

WHITE PAPER

Document Communications  
Help Powerful Retail Banking  
Industry Face Market  
Challenges

**GMC**

SOFTWARE TECHNOLOGY

# GUIDE TO CONTENTS

## PAGE

1

### **I. Market Overview: Powerful Retail Banking Industry Faces Tough Challenges**

2

### **II. Business Challenge: Keeping Content Accessible, Compliant and Relevant**

- Unifying Content Across Platforms
- State-of-the-Art Data Access
- Automating Statement Workflow and Messaging
- Ensuring Consistent Compliance
- Capturing Check 21 Opportunities
- Greater Marketing Relevancy
- Building a Web-Based Service Environment

6

### **III. An Industry-Focused Approach**

- Content Integration Hub
- Seamless Interoperability
- Reliable Document Tracking

7

### **IV. Solution Review: GMC and PrintNet Software**

- Vendor Overview
- Product Overview
- Workflow and Administration
- Data Handling
- Design Interface
- Importing Existing Forms
- Proofing
- Messaging
- Output Management

9

### **V. Key Differentiators**

- New Value for Existing Systems
- Making Content Accessible and Useable
- Common Interface for Greater Enterprise Value
- Relevant, Results-Oriented Content

10

### **VI. Conclusion: Competitive and Successful Banking Enterprise**

## I. Market Overview: Powerful Retail Banking Faces Tough Challenges

It's no surprise that the retail banking market looms large in today's economy. \$1.33 billion in banking services were projected for 2004; with mortgages the largest segment at 62 percent. However, retail banking is a fragmented giant with the four largest companies controlling only 35 percent of the total market value. Key drivers and trends affecting this important market include industry consolidation, expansion into insurance services, regulatory compliance, and consistent brand management across all delivery channels.

Bank technology professionals need solutions that will easily integrate into existing systems and processes and add automation without increasing the IT support burden or requiring extensive programming. Client relations and marketing departments are heavily involved in setting business objectives requiring customer communication excellence, primarily executed through monthly statements and mailed or electronic marketing materials. Procurement organizations within banks are concerned with controlling costs and reducing inventory, while the operations side is concerned with business process improvement to drive time and costs out of workflow.

Other challenges facing retail bankers include:

- Competitive direct mail communications to capture greater market share
- Cross selling of services to gain more business from existing customers
- Back-office application integration to drive more efficient operation
- Greater security of customer data
- Check 21 and other regulatory compliance

Legislation like the Sarbanes-Oxley Act and Gramm-Leach-Bliley Act Financial Privacy Rule make infallible access to content an imperative. The challenge for banking organizations is that their myriad documents, records and other types of information are maintained across disparate platforms and legacy systems. A common platform for the integration and management of enterprise content offers significant advantages. However, to date, few vendors have stepped up with practical and effective solutions specifically geared to the needs of the retail banking industry.

One solution that is well positioned to address these specific challenges is GMC Software's suite of PrintNet™ Software. GMC PrintNet gives retail banking enterprises the ability to operate seamlessly across the multiple platforms that result from consolidation, acquisition and expansion. The software helps banks quickly develop and modify applications to speed entry into new markets. It streamlines workflow and reduces costs. Finally, PrintNet Software allows document consistency and content automation to ensure compliance and branding objectives are met.

The remainder of this paper reviews GMC PrintNet in terms of the particular business problems that it solves for the retail banking industry. It includes an up-close review of the product, as well as a discussion of its key differentiators.

## **II. Business Challenge: Keeping Content Accessible, Compliant and Relevant**

As organizations strive to remain competitive, they succeed through highly targeted customer service, consolidated systems, and more efficient processing. Document creation, processing, production and delivery are often critical parts of the functions that drive a retail banking enterprise, and play a direct but often unsung role in meeting key business objectives. The PrintNet solution is designed to offer real value at all the points in an enterprise where document quality, relevance and content are crucial to the business. It can be integrated across multiple platforms, and can set up documents automatically to meet compliance requirements and other business objectives within any environment without extensive, expensive programming.

