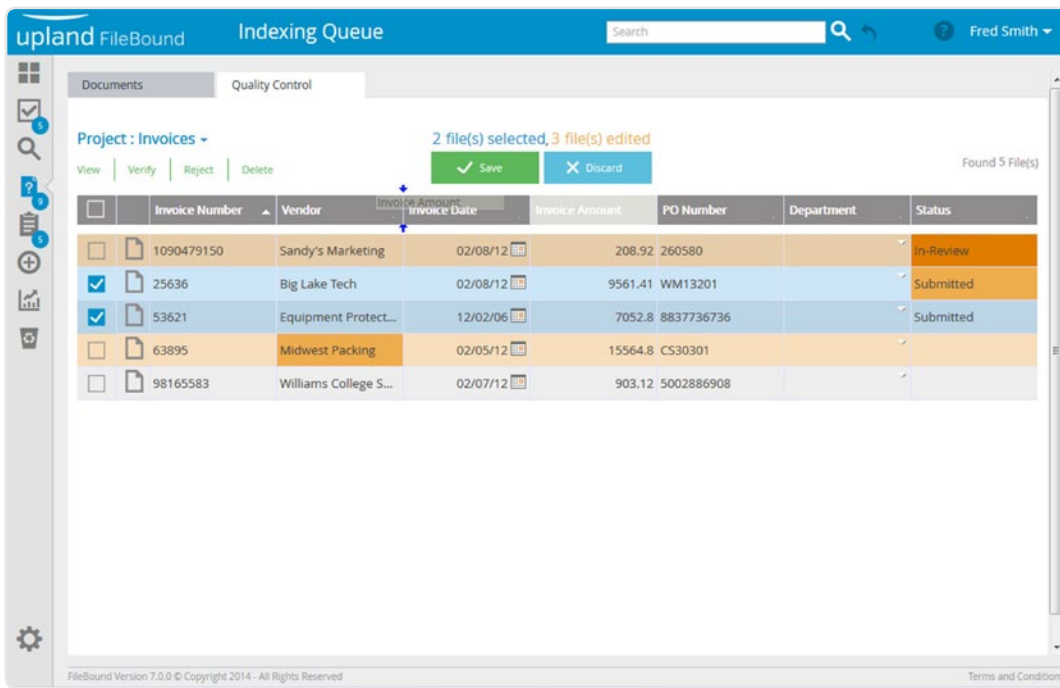
Editable grids allow FileBound users to decide how they want to see data presented and edit metadata without opening a document.

Auto-Verification Offers Efficiency and Security

FileBound's workflow includes an auto-verifier option that can be used to determine if a packet of documents is complete. This can be a powerful tool when connected to a system of engagement such as an online customer portal.

Let's say, for example, a job applicant is submitting her application online. She is being asked for a resumé, references and copies of the appropriate employment eligibility documentation. The applicant completes the application and attaches her forms. But, what if she is an out-of-the-country resident and forgets to include the proper working permits?

Through the auto-verifier step, the paperwork can be checked by applying technology like bar code or forms recognition. If anything is missing, a notification can be created. This not only speeds up the application process, it prevents incomplete applications from moving further downstream — where they can potentially cause bigger problems, like compliance issues, if the missing forms issue is not addressed before someone is hired.
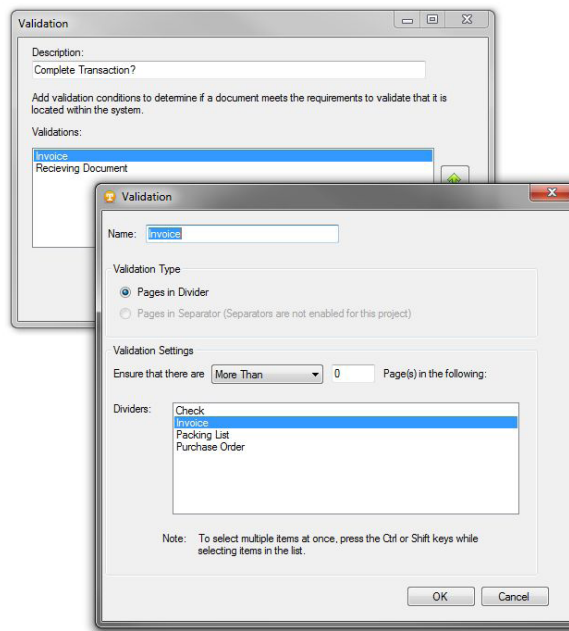
FileBound 7 features a new validation option within its workflow. In this example, for an invoice transaction to be considered complete and passed on to the next step in workflow, at least four documents must be included.

