“Dynamic Capture – empowering the mobile workforce”
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http://www.aiim.org/Training

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Introduction

In the 20th century, paper made up 90% of all business information. This is the reason capture conjures images of scanners, but here in the 21st century, the majority of business information is digitally born using office productivity tools, electronic forms, social media, email, and more.

Extending our reach to capture physical information beyond paper, are mobile devices fully equipped with cameras capable of single shot photography, video with audio, and yes, even capturing paper when applicable – and, of course, capturing signatures. We can capture anything from anywhere at anytime, and upload it to applications that are managed in-house or in the cloud.

Regardless of the business focus, whether banking, insurance, healthcare, government or some other vertically focused sector, capture is an integral part of operational processes and should be accomplished at the leading edge of the process and first touch point with content. This applies not only to the capture and conversion of physical content, but also digitally born content created in office applications, web applications and social media. Forward thinking CIOs and COOs addressing this multi-dimensional approach to capture, identify areas of opportunity to implement process automation practices, and various technologies in ways that bring captured information into the appropriate business process.

In this paper, we will present the use of capture and workflow functionality in support of collaboration, process management, and information governance leveraging capture capabilities at the leading edge of a process.

Capture at the Leading Edge of Process

The types of content captured for business use, ranges from the typical scanned documents, to electronically created documents, social media postings, email, and even text messages. AIIM research finds that while 43% of respondents cite scanned documents as the more dominant content captured and auto-classified, incoming electronic documents including PDF files, web based content, etc. are cited by 39%, and 32% cite office documents, which of course are digitally born.

Dependent upon the industry or sector, this content could be patient information, insurance applications and claims, correspondence, financial reports, loan and mortgage applications, and even video or audio files. In many cases, these content pieces are available for capture outside of the brick and mortar building. They are available in the field, at remote locations, and can be captured or worked with, using mobile devices. Likewise, the appropriate metadata must be applied in order for processes to work correctly, and the content itself to be stored and managed properly.

Think about insurance claims where the adjuster is in the field and can capture all of the claims information, including video or digital photos of the damage, then upload to the main system where it launches the claims processing workflow. Now imagine that there is a discrepancy with some of the metadata and the adjuster makes correction right then and there, eliminating an exception or subsequent correction. Using mobile

Figure 1 – For which content types are you capturing and using automated declaration/classification?

- Incoming scanned
- Incoming electronic (PDF, Web, etc.)
- Office documents
- On exit from process workflow
- Email
- SharePoint
- Output documents to customers
- Website content
- Internal social business systems
- Instant messaging

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apps, consumers can capture a check for deposit or apply for a loan using their mobile device, but what if data needs correction? Validation of the data supplied should be done before submission to ensure accuracy and streamline the process. This is also an area where capture automation can provide substantial benefit.

**Multi-Channel Capture**

The role of the capture system has been extended to address a combination of paper, email, text, social media, and more, directing this content either to line-of-business processes, or to customer service representatives for action. Analyzing the text in these messages can automate routing, and the management of “trailer documents,” such as proof of identity, which can be automatically archived. In many cases, some content will arrive in paper form and additional related content electronically. For example, a loan application may be completed on paper while supporting documentation like proof of identity and wages is sent via email.

Even though combining these together and routing them to the same process will provide considerable improvement in uniformity and flexibility, research shows that 22% of organizations process them separately, and 49% have somewhat ad hoc arrangements.

**Figure 2 – How do you deal with multi-channel inbound communications?**

![Multi-channel communication diagram]

**Automating the capture process**

Technologies used to identify and classify the information, not just in its captured state, but also in context, immediately place it under corporate governance ensuring compliance with industry, regulatory and legal guidelines. Part of the challenge here is the level of accuracy in metadata application and exception processing.

Capturing information at the leading edge of a process and the first touch point of content brings the content under corporate control faster and more securely. Use of integration with target systems like ERP, CRM and ECM can source and apply key metadata for validation, allowing the user to make metadata corrections immediately, and ensuring the data is clean before uploading.

In this same light, exceptions should be identified and processed immediately rather than further down the process where another individual, unfamiliar with the existing circumstances at the point of capture, would have to interpret the data in order to make what are perceived corrections. This alone would save considerable time-costs for those organizations conducting post-process metadata cleansing and could also streamline exception related processes for any organization.

AIIM research finds that 45% of those responding to our survey perform some form of automated classification, including 18% at the point of ingestion and 28% as part of the workflow.
The Mobile Workforce Challenge
Line-of-business managers have a growing need to extend interaction with on-prem processes and content to field workers and business partners, capturing content early on in the process, and speeding up commenting and sign-off cycles. Although 29% are in the process of planning or rolling out mobile access, only 39% currently provide mobile access of any sort, and only 11% would describe that as universal access across all staff, with just 5% also providing mobile access to project partners.

One of the main challenges of mobile capture compared to traditional capture using document scanners is the quality of the captured image. This will vary based on the device, megapixel strength of the camera in the device, distance the device is held, steadiness of the hand and so on. Simply stated, if the captured images are blurred due to the use of the mobile device, it will result in inaccuracy of classification and automated data extraction capabilities. This in turn creates a greater need for corrections and exception processing.

This is where placing the ability to make corrections at the time of capture, will streamline the process, ensure data quality based on context and content, and reduce post-capture error correction and exception processing. In addition, the capture process needs to be close-coupled to the process access app, so that captured images and documents are containerized on the device for security reasons. Simply taking the photo or scan, then attaching it to an email, will not form a secure, end-to-end, compliant process.
Conclusion and Recommendations

Dynamic capture using mobile devices to capture content at the first touch point and bring it in to the business process at the leading edge of the process, provides significant benefits in streamlining operational processes, gaining control over content faster, initiating appropriate actions early-on and minimizing risk as a result. Of course, accuracy is key as is the ability to make corrections or address exceptions before the content is uploaded to the back-end systems. This means placing that capability of validation into the hands of the user through the mobile device.

Dynamic capture must look at the holistic environment using internal and external perspectives, as today’s ECM environment is no longer one dimensional, but rather multi-dimensional, spanning the enterprise, bridging across applications and platforms, and extending beyond the corporate walls. The information eco-system of business organizations comprises people, process, content, governance, and technology.

In order for this to be successful, there is a need to plan and understand the overall goal when designing a mobile enhanced capture environment. Considerations must be made regarding the interface, appropriate metadata, metadata reference sources, and establishment of validation processes. Some first steps you can take to move forward are to:

- Identify business areas where mobile capture will benefit in both labor and physical costs – include paper and digitally born content
- Document the regulatory requirements and align mobile capture to support them
- Standardize and automate your processes whenever and wherever possible
- Establish goals and metrics related to mobile capture to ensure outcomes are being met
- Look for additional areas of improvement and opportunity extensions using mobile capture and recognition technologies

References

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