### **Unifying Content Across Platforms**

For a variety of reasons – acquisitions, consolidation, centralization – many banking organizations today must juggle disparate environments for storing, accessing and managing corporate assets like documents, reports and records. They must also contend with a mix of paper and electronic content sources distributed across several applications and different platforms.

Sometimes banks must accommodate still vital legacy applications that would be serious obstacles to new technology upgrades without involving major reprogramming. In other cases, organizations are transitioning from outdated systems to new technology, but, to maintain daily operations, critical information is moved slowly between systems.

As organizations assimilate other organizations (and their respective technology systems) or transition information between systems, content is inevitably distributed across multiple systems. This process may involve conversion from an old content format to a new one, or it might require running two systems side-by-side until retention requirements for data on the old systems have expired. Either scenario – converting content formats or paying for duplicate software licenses – is expensive and time-consuming. PrintNet Software creates a central repository to control data through a common interface and facilitate access across platforms, departments and applications.

Web services are another option for providing open access to newer interfaces and systems. Other alternatives include direct system integration or programming through an enterprise application interface (EAI). PrintNet enables solutions like these for retail banking operations.

### **State-of-the-Art Data Access**

Given the pace of today's business climate and increased regulations related to data accessibility and security, financial organizations now need to make all appropriate content available in a highly secure environment, even when information resides on different systems and platforms. This requires state-of-the-art data access, and PrintNet satisfies the requirement completely.

PrintNet is a scalable solution for the consolidation and management of active and archived content usually located in separate repositories. The software enables a strategy that allows organizations to leave their content where it resides, convert it on the fly as requested, and then deliver it through

whatever channel is preferred. Live content can be managed by another application, while still being accessible through PrintNet. This helps banks maximize the content that already exists in other systems, while creating a unified centralized virtual repository for content access, retrieval, transformation and archiving. This approach has helped many organizations establish the sophisticated data access their business strategies require. For example, a large US bank wanted to convert 175,000 reports from microfiche to online archiving and viewing. GMC provided project planning, conversion utilities, and implementation staff for the project, which was successfully rolled out to 17,000 users.

### **Automating Statement Workflow and Messaging**

The core document applications of retail banking operations are statements, letters and billing. Statements are the primary means of communication with existing customers, and the documents have high readability rates. Messages are often woven into the documents to promote additional services, while the use of inserts remains a staple of the printed bank statement. Since the read rate of inserts is low, the importance of building messaging into the statement itself becomes more critical.

More than most other documents, bank statements must be formatted in very specific ways to accommodate variable data and to maintain data integrity for compliance and security. Statements involve complex design and logic requirements. The nature of banking applications requires “flow to” objects for these multi-page documents, and designers must know when any given data set for the application may push objects off the page, so they can take steps to avoid problems. These high-volume applications are further constrained by tight, inflexible delivery windows mandated by industry regulation and customer expectation.

Letters are typically generated in response to a transaction or customer service action, and may require personalization by a CSR with review and approval by a supervisor, or they may be required to conform to a standard template. A mid-volume application, letters are usually produced daily in batch or ad-hoc volumes. There is strong interest in a standardized format to streamline production and reduce the potential for errors, inconsistency and liability.

High-volume billing is another core application and another primary means of communication with existing customers. The application requires collection of data from legacy systems, with the incorporation of messages to promote additional services and encourage customer self-service online. Integration with mail piece tracking systems is essential to avoid duplicate production if a payment is known to be en route.

While other products may support letters and correspondence output as an afterthought, GMC recognizes the strategic communication value of these common documents. Billing applications require easily configurable setup of transactional data and targeted marketing messages with dynamic white space management. The GMC PrintNet Suite provides these capabilities and more as standard features. High usability is especially important to line-of-business owners seeking to provide additional services to existing customers, yet these departments do not have the technical skills or job responsibility for extensive programming of applications or development of new ones. The versatility of the PrintNet suite allows users to learn and support just one tool for a wider range of document applications, even complex bank statements or mortgage applications. The ability to handle full-color and

double-byte character sets makes PrintNet ideal for more efficient, effective creation of promotional materials.