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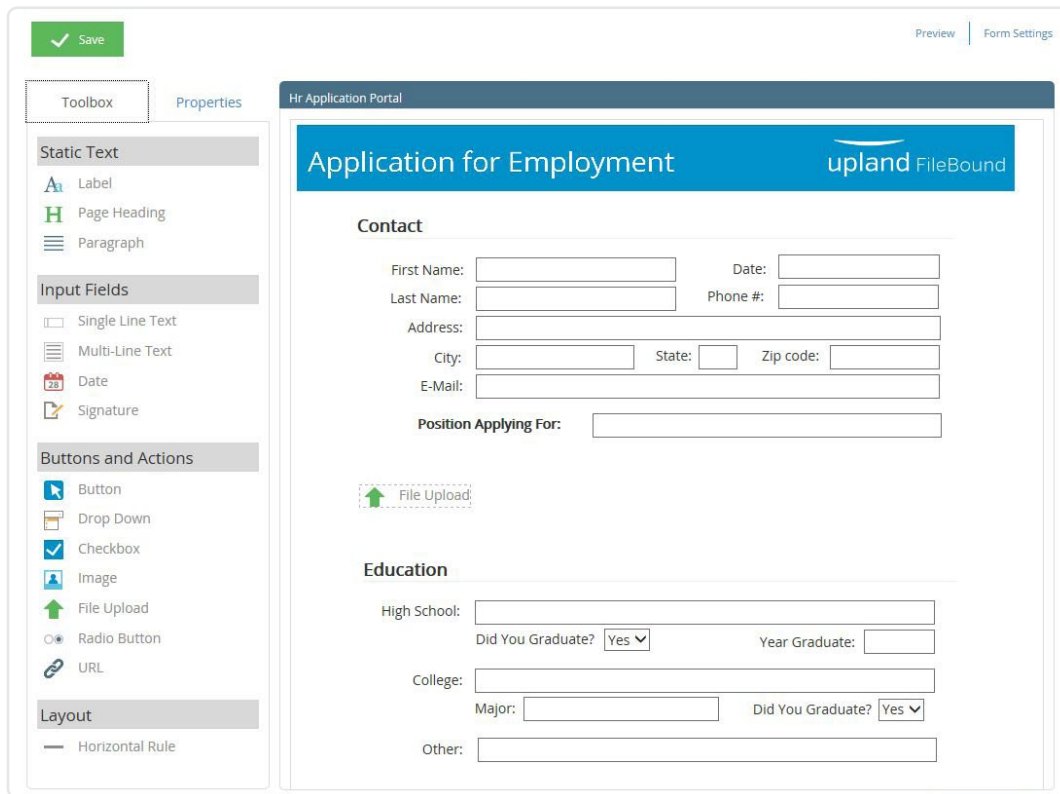
FileBound 7 includes a new e-forms designer that eliminates the need to rely on third-party software and IT assistance to create e-forms within the ECM application. Once created, forms will automatically size themselves for optimal display on a user's device.

Other powerful workflow options include the ability to run duplicate file checks, the option to automatically apply stamps to documents, and the ability to lock down documents against changes after specific steps are completed.

