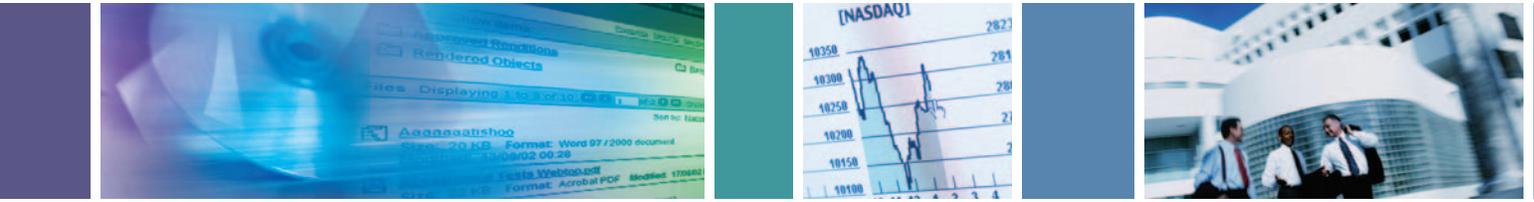


industry solutions



**Documentum Solutions
for Investment Banking
and Brokerage**

Gaining the Information Advantage

Between battling each other for their fair share of the coveted underwriting market—and battling online competitors for retail share of wallet—traditional investment banking and brokerage firms are increasingly dependent on technology for a competitive edge. From ensuring that research is independent of underwriting bias to increasing efficiency with automated straight-through processing, these organizations must leverage technology to reduce costs, save time, and squeeze every ounce of value from their information assets.



Documentum has more experience integrating solutions across the investment banking content value chain than any other enterprise content management company.

Highlights

- Streamlines operations
- Automates disclosure across product groups
- Reduces the costs of compliance
- Accelerates legal filing
- Supports collaboration on a global scale
- Enables targeted multi-channel marketing

Documentum—Up to the Challenge

The content value chain describes how essential processes are related in an organization and how content moves and is used across those processes. And in every area of the investment banking content value chain, Documentum helps manage regulatory compliance while reducing product cycle time, minimizing risk, and streamlining collaboration.

In fact, for every content management challenge an investment banking firm confronts, Documentum provides a solution. And with our standards-based platform and world-class partner integrations, the

opportunities to leverage Documentum throughout your organization are virtually unlimited. Documentum can help you exploit the natural relationships between content and processes that start in research and underwriting and extend all the way to back-office operations and compliance—which means your business becomes more agile, more responsive, and more competitive.

On the following pages, we profile solutions that illustrate the varied ways in which Documentum adds value to every area of a financial services organization.



Research: *Quality research is a must have for investment banks. Yet research is also a significant component of overhead. Enhancing the speed and efficiency of the research process is essential to matching a firm's cost base with its revenue stream, especially in the face of more stringent government regulations regarding conflicts of interest between research and underwriting.*

1: Research

2: Underwriting

3: Marketing

4: Sales and Trading

5: Back Office and Compliance

Solution: Equities Research Authoring A Large Asian Securities Firm

“Documentum has made our analyst reporting more efficient and independent. Workflow ensures that when something is published, we know it has met all of our approval standards as well as SEC regulations.”

Vice President, Business Process Support

This prominent Pacific Rim securities firm was founded in 1982 and is a wholly owned subsidiary of a large multinational corporation. The company has nearly 3,000 employees, with offices in Korea, London, New York, Tokyo, and Shanghai.

Challenge

This firm's investment analysts produced research reports that were distributed to the company's investment advisors and published to the company website. Analysts used different methods for compiling reports and created their own report forms. Consequently, it required a 10-person staff to standardize the reports prior to publication. In addition, with no central repository for reports, it was difficult to retrieve them when an analyst left the company. New SEC rules also mandated that an audit trail exist for all research-related activities. For example, the company must be able to demonstrate that an investment security report has not been written by someone on the underwriting team. The company wanted to increase the speed and competency with which analysts created reports, while automating SEC compliance and audit processes.

Solution

To start, the company deployed a Documentum solution that included integration with a third-party search engine and portal framework. The company then created 100 templates to accommodate analysts' needs for a variety of report formats. Now, an analyst simply chooses a template and populates it with the appropriate content. Formulas and calculations can be

included by linking the template with a Microsoft Excel spreadsheet. Documentum workflow controls review, approval, and publication. Reports are stored in an easily accessed central repository and are indexed for fast retrieval.

