

# Unstructured Content Strengthens Business Processes

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## WHITE PAPER

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## IN THIS WHITE PAPER

Financial institutions, especially in banking and insurance, must diligently and constantly seek new methods to improve financial performance and customer satisfaction. Most financial businesses combine both customer servicing and internal workflow processes, tightly coupled with risk-sensitive decisions. Each of these processes requires different types of information, but all too often, financial institutions have automated the retrieval of the structured data (e.g., name, address, account number, balance) without focusing on the equally essential unstructured information (e.g., documents and images such as insurance binders, promissory notes, drivers' licenses, property damage photos).

In this paper, we examine new technical capabilities applicable to a wide range of financial industry processes, including such diverse tasks as new account opening, loan application processing, insurance claim processing, and many more that involve the gathering of mixed documentation. Continual process improvement (including both cost reduction and servicing enhancement) requires the dogged pursuit of an enterprisewide goal: to automate processes end to end, including to deliver the right information at the right time for decision making and transaction completion. Fortunately, new content management solutions are making it easier than before to bring all the parts of a process together, including the unstructured information.

## SITUATION OVERVIEW

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### **Customer Needs in Financial Services and Insurance**

Banks and insurance companies universally seek to optimize servicing capability in competitive marketplaces — that is, to ensure a satisfactory "customer experience" across multiple channels while controlling the costs associated with high-quality service. To achieve this goal, banks and insurers have to manage the accessibility of all the necessary materials associated with customer-driven transactions. *Content management solutions*, which integrate forms and supporting

documents wherever necessary in a product-related process, are the key to organizing superior servicing capabilities delivered consistently across multiple products and channels. The components of such solutions will be described in more detail later in this document; we begin with the importance of the processes themselves.

Customer relationships in the financial services industry are apt to be complicated. Depending on the mix of products that customers utilize, and the channels they choose for servicing, each customer impacts *both* the firm's revenues and its expenses. Financial firms can structure incentives to shift customer behavior by providing attractive products through convenient channels at competitive prices. However, the most powerful and long-lasting customer incentive is *a consistently excellent servicing experience* characterized by prompt, knowledgeable, and satisfactory interactions. An excellent customer experience will increase customer loyalty and share of wallet. By contrast, an unsatisfactory experience will often cause defection.

If consistently excellent servicing is so important, why is it so uncommon? Most financial relationships rely on a variety of documents and reference materials, such as signature cards, photos of collateral, pledges of security, original loan agreements, handwritten claims statements, third-party appraisals, signed guarantees, and more. Industrywide, closer examination of most servicing processes reveals a common weakness: Very few firms are able to incorporate this unstructured content digitally into business processes and the online experience.

A homeowner's property insurance request, for example, might ultimately include not only the customer's signed application but also phone call transcripts regarding coverage needs, photos of the property, a certified plot plan, an appraiser's certificate of valuation, the town's certification of tax status, and who knows what else. Most of today's decisioning, servicing, and CRM applications lack this information and effectively handicap bank or insurance company personnel who require such critical information to make decisions or respond to customers. Lack of integrated access also plagues the call center representative, not to mention the customer utilizing an online self-service process, both of whom are trying in vain to obtain comprehensive information from the company's customer servicing systems.

What information do all of these users need? They need to know the status of a customer's business transactions, and they need ready access to all of the relevant elements of that transaction appropriate to their roles and responsibilities. Unstructured (often paper-based) content can be captured and digitized, but it must also be tagged and attached to processes or queries so that anywhere in the organization, the right information is presented to the user at the right stage in a particular process.