Facilitating Rapid E-Forms Adoption

FileBound's e-forms designer includes drag-and-drop elements, a template library and a wizard that walks users through steps for creating HTML forms. These could be HR, loan applications, request for quote forms and more. FileBound forms will automatically size themselves to best display on a user's particular viewer. This makes them ideal for mobile deployment.

The wizard enables users to create fillable fields that can be completed with text or marks or through drop down selections. Design options include labels, uploaded images and buttons that can activate functions like submitting a form to a specific folder or workflow. Levels of access can also be controlled — a form can be made public or kept behind a firewall.

Analytics Unlock Full Potential of ECM

FileBound's Analytics Dashboard provides users with insights into all their workflows. Graphs and charts are automatically created within based on metadata, as well as the steps in a workflow. For example, an invoice processing workflow graph would be created that shows the user how many invoices are being processed, what stage each invoice is at, what the total invoice dollar values are and who the vendors are. A business might be able to see that there is just over a $1.2 million worth of invoices currently being processed and that approximately $216,000 worth of those are in Phase 3, while $787,000 is only in Phase 1.
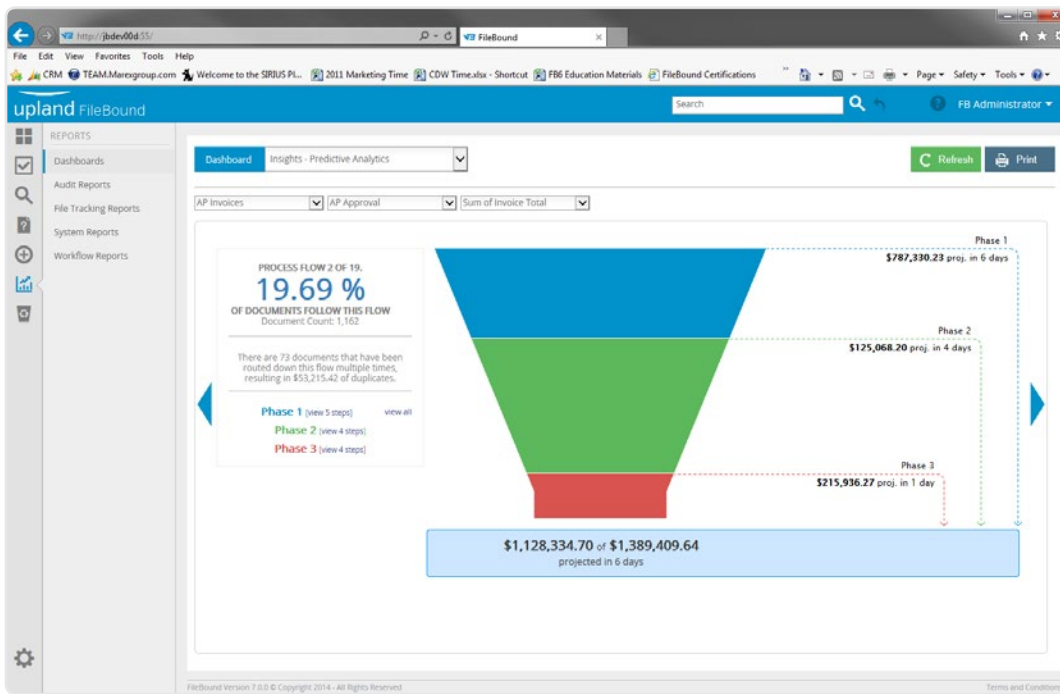
FileBound's predictive analytics provide a granular view of expected performance based on historical averages.