Results

Documentum has enabled a 70 percent reduction in the number of full-time employees required to manage and standardize reports. The solution also automatically eliminates conflicts of interest between research and underwriting. For example, when an analyst attempts to write a report on securities recommended by underwriting, a popup window appears in the template with the message “issues excluded from opinion.” This message displays again when the report is completed. If it is ignored, the report will not be published. Approved reports are automatically pushed to a Web server where they can be viewed by customers and the sales staff.

Recommended Product Suite

- Documentum Content Server
- Documentum Web Publisher
- Documentum Webtop
- Documentum Site Caching Services
- Documentum Enterprise Content Integration Services

The Documentum solution automatically eliminates conflicts between research and underwriting while producing a clear audit trail.



Underwriting: Debt and equity underwriting are significant sources of revenue for investment banks, and managing that information is a high-stakes requirement. The competition for underwriting clients is fierce so companies need the ability to quickly gather, process, and share enormous amounts of information.

1: Research

2: Underwriting

3: Marketing

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Solution: Real Estate Deal Management

Boston Capital

Boston Capital Corporation is a diversified real estate financing and investment company headquartered in Boston, Mass. The company owns more than 129,600 apartment units with a total development cost of over \$9 billion, making it the fifth largest owner/investor in multifamily real estate in the U.S.



Documentum helps Boston Capital close deals faster—a decided advantage in the tightly contested commercial real estate market.

“With the Documentum and Captiva solution, our key resources spend less time looking for and processing paper. Administrative functions are streamlined, creating greater throughput in the deal lifecycle. There’s no question that this platform will become an integral part of our business, and will be essential to our day-to-day operations.”

Tom Gardner, CIO, Boston Capital

Challenge

The process of putting together real estate deals is highly transactional and generates large volumes of content. Documents can be hundreds of pages and range from leasing and financing origination paperwork to market analysis reports and construction drawings. At Boston Capital, all processes for creating, approving, and accessing this information were manual and paper-based, with documents stored on isolated hard drives or in binders. There was no electronic system to facilitate information sharing among regional employees. Printing, copying, and mailing costs were high. To address these inefficiencies, the company adopted a new strategic plan that emphasized automating manual processes to become more competitive. The deal-making process was a natural test case.

Solution

Boston Capital deployed a Documentum solution for managing all the content essential for putting together a real estate deal, including financial models, financial agreements, and various reports and studies. Using Captiva InputAccel for scanning and imaging, the system captures and imports scanned images into the Documentum repository where they are categorized for fast and easy retrieval. Currently, Boston Capital is

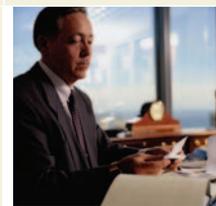
scanning an average of 10,000 pages per day. The company also employed Documentum virtual document management technology to create and store packages of related documents, such as a real estate closing package. Now virtual documents can be altered and reassembled on the fly and are updated automatically, ensuring that users have the most up-to-date document versions.

Results

Boston Capital estimates a 15 percent productivity gain from its Documentum solution. For example, Documentum has reduced the amount of time it takes employees to retrieve information from as long as two days to less than one minute. The gains in productivity enable a more efficient allocation of resources, which in turn strengthens the firm’s ability to compete effectively. For example, the solution shortens time to close for real estate deals, which improves customer relationships and enables executives to focus on high-value activities such as sourcing new business.

Recommended Product Suite

- Documentum Content Server
- Documentum Desktop/Webtop
- Documentum Content Intelligence Services
- Captiva InputAccel



Marketing: Disclosure requirements, which continue to grow more stringent, can cripple marketing efforts if not managed effectively. At the same time, competitive pressures compel firms to control marketing expenses while striving to deliver the right information to the right people on demand.

1: Research

2: Underwriting

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Solution: Intranet, Portal, and Website Management

State Super Financial Services

“Documentum works within our existing framework and accommodates growth and future deployment, without compromising performance. It also meets our need to publish HTML and, in the future, store content in XML.”

Geoff Purcell, General Manager IT, State Super Financial Services

State Super Financial Services (SSFS) is one of Australia's leading financial planning organizations with more than \$4 billion in funds under management. It has 15 offices with 250 employees throughout New South Wales, the Australian Capital Territory, Brisbane, and Melbourne.

Challenge

Rapid growth had made communications within SSFS increasingly difficult. There was no central repository for information and no means to publish consistent messages across the organization or to external audiences. SSFS wanted to create a knowledge management solution that would leverage the Web and the company intranet as the primary delivery vehicles for business communications.