## **Banking and Insurance: Examples of Improved Processes**

Content management solutions are particularly well suited to tasks that require significant unstructured and paper-based inputs, all to be assembled for a specified decision process that might involve multiple persons at multiple stages. Both banks and insurers can improve process efficiency and cost control by:

- Automating the processes via embedded business rules
- Integrating with other systems to collect existing structured data
- Capturing digitally the paper-based content

These three steps enable the consolidation of all the pieces of a specific customer instance into a virtual folder or virtual case file, which carries all the components through the relevant process and enforces item-specific user authorizations and permissions. Within the financial services industry, typical tasks that would suit this new approach include processes such as new account opening, statement archiving, credit origination, and claims management:

1. **New accounts.** Since the advent of recent "know your customer" regulatory requirements, the process of opening new accounts has increased in complexity and operational risk. Banks need to not only establish what product or service the customer needs but also document that the customer's claimed identity is correct. Content management solutions allow financial firms to articulate through business rules the regulatory requirements for establishing identity and to capture identifying information automatically from digitized versions of documents such as passports and drivers' licenses. The workflow components include automated collection of existing data from internal and external systems, as well as real-time status reporting, an audit trail of what was done when, and by whom, and finally, a records retention protocol that ensures continuing compliance.
2. **Credit origination.** A major European bank decided that it needed to streamline its commercial loan origination process. The bank's objectives were saving money and time by automating the workflow, reducing risk via embedded business rules, and improving competitiveness by speeding the availability of decisions to would-be borrowers.

The overall process enables the simultaneous availability of transaction information (as per designated rights and privileges) to customers as well as internal staff. The content management business process approach also allows this institution to modify the features of a product, or create new products, in days rather than months.

3. **Claims management.** A major United States–based provider of life and health insurance had a major paper-based headache in assembling the document files that were needed to process claims. The master claims worksheet, an internal document, required nearly 100 fields of data to be completed just to begin the adjudication. The data elements were backed up by pages and pages of documentary evidence.

Where was the data that it needed? Most of it was embedded within the multiple pages of policy forms, amendments, endorsements, customer notices, medical reports, expense receipts, and more. The firm had been using internal resources to start preprocessing: to sort, separate, and scan most of the documents. The resulting image files were then delivered to an outsourced service that searched the documents to find the needed data elements and keyed them into the master claims worksheet. This error-prone manual process was expensive and time-consuming.

New content management tools enabled the insurer to take a different approach and speed the process in-house. Document capture applications with extraction capability not only scanned documents but also categorized them according to known document types. Within each document type, specific data elements could be identified and extracted for automated mapping into the master claims worksheet.

When this new, streamlined document processing solution was fully operational, it achieved over 90% accuracy in classifying documents, saving the labor of the manual presort and separation. The formerly outsourced data entry exercise was replaced by automated data extraction. Only the remaining 10% of documents required a manual review, to recheck data elements and locate missing elements, before the entire "transaction file" could be classified as ready for delivery to the adjustment process.

In addition to these cost-reducing efficiencies, customer relationships are being strengthened daily at this insurance company by the improved processing capabilities. Whether the user is a self-service customer or internal staff handling the claim or assisting the customer, more information is available more immediately to whomever needs it.

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## **The Diversity of Financial Services and Insurance: Processes, Customers, and Channels**

### ***Product-Related Processes***

Financial firms offer literally hundreds of products, all of which are supported, at least in part, by three major types of processes:

- **Applications** represent a noncustomer's initial approach or an existing customer requesting a new service. The complexity of any application process depends on the nature of the customer (consumer, high net worth personal, or corporate/institutional) the risk profile of the product, and the dollar value of the proposed transaction.
- **Enrollments or approvals** split into two major process types depending on the risks the financial firm is taking on. It is far easier to approve an application from a prospect seeking to *deposit* money rather than one that wants to *borrow* it, although regulatory requirements such as the USA PATRIOT Act ensure that significant documentation (i.e., nondigital content) is needed in either case.
- **Delivery and servicing** processes include "one-time" deliveries, such as the maturity of a specific transaction or the adjudicating of a claim against an insurance policy, as well as continuing "services" such as collecting interest and premiums, applying principal payments, and many more. Many financial products involve both delivery and servicing processes, as the establishment of the relationship occurs once (e.g., borrowing money) but the related transactions can recur repeatedly.