There is a Predictive Analysis feature, which can be applied to historical data sets to determine future outcomes and trends. Predictive Analysis could be used to project that 90% of the Phase 3 invoices will be ready to be paid in two days, while 70% of the Phase 1 invoice will be ready to be paid in six days. This information can potentially be combined with other data that can be pulled from Filebound or other integrated applications, like when each invoice is due and at what date early pay discounts expire — which can lead to significant improvements in areas like cash management.
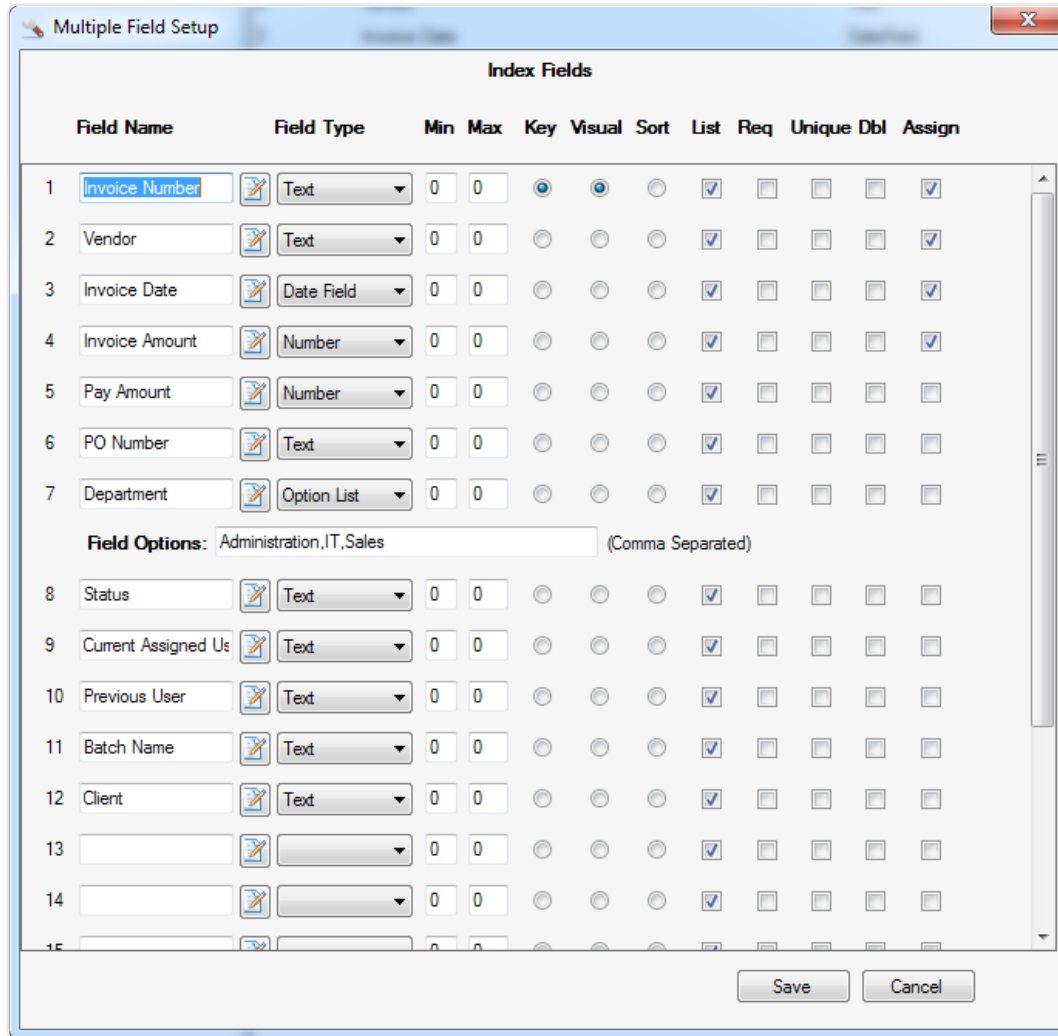
Additional FileBound Dashboard features include:

• the ability to drill down and view information on specific steps in a process, such as how many mortgages are awaiting approval from a specific loan officer

• the ability to compare the performances of groups of documents — such as invoice amounts by specific vendors over a specific time period

• interactive options that enable users to narrow the number of documents being analyzed through selecting specific metadata criteria — such as limiting the loans being analyzed to those worth higher than a certain dollar amount.