Solution

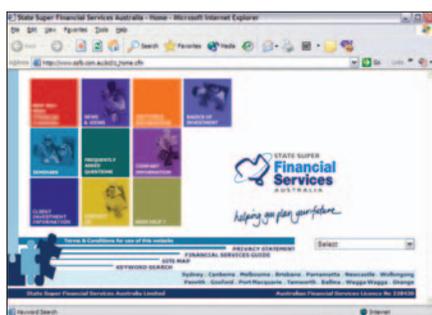
Initially, SSFS deployed Documentum to power its intranet. Through a browser interface, Documentum has now enabled the company's non-technical employees to easily create, manage, and publish content for multiple business units. Each unit has a content administrator who monitors, configures, and maintains business information. Business unit staff work closely with the administrator to ensure that accurate information is published to the appropriate areas of the intranet. SSFS has also extended the solution to leverage the Documentum repository's ability to manage any type of content including traditional documents created with desktop applications, HTML and XML, images, graphics, multimedia, and other types of rich media.

Results

With Documentum, SSFS leverages its content repository beyond the company intranet for Web and corporate portals, inter-enterprise collaboration, and e-business applications. For example, financial planners can use the SSFS website to download the latest investment returns or market performance data. Documentum also enables SSFS content administrators to free key personnel from content-related activities. Time to market is dramatically reduced because critical information can be delivered on demand with no intervention by the company's IT department. This knowledge management solution facilitates content reuse, which reduces needless duplication of information, enhances productivity, and lowers cost. In the future, SSFS wants to expand Documentum to include the automation of paper-based transactions in its funds management business.

Recommended Product Suite

- Documentum Content Server
- Documentum Web Publisher
- Documentum Webtop
- Documentum Site Caching Services
- Documentum Media Services
- Documentum Enterprise Content Integration



For SSFS, Documentum facilitates content reuse, enhances productivity, and lowers cost.



1: Research

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Solution: Website Management

Deutsche Börse Group

“Documentum is a major component of our new Web platform. It enables us to maintain the static content of our websites in one central system, with consistent layout and design, while lowering the total cost of ownership for our Web platform.”

Sebastian Martinez Cabrera, Project Manager, Deutsche Börse Group

Deutsche Börse Group is a fully integrated exchange-trading and technology organization and the leading infrastructure provider for the securities industry. The portfolio ranges from trading, clearing, and settlement to capital market information and processing technology. The company organizes and operates equities, derivatives, fixed-income securities, and commodities markets in cash and derivatives trading on exchange-based and OTC platforms.



Standardization on a single platform has lowered operating costs and improved the Web experience for Deutsche Börse customers.

Challenge

As demand for Web access to product, service, and investment information increased, the Deutsche Börse website grew to include information from different systems, based on heterogeneous technologies, software products, and a wide variety of hardware infrastructure. About 20 percent of the content was static, describing products and services. The remaining 80 percent was dynamic information describing the price movement of stocks, bonds, derivatives, and other investments. The company wanted to redesign its site to be more appealing to its target groups, such as companies, large institutions, and private investors, while providing improved navigation and consistent layout. At the same time, to reduce maintenance costs and improve performance, it needed to consolidate on a single Web platform that could easily support additional websites.

Solution

Deutsche Börse selected Documentum from more than 200 Web content management solutions. The company deployed a new Web platform that integrates Documentum with open source components such as a portal framework, search engine, and Web and application servers. The Deutsche Börse website was relaunched in July

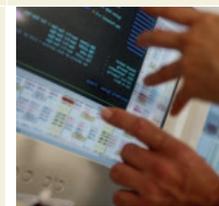
2003 with separate content areas or sub-portals for discrete target groups. Today, pre-defined templates control the look and feel of the site, ensuring consistency and protecting brand integrity. Content owners are able to publish information and define navigation for their sub-portals without intervention by the IT group. All static information can be edited through Documentum while dynamic information, such as real-time stock quotes, is incorporated through the portal framework.

Results

Currently three Deutsche Börse websites (deutsche-boerse.com, www.clearstream.com, and www.entory.com) are supported by the new Web platform. All content for the sites is managed by approximately 100 content authors using Documentum tools. Standardization on a single platform has enabled the company to substantially lower operating costs and reduce hardware investments while improving the Web experience for its customers.

Recommended Product Suite

- Documentum Content Server
- Documentum Web Publisher
- Documentum Site Caching Services



Back Office and Compliance: *Investment firms must constantly balance the risks of non-compliance, such as penalties and negative publicity, with the costs of remaining compliant. Legacy back-office systems prevent the automated record keeping that is the foundation of a comprehensive yet streamlined compliance process. And they're expensive to maintain.*

1: Research

2: Underwriting

3: Marketing

4: Sales and Trading

5: Back Office and Compliance

Solution: Disclosure Automation

A Global Investment Banking Firm

“Documentum has enabled us to develop a hosted utility that streamlines and automates the disclosure process—reducing cycle time and cost, ensuring accuracy, and enabling compliance.”