As banks move to expand and promote services through more useful statements and correspondence, the ability to include features such as tables add value to document communication. PrintNet enables the generation of dynamic tables and white space management within a single user interface. Again, the advantage of a single, easy-to-use tool for many types of documents enables more efficient, consistent workflow. Data logic capabilities further enhance consolidated billing objectives by making it easier to bring together the data from multiple sources.

### **Ensuring Consistent Compliance**

Government and industry regulations have forced banks to pay close attention to the control and distribution of content. Now banking professionals must deploy new policies and procedures for managing and securing personal financial records, while at the same time making this information more accessible. The Sarbanes-Oxley Act mandates internal controls and procedures for financial reporting. The Safeguards Rule requires adequate security on access to financial information and credit reporting agencies to maintain data integrity. Other regulations facing retail banking affect the privacy of financial information, restrictions on sharing information and notification to all customers of privacy policies.

Operating within the mandates of these regulations while still leveraging the marketing value of customer-facing documents appears to be a nearly impossible task, yet one that GMC PrintNet Software is quite capable of supporting. PrintNet enables organizations to meet their regulatory compliance requirements, like content accessibility, without the burden of upfront conversion, computing system consolidation, or the ongoing cost of multiple software licenses. Specifically, once each repository is plugged into the virtual PrintNet repository, previous software systems can be turned off. Users and applications can access the data they need without complications.

### **Capturing Check 21 Opportunities**

The Check Clearing for the 21st Century Act or Check 21 is one of the most significant pieces of legislation in the history of US banking. It is designed to facilitate faster, less costly check truncation and check image presentment as banks substitute a machine-readable copy of a check (image replacement document or IRD) for return of a negotiable instrument to the bank of payment. With the promise of operational benefits and cost reductions, financial institutions are preparing for a significant transition from paper-based to electronic-based images.

Back-office application integration is needed to meet new regulations imposed by Check 21 legislation and take advantage of the appealing opportunity to reduce costs. Many banks already return checks to customers as images on statements, but this too requires integration between imaging and document composition solutions to print the documents appropriately.

PrintNet can streamline and simplify workflow to better support Check 21 and check imaging initiatives, including routing of images to the appropriate site for output or processing. The PrintNet

Suite seamlessly integrates with check imaging systems or document repositories without requiring extensive programming or creating unnecessary breaks and delays in workflow. The software uses a flexible workflow system that can be configured to match an organization's existing processes without creating major disruption or requiring extensive retraining.

The GMC PrintNet Suite integrates with back office applications including check imaging systems and repositories, so organizations can bring images or other targeted content from their back office systems into the print stream to reach target audiences with more meaningful and effective output. This also makes it easier to bring together the elements required for printing of IRDs, as well as generating accurate electronic images of documents.

### **Greater Marketing Relevancy**

For retail banks to achieve greater success, they need to capture new customers and build greater market share through relevant direct mail communications. To support this effort, financial institutions must utilize their primary point of customer contact – the statement – to promote additional banking services. When well executed, these powerful communications tools also help banks to cross sell and up sell additional services to existing customers and drive increased revenue share per client. The selection of which services to offer and even the images used in each piece can be driven by customer data for maximum relevance. Emerging affluent minorities represent important new opportunities, but printed promotional materials must be adjusted for ethnic culture and language to appeal to these customers.

PrintNet can be the cornerstone of a comprehensive strategy for statement communication. The product suite supports both transactional and promotional applications, enabling personalized messages to supplement or even replace paper inserts. When messages and images are based on customer data, organizations can produce highly customized, more targeted output that typically achieves better marketing response than static messaging. Targeting by data is especially critical for success with in emerging multicultural markets.