The Dashboard plays hand-in-glove with FileBound's ease of configuration — because not only can users easily identify weaknesses in their workflows, in many cases they should be able to quickly re-configure the workflows to fix them.

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Strong ECM Baked In

Unlike many cloud systems currently being promoted for document management and workflow automation, FileBound is a mature application. First introduced in 2001, it features all the traditional ECM functionality like check-in/check-out, version control, access control, auditing and disposition. These features make it a fully capable system of record.

FileBound has the all the functionality of a traditional ECM application, including the ability to set up and deploy custom metadata fields.

Re-Making ECM for Today's IT Environment

Filebound has designed its ECM software with an eye for today, as well as the future. Once monolithic silos confined to a few specific back office processes, ECM has been going through an evolution. A few years ago, SharePoint started to open up the discussion of ECM being deployed every desktop. Now the cloud is truly making robust ECM functionality accessible to all.

But, accessibility and usability do not always come hand-in-hand. FileBound has taken a mature ECM system and cloud infrastructure and wrapped them with a modern interface and features designed to be utilized by every business person. No longer does it take an IT expert to configure a workflow or set up an analytics graph. Concepts like self-service, mobility and agility are all realized in FileBound.

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FileBound represents a versatile ECM application designed to be widely deployed across a multitude of applications and organizations. Barriers like high-start-up costs, limited flexibility and expensive maintenance have been minimized. Meanwhile, features like subscription pricing, ease of deployment and use and a hosted infrastructure are being brought to the forefront. Advanced features like predictive analytics ensure that Filebound's benefits will only increase over time.

All this enables ECM to move forward successfully into the next generation of information management, where static back-end systems of record are table stakes. Going forward, ECM must be able to react and capture information with more flexibility — and act more like a market changing system of engagement. The capabilities in FileBound make this a possibility.

End notes:

[1] http://thedmcollaborators.com/2014/08/04/the-paperless-office-four-shocking-figures-which-show-how-far-we-still-have-to-go

[2] Systems of Engagement and The Future of Enterprise IT A Sea Change in Enterprise IT White Paper, AIIM 2011.

About the Author

Ralph Gammon is the editor and publisher of the *Document Imaging Report* newsletter, as well as the *Document Imaging Talk* blog. As a journalist and analyst he has watched ECM applications evolve from use in a few targeted environments to mainstream applicability in almost any organization. The continuing evolution of business processes, where paper becomes just one of several input avenue and automating workflow is the key to success, is one of his favorite topics. Ralph also works as a freelance consultant and editor and is a popular conference speaker.

About FileBound

Upland's FileBound delivers business process automation and document management applications that improve the operation of any organization by connecting users with the information they need to work more efficiently and effectively. With FileBound, customers can build automated workflow processes and centrally manage documents to improve compliance, collaboration and access to information. FileBound applications can be deployed locally or as a cloud-based service and have been implemented by organizations of all sizes around the world.

Unlike legacy products, FileBound's simplified, flexible approach to usability, configurability and licensing delivers fast, game-changing results:

- Easy-to-use configuration tools give you greater control and agility by reducing reliance on IT when responding to changing business needs

- Device-agnostic mobile solutions seamlessly support BYOD policies and remote users at no additional cost

- Analytics tools provide meaningful, timely and actionable insights into all workflow processes to harness the full value of the data to make better business decisions

- Contemporary interface design makes it easy to adapt to automation technology and controls what you see when logging on, making it easier to complete work

- Easy-to-understand, all-in-one licensing options meet the needs of businesses of all kinds

- Strong integration capabilities allow you to build end-to-end automation solutions that maximize productivity by eliminating "data silos"

The Upland Product Family

Upland's family of cloud-based enterprise work management software helps every team in your organization do their best work. See what you can do with Upland. Contact us at **855-944-7526** or **info@uplandsoftware.com**.