Information Technology Liaison, Legal Affairs and Compliance

This firm is one of the world's leading financial management and advisory companies, with offices in 35 countries and private client assets of approximately \$1.5 trillion. As an investment bank, it is a leading global underwriter of debt and equity securities and a strategic advisor to corporations, governments, institutions, and individuals worldwide.

Challenge

Each year, open-end mutual funds are required to file a registration statement. To protect investors, the SEC has gradually tightened regulations that apply to these documents. Without a flexible publishing process, more rigorous disclosure makes it difficult to meet product launch demands. Also, historically the legal filing lifecycle has contained many manual processes that increase the likelihood of errors. Managing content across fund groups adds to this risk. As a result, mutual fund companies are looking to technology for solutions that reduce cycle time, decrease costs, and mitigate the risks of legal filing.

Solution

Using Documentum, the company deployed an automated legal filer solution that manages the lifecycle of registration statements from authoring to publication. Today it enables disclosures to be easily reused across multiple filings. The foundation of the system is a Documentum repository that stores filing content such as standard risk disclosure and fund-specific language, language rules, assembly criteria, templates, graphics and logos, access control lists, and document metadata. As a filing progresses through a workflow it is subject to automatic scheduling procedures, and e-mail alerts notify appropriate personnel of its

progress. A rules engine ensures that each element of the filing is correct before templates are applied in a dynamic assembly process.

Results

Leveraging the Documentum platform, the automated legal filer solution makes the company's publishing process more controlled and efficient. It reduces overall cycle time while increasing the company's ability to meet aggressive product launch timelines. It lowers fees by reducing the amount of time service providers need to review filings. The solution's streamlined editing process delivers additional savings through the diminished cost of typesetting, author's revisions, prepress, and file conversion. The solution also decreases errors, mitigates legal risk, and eases compliance by using rules-based language and providing an audit trail for language revisions. The company expects to extend the platform to include additional disclosure filings such as proxies and shareholder reports.

Recommended Product Suite

- Documentum Content Server
- Documentum Compliance Manager
- Documentum Business Process Manager
- Documentum Business Process Services

Disclosure automation powered by Documentum mitigates legal risk and eases compliance while enabling the company to meet aggressive product launch deadlines.

It's the brave new world of investment banking. Trading margins are shrinking. Venture capital firms are keeping a tight grip on their money. And industry regulators are demanding much greater transparency. If ever there was a time to invest in a more efficient content value chain, it's now.

For more information about how Documentum can empower an entire organization to be more productive, more aggressive, and more innovative, visit www.documentum.com or call **800.607.9546** (outside the U.S.: +1.925.600.6754).

Documentum—The Solution of Choice for Companies in Brokerage and Investment Banking

The rules of the game have changed in brokerage services and investment banking. Now the rapid and innovative use of information to increase revenue and reduce cost are keys to competitive survival. That's why successful investment banking and brokerage firms rely on Documentum. Award-winning Documentum solutions unite content across business areas to speed information sharing, support collaboration, improve customer service, and boost efficiency. When information is the difference, the choice is Documentum. To learn how Documentum can deliver improved business performance to your brokerage or investment banking enterprise, visit us online at www.documentum.com/industry/finance or call 1.800.607.9546 (outside the U.S.: +1.925.600.6754).

About Documentum Software from EMC

Documentum software from EMC Corporation includes enterprise content management solutions that enable organizations to unite teams, content, and associated business processes. With a single platform, EMC Documentum software enables people to collaboratively create, manage, deliver, and archive the content that drives business operations, from documents and discussions to e-mail, Web pages, records, and rich media.

A Partial List of Customers in Brokerage and Investment Banking

Aktiva Group	Visa International	Marsh & McLennan
Royal Bank of Canada	Deutsche Börse	Capital Group Companies
Mastercard International	Investec	BZW Services
Countrywide Home Loans	VanGuard	Voestalpine Stahl
Wellington Management	D.E. Shaw & Co.	Boston Capital
Thomas Weisel Partners	SWX Swiss Exchange	Nomura International
FleetBoston Financial	T.Rowe Price Group	Cazenove & Co
Aegis Mortgage Corporation	Samsung	Schroder Investment
Bayard Partners	AMVESCAP	Management Limited
Luxembourg Stock Exchange	ANZ Investment Bank	GE Capital Commercial Equipment
Caisse de Dépôt et Placement du Québec	Toronto Stock Exchange	Leasing
State Super Financial Services	Charles Schwab Corporation	Dresdner Kleinwort Wasserstein
	Houlihan Lokey Howard & Zukin	



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