### **Building a Web-Based Service Environment**

As online banking and web-based self-service become expected, if not demanded by both business and consumer customers, banks must find ways to integrate not only old and new data sources, but also workflow for printed and electronic output. Data access is a challenge, especially when older content sources require custom integration or are not accessible by Internet clients.

Even if Internet access to content is not required, intranet access is usually necessary for various purposes within an enterprise. In retail banking, call centers are deluged on a daily basis with inquiries about statements, correspondence and billing. When a CSR can find and view an exact replica of a customer's statement creates an immeasurable advantage in terms of timesavings, customer satisfaction, and cost of response. The ability to post exact document images online for customer self-service enhances competitiveness in an increasingly online marketplace. There is growing interest in electronic presentment, yet banks must still maintain all systems and workflow for paper-based documents as well. Bringing the two together has been a huge challenge – until now.

As banking crosses more boundaries – geographic, cultural and digital – and moves into new areas to better serve and capture customers, PrintNet helps keep document workflow seamless and connected. In the retail banking environment, remote locations can range from branch offices to intrastate subsidiaries sending work for centralized production. With the PrintNet Web2Print module, ad-hoc documents can be completed and printed through a thin-client interface eliminating the steps and expense involved in remotely preparing and submitting jobs for production.

PrintNet can automate routing of output to the appropriate or requested delivery media. A major US bank uses a GMC solution to present current and historical bank statements to six million online customers. The system currently handles 15 million accounts and accesses 80 statements per minute with over 10,000 hits per hour. Based on the bank's implementation of PrintNet T, over 100,000 customers have elected to stop receiving printed statements. Unlike script-based post-processing that requires manual planning for various output formats, PrintNet T actually creates the workflow process for document design and data handling, so workflow need only be defined once for a particular application.

### **III. An Industry-Focused Approach**

With support for both transactional and promotional document design features, the GMC PrintNet Suite is capable of handling all documents required by the even the most diversified retail banking enterprise. Users gain a complete, robust platform for a broad spectrum of applications and platforms. PrintNet offers the advantage of a single product environment, an imperative for organizations needing to reduce the time, resources and costs of maintaining multiple document composition solutions. Users gain powerful document enhance capabilities without having to learn multiple tools.

#### **Content Integration Hub**

The GMC suite of products provides a scalable platform for managing enterprise content in today's retail banking environment. With sophisticated integration and access to any source of content, PrintNet acts as a hub for content ingestion, access, delivery and archiving. The software leverages content definitions to establish an index of locations and metadata, and this index becomes the unified user view into the virtual repository. When a user requests a particular item, the content is retrieved from the original storage location, converted on the fly for delivery to a digital printer or web browser, for example, and finally it is moved and stored on a new platform as specified by the organization. Regardless of where the content actually resides, PrintNet gives users a single view into the virtual centralized repository and maintains appropriate security and access privileges. This seamless integration makes PrintNet very easy to use, and the straightforward interface encourages user adoption. In addition, the integrated virtual repository addresses the requirements for access from desktop or browser-based interfaces, from branch locations or customer service centers.

#### **Seamless Interoperability**

Behind the scenes, the PrintNet solution uses web services and application program interfaces (APIs) to connect existing repositories, and then convert and present content as requested. The various

repositories can be located on different computing platforms, so banks are not required to alter their current platforms, databases or processes. PrintNet conversion capabilities span a gamut of environments, including Windows 2000, Linux, Solaris, HP-UX, AIX, and x/OS.

### **Reliable Document Tracking**

PrintNet provides process management and control reporting for verification of piece-level tracking, a critical requirement for sensitive documents such as statements that must remain in a secure delivery stream. Like many industries that rely heavily on mailed communications, retail banking must accommodate PLANET codes in documents. These codes are the USPS system for tracking outbound and inbound mail items to the individual post office. Outbound tracking identifies where bills and notices are in the USPS system, while inbound acknowledges when remittance and payments are on the way. Use of PLANET codes reduces customer service calls and unnecessary issuance of late notices and holds obvious value for financial documents, and PLANET codes are especially useful if they can be easily incorporated into documents at the early stages of production.