### ***Customers***

The mix of products in financial services reflects not only the great variety of customer needs but also the variety of the customers themselves, from major corporations and government entities to small businesses and consumers. Customers may be spread over a local to global geography, with risks and regulatory requirements differing among locales. Consumer insurance, for example, is state regulated in the United States, so products meant to serve the same consumer need (e.g., auto insurance) must be priced and structured specifically for each state.

## **Distribution Channels**

In most financial firms today, channel-driven processes constitute a different but equally complex perspective. Increasingly, financial products are marketed, sold, delivered, and serviced directly or indirectly in digital form. This encompasses newer channels such as self-service Internet sales, but it also recognizes that even traditional channels such as bank branches and insurance agencies or independent agents are all heavily dependent on the information they can access through distributed systems and Internet-enabled software tools. In both banking and insurance, customer service reps in telephone call centers are, likewise, able to respond only with the information that they can see on their screens.

Banks typically have more frequent servicing interactions with customers than do insurers, providing greater motivation for them to compete further based on channel- and device-related convenience. Customers may seek service via Internet-enabled devices such as mobile phones and PDAs, via third-party or proprietary PC-based software interfaces, and also via multiple types of cards. The proliferation of channels increases customer convenience, but at the same time, it raises the stakes for the service provider because a superior customer experience requires the ability to make the same information available through all channels simultaneously.

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## **The Legacy Infrastructure**

Besides the complexity of products, customer segments, and delivery channels, the financial services industry has one more characteristic that makes technology-based transformation difficult: The industry is already totally dependent on a tangled infrastructure of legacy systems, most of which individually support only a partial set of products, for a partial set of customers, via a limited set of channels. The industry describes its systems as "siloes," reflecting isolated, mainframe-based towers of data often "interconnected" only by occasional batch posting processes to one or more purpose-built data warehouses. In the larger banks and insurers today, some of these systems are over 30 years old, and the decades-long process of mergers and acquisitions continually adds acquired systems posing major integration challenges. Many major banks run more than 1,000 licensed software applications, some so old or heavily customized that they are no longer vendor supported. Within such an architecture, having a complete and actionable view of a customer relationship is virtually impossible.

The financial services industry in general has made little progress in integrating the structured data found in its legacy applications with its equally essential collections of unstructured content, the pieces of which are so critical to so many business processes: documents, signed promissory notes or loan agreements, collateral photos, graphic images, call center audio recordings, and more. Banks and insurers

require this content, which for them has commercial value, legal significance, risk ramifications, or some other importance, but few have efficient ways of dealing with it, and most are unable to readily link it to the relevant transaction, customer, or product.

A banker may have the original promissory note in hand, or an image of it on screen, but will have to go elsewhere to find the borrower's outstanding balance and payment history. An insurance adjuster may have in hand the claim report of an auto accident but will have to go elsewhere to learn if the policy referenced actually covers that vehicle, or that driver, or the damage done to third-party property. Vast repositories of internal and externally sourced data and unstructured content are accessed by alpha- or date-based or customer-based tags, but they are rarely adequately cross-referenced to structured content. This applies not only to data warehouses of previously scanned documents but also to assorted departmental file drawers and centralized vaults.

In 2008, the enterprise content management association, AIIM, conducted a survey in which respondents were asked to rank the risks associated with lack of unified (enterprisewide) access to these stores of unstructured content as part of business processes. 64% of respondents indicated that they could be exposed to inconsistency in communications between functional areas, and 58% believed that individual groups attempting to organize access resulted in duplication of effort. Three additional serious risks, namely increased costs, poor decision making, and governance/compliance issues, each garnered expressions of concern from more than 40% of the respondents.

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### **How to Move Ahead?**

While the risks of not being able to access the relevant data are real, equally so are the challenges associated with trying to patch these data sources together without a fully developed content management platform. Even if unstructured content has been captured in digital form, it is expensive and time-consuming to link diverse databases and integrate various legacy applications.

