# MFS Investment Management

Investment leader uses XML to streamline operations and offers customized materials to business channels with Adobe FrameMaker and PatternStream from FML

#### **PROFILE**

- A leading provider of mutual funds and investment services
- Assets managed (as of 6/30/02): \$122 billion
- Headquarters: Boston, Massachusetts
- Employees: 2,714
- www.mfs.com

#### BENEFITS SUMMARY

- With Adobe FrameMaker and PatternStream, MFS can produce 15 times the number of publications and with a smaller staff.
- Automated enterprise authoring and publishing with FrameMaker provides MFS with more control over the final look and feel of all marketing collateral.
- FrameMaker 7.0 support for XML will make it easier for MFS to reuse information and to incorporate unstructured information, such as articles, into collateral.
- Ease of converting FrameMaker documents to Adobe PDF files enables MFS to create compact files ready for delivery to printers or to customers via the Web.
- Using FrameMaker, the overall quality of the final documents is higher due to better access to more timely, accurate data in the automated publishing system.

Quick access to up-to-date mutual fund information is key to winning new business and keeping clients happy in the financial industry. In addition, brokers and other investment specialists need materials tailored to a potential client's interests, so customization of documents is critical. As the nation's first provider of mutual funds, MFS Investment Management (MFS) has long understood the importance of offering clients ongoing access to investment information.

Today, MFS is a leader in providing investment services to institutions and individuals worldwide, managing assets of \$122 billion. To address the diverse information needs of customers, MFS implemented an automated enterprise authoring and publishing system based on Adobe FrameMaker software and PatternStream from Finite Matters Limited (FML), an integrator of enterprise publishing solutions using Adobe FrameMaker. The system helps MFS to more efficiently reuse content across departments and enables the company to produce more than 400 different marketing publications quarterly, delivering them on paper and online in Adobe Portable Document Format (PDF).

"FrameMaker and PatternStream enabled us to boost the variety of marketing documents we produce by 15-fold," says Ernie Savoie, vice president of engineering at MFS Corporate Marketing. "We can now offer a broader range of information, and the overall quality of our automated marketing material has improved."

## XML to support unstructured information

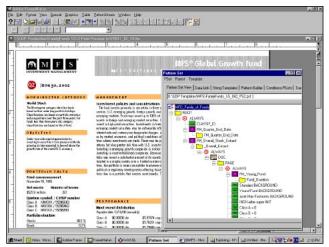
To more easily incorporate unstructured information such as articles into collateral, MFS is looking to create a repository of XML files within an Oracle database. Articles, logos, and graphics can be stored as XML files, pulled from the database, and then placed alongside structured data such as text and numbers in FrameMaker templates. "FrameMaker 7.0 software support for XML can act as a bridge as we explore ways to automatically bring structured and unstructured information into one document," says Savoie.

The planned XML- and SGML-based work-flow supported by FrameMaker 7.0 will enable MFS to store all relevant information in a single database and bring it into the publishing system. This structure will make it easier for design staff to increase the variety of artwork and number of articles appearing in MFS collateral—and improve the overall content and look of documents. The XML processes will encourage groups to share materials company-wide and enable them to keep on file information that can be reused as needed.

# Consolidated data, improved productivity

Information for MFS marketing documents comes from departments throughout the company, with a single brochure often requiring 50 or more pieces of information from various groups. For example, Equity and Fixed Income analysts provide the latest valuation figures, as do staff from Fund Treasury and other departments; MFS Compliance delivers text outlining current regulations; Human Resources updates executive





MFS has implemented an automated enterprise authoring and publishing system based on Adobe FrameMaker and FML's PatternStream software. Content is stored in an Oracle database linked to the PatternStream application. Staff can select a FrameMaker template from within the system and create new materials or update existing ones. FrameMaker provides MFS with more control over the final look and feel of all marketing collateral, while support for XML enables MFS to incorporate unstructured information, such as articles, into collateral.

"FrameMaker and PatternStream enabled us to boost the variety of marketing documents we produce by 15-fold. We can now offer a broader range of information, and the overall quality of our automated marketing material has improved."

Ernie Savoie Vice president of engineering MFS Corporate Marketing biographies; and Corporate Communications can provide articles and key marketing points.

The large number of content providers and the variety of information—text, data, articles,

charts—present MFS Marketing with numerous challenges. Data must be assembled, verified, and then incorporated easily into documentation. Previously, creating performance-marketing materials was a slow, manual process that involved eight employees using QuarkXPress and Xtags to lay out designs. Because of the difficulty of assembling information and laying out the pages, marketing staff could produce only about 25 different publications quarterly.

Explains Savoie, "FrameMaker and PatternStream offered an ideal solution. Now, with fewer staff we can produce 15 times the number of publications." Department information is collected in an Oracle database linked to the PatternStream application. Selecting from any one of the many FrameMaker templates in the system, staff can initiate through PatternStream the creation of new materials or update existing ones. Because text and data from other departments can be incorporated easily into layouts, the publications staff can leverage the work of other employees to more quickly complete materials.

# **Gaining control over document creation**

Centralizing the creation of marketing materials gives MFS an effective strategy for ensuring consistency across documents. For example, departments sometimes use different names for the same products. While this is not a problem for internal communications, it can be confusing for

customers if inconsistencies appear in materials. By pulling all information from a central database and incorporating rules for naming conventions, standard fonts, and layouts into the FrameMaker templates, the automated system brings muchneeded control to the document creation process.

Once materials are finalized, marketing staff transfers them to a server running Adobe Acrobat Distiller Server software, which can handle large-scale conversions of PostScript® documents to Adobe PDF. In seconds, new materials are converted to platform- and application-independent Adobe PDF files for delivery to service providers for printing and electronic delivery to customers via the Web. The compact files travel quickly over the Internet, and documents in Adobe PDF look the same on screen as they do on paper.

## **Customized marketing collateral**

Although much of the data and information contained in marketing collateral is the same across documents, the look of materials changes depending on the audience. Materials developed for brokers researching 401(k) investments look very different from materials designed for insurance companies interested in investment options, even if the highlighted funds are the same.

"The ability to mix and match information from our database to create more tailored documentation is critical," concludes Savoie. "With FrameMaker and PatternStream, we can expand the type and quality of automated marketing material we deliver to clients."

### TOOLBOX

Adobe Acrobat Distiller Server Adobe FrameMaker PatternStream from FML Oracle database

PCs
Apple Macintosh computers