## **IV. Solution Review: GMC and PrintNet Software**

### **Vendor Overview**

Founded in 1986, GMC Software AG ([www.gmc.net](http://www.gmc.net)) provides software solutions for designing and producing customized business communications such as bank statements. GMC is headquartered in Switzerland with subsidiaries for sales and support in major markets around the world. Using a turn-key approach, GMC customized software development and systems integration services enable more streamlined workflow and greater document capabilities within document-intensive retail banking environments. An internal technical support team and professional services organization guarantee reliable maintenance, with web tools and user groups for self-service.

### **Product Overview**

The flagship PrintNet Software suite is designed for transactional and promotional applications typical of the financial services industry, with an emphasis on personalized document composition and production. PrintNet software features easy to implement layout, design and production capabilities that increase overall productivity and maximize ROI. Users gain the ability to handle complex designs and multiple business processes within a single, flexible workflow. The suite includes web modules for online design, proofing and submission to leverage the speed and convenience of online processing for use by remote branches or operations centers.

### **Workflow and Administration**

PrintNet applies administration and version control to objects and workflows to improve these two key aspects of statement and billing creation and production. The software supports a collaborative environment by integrating the data and design steps of the document development process. User password security is available, and the administrator, who can also roll back versions or make changes for production, assigns network rights to the design tool. PrintNet Output Management software

provides production print scheduling and job processing, with configurable workflow to track document creation and production.

### **Data Handling**

PrintNet modules handle merging, filtering and casing of data. The product accepts flat file, CSV, ODBC, and XML sources, which are combined through key indices for use with the design application.

### **Design Interface**

The PrintNet design interface presents a tree view of objects in the document and the variables within. A properties window allows the designer to edit object properties. Complex objects like tables or charts can be scripted to take advantage of data-driven logic for a more informative statement.

### **Importing Existing Forms**

For faster design, forms created in other applications such as Quark XPress can be imported into the GMC PrintNet Suite as objects that can then be used across several documents or as the base layout. As a result, banks can avoid investing more resources in the creation of content already available in other applications. Objects are organized into layers that can be set to print or just used for positioning. The design interface supports imposition; data-driven tables with headers and footers; and dynamic graphics with support for RGB, CMYK, HSL and LAB color spaces, as well as AFP color.

### **Proofing**

Unlike many other tools on the market, with PrintNet, proofing can be performed on live data and dynamic layouts. The data proof steps through the associated file record by record, displaying the values of each field used in the design. A visual proof of each record can be generated for each output type with display of error codes indicating which objects on which pages cannot be resolved.

### **Messaging**

Message areas are designated on the document within the design interface, and they can be of fixed size or width. A link is established between the layout and a message set. Messages can be defined and prioritized as “must print,” “print if space,” or “duplex,” which would allow the composition engine to place the message on the back of a page. If a monthly statement is very short, for example, the software could allow printing of a longer message. During composition, the messages are pulled in based on variable data, and usage information is written to the messaging server.

### **Output Management**

The PrintNet composition engine maintains the layout as full color, vector-based objects with relative positioning until converted to a printer-specific format. The output interface allows administrators to configure printers, set the number of copies, and designate extract files for indexing or post processing. The production engine produces AFP, Metacode, PCL, IJPDS, PostScript, VPS, HTML or PPML to a spool or IPDS to drive a printer directly. Banks with mixed production environments as a result of mergers or acquisitions are about to accept output on any of their existing systems.

## **V. Key Differentiators**

GMC Software is well positioned as a strategic provider of business communications solutions for the financial services marketplace. GMC PrintNet offers functionality that extends the capabilities of an organization through advanced data handling, content integration and web interfaces. GMC provides all of the tools necessary to ingest, archive, access and deliver content across all the locations of a financial enterprise and to its customers. The software is especially suited for organizations needing a solution that can be integrated with existing applications without expensive reprogramming or disruption of services, and production workflow automation manages processes from data to output. The rich object-oriented design software offers strong graphical and transactional features with solid platform support, even for Macintosh design clients. In addition, PrintNet capabilities are based on scalable technology that is not bound to a single computing platform.