The technology exists today that enables firms to successfully manage enterprisewide content as one critical component of numerous business processes. Can content management solutions address the risks perceived by the surveyed firms? Broad accessibility to all the important content (subject to user authorization) minimizes the risk of inconsistency in communications. Accessibility also reduces costs and supports improved decision making simply by making the decision components conveniently available. If an enterprise content management approach is adopted, then the risk of individual groups duplicating effort through their own efforts is forestalled, and the governance and compliance issues are controlled from the top down.

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## **Content Management Solutions Leverage Unified Access to Enterprise Data**

Content management solutions include software application frameworks developed for a particular class or instance of process, such as "account opening" or "credit application." The generalized frameworks are highly reusable and customizable to facilitate conformity with the policies of a particular institution or the data and workflow requirements of a particular product. They are built on a foundation of enterprise content management, which used to be primarily about document storage but in recent years has become much more, adding capabilities to support the most effective use of all enterprise information resources, in whatever form. Today, the ECM foundation supporting these applications includes:

- Storage of content within a context-linked schema and with the addition of metadata and tagging for each file, both of which improve the ability of other content management applications and multiple users to locate the same material when needed while preserving version control.
- Automated movement of content via workflow protocols, pulling together all kinds of information relating to a single decision or routing in sequence through relevant users. Product-specific rules can be incorporated into the workflows to provide more secure enforcement of policies and procedures as well as exception handling. These automated business processes can also interact with third-party databases to ensure data accuracy and to exchange data.
- Automated content generation, via XML forms — prefilled in real time with data elements for specific questions about a specific transaction instance or created as mass-produced advices, statements, warnings, and so forth. The active forms can draw data not only from unstructured content but also from the established databases or transaction records of the firm.
- Protection and preservation of content more securely than in physical or paper form. From a security perspective, this means a robust, enterprisewide authorizations component that safeguards all of the business' data. Permissions and authorizations can be granted not only to internal users but also to customers accessing remotely, determining who can read, write, transmit, print, or embed and assemble content. With respect to compliance and information preservation, retention policies and records management capabilities ensure that content is preserved for the appropriate time periods.

Content management solutions make maximum use of all of these capabilities, assembled into robust case-based frameworks. In addition, the availability of strategic and implementation services, certified partner offerings, and vendor-supported process/industry expertise helps organizations improve and automate business processes while speeding deployment. Similarly, the customizability of the frameworks allows firms to leverage a steep learning curve to reduce overall development costs.

## **FUTURE OUTLOOK**

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### **Summary and Essential Guidance**

Financial firms continue to struggle with the challenges of delivering and servicing a complicated mix of products through multiple channels while attempting to control the costs of maintaining infrastructure for both the products and the channels. Their legacy systems hold the structured data, but the critical elements of many relationships are in the form of unstructured content.

For financial firms, customer loyalty (and thus, success in the marketplace) depends heavily upon a consistently excellent customer experience across all channels. Content management solutions (built on the foundation of a proven enterprise content management capability) provide a new avenue for financial firms to solve many of their process-based challenges and to do so with security, efficiency, and customer satisfaction at the forefront. No doubt there will be some confusion in transitioning to a process- and content-driven view of the business and its products, but early adopters suggest that the rewards can be substantial.

Financial Insights believes that the integration of unstructured content with structured data promises to vastly expand the problem solving and customer servicing powers of financial industry personnel in many domains. Given the enhanced capabilities of content management solutions, we expect that banks and insurers will be able to gain competitive advantage by improving customer servicing and controlling costs. We believe that customers will vote with their feet, standing fast, when they experience consistent and high-quality service, whether from a branch, an agent, a PDA, or a PC interface. Finally, we believe that the flexibility and reusability of the process-driven frameworks will allow financial firms to minimize the risks associated with both the products themselves and the compliance and regulatory constraints facing the industry.

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