### **New Value for Existing Systems**

PrintNet helps banks add significant value to their workflow without requiring major modifications or increased support. Organizations can continue with their existing content or reorganize it around new indices so users can take advantage of viewing and sorting features that may not have been available with their legacy application.

The suite's scalable architecture allows organizations to expand departmental solutions across the enterprise without changing systems. An open API lets organizations integrate the GMC PrintNet Suite with other back-office applications to share data or content objects. By leveraging the content contained in existing systems, organizations don't have to invest more resources to recreate content; instead they can make use of existing material to customize and personalize business communications.

Although the PrintNet product suite was developed in a mainframe environment for enterprise-level applications in large organizations, its capabilities are available for Windows, Linux, and Unix platforms. As such, the offering meets the needs of niche and departmental applications, while retaining the ability to scale to high volumes.

### **Making Content Accessible and Useable**

Content integration is available for active repositories maintained by other applications and from legacy archives. This cross-platform integration allows content to reside in its native environment and still be accessible in a distributed environment. Subscription services provide an automated mechanism for delivery of new content to users that will need it. As a result, companies gain greater capabilities and consistency across the organization without adding to IT workload. Content from archives can be integrated with live applications such as CRM and ERP, to present a consolidated view of one client or transaction for a higher level of customer service.

Using J2EE and SOAP as the basis for content integration reduces the customization required for linking to external repositories. Extensive use of XML as an internal format for features such as subscription services allows the system to ingest content and the rules regulating it at the same time. With

access to both the content and its metadata information, the software can receive content as part of a business process, act on content based on the metadata, and deliver it to end users or customers via paper or electronic formats. Granular security is provided at document, page, column or line level, with audit trails and support for secure media.

### **Common Interface for Greater Enterprise Value**

PrintNet Software is a powerful solution for banks needing to consolidate content access under a common interface for retrieval and delivery. This approach allows banks to incrementally optimize their overall content management system and practices, and position to meet current and future requirements emerging from legislation like the Sarbanes-Oxley Act without disrupting current content management and processing requirements.

By reducing the time and effort to manage documents and their content, banks achieve faster time to market, more manageable compliance, increased marketing and branding opportunities, and more responsive customer service. As these goals become more and more critical to success, financial service organizations are turning to GMC Software for the resources needed to achieve them.

### **Relevant, Results-Oriented Content**

PrintNet capabilities enable organizations to produce meaningful, targeted output for customers across diverse cultural backgrounds – ultimately positioning to reach a broader audience from a single application. As retail banking reaches out to new markets, these capabilities are valuable tools for the back office that must produce the appropriate communications.

The GMC PrintNet Suite supports full-color and vector-based graphics that can be included within a document based on simple conditional logic or more complex programming. In addition, the suite accepts double-byte character sets driven by UTF-8 codepages and produces documents in single or multiple languages. The GMC PrintNet Suite Output Manager delivers extract files generated during composition to intelligent inserters for selective insertion, based on customer data. This feature allows organizations to produce highly-customized or targeted output.

## **VI. Conclusion: Enabling Competitive and Successful Banking Enterprises**

As organizations strive to remain competitive, they will succeed through highly targeted customer service offerings, consolidated systems, and more efficient processing. Documents and their creation, processing, production and delivery affect critical functions that drive a retail banking enterprise. PrintNet solutions are geared to all the specific challenges facing the retail banking industry– security, Check 21 compliance, relevant marketing, operational efficiency, and more. GMC maintains a total focus on the components required for successful implementation and long term customer satisfaction – sophisticated tools, superior technology and a great support team. These values not only enable a greater solution, but also ensure success of short and long-term goals for all of its retail banking customers.

*For additional information or to contact a local GMC representative, visit [www.gmc.net](http://www.gmc.net).*