

Molecular.

How MFS Investment Management Migrated
to Portal Technology

10.31.2006

CONTENT, DOCUMENT and
KNOWLEDGE
Management
KMWorld

MFS Portal

MFS.com US Investor Non-US Investor US Institutional Investor

login to mfs.com register news center about MFS careers contact us search help

Manage my Accounts Products & Performance News & Commentary Retirement Planning College Planning Education & Planning Forms & Literature

Welcome to MFS Investment Management® for U.S. Investors

Shortcut to our funds Select a fund

Log in or register for mfs.com

Investment professionals Plan sponsors Investors TPAs [Continue](#)

Order MFS literature online

Manage My Accounts October 9, 2006

Mutual Fund, IRA & 529 Accounts
View accounts; buy, exchange, or sell shares; change address; view statements and tax forms; update personal information; and more. [Log in to MFS Access](#)

401(k) and Workplace Retirement accounts
View accounts; exchange shares; rebalance portfolio; change investment elections; and more. [Log in to MFS Retirement Access](#)

Retirement plan access for Plan Sponsors and TPAs
Plan sponsors and third party administrators can view plan and participant information, place transactions, and more. [Log in to MFS Plan Access](#)

News & Announcements

[Week in Review: U.S. markets hit record highs this week](#)
A look at key events influencing U.S. and global financial

Market Watch

I want to...

- [Reduce sales charges](#)
- [Register with mfs.com](#)
- [View prices & performance for all funds](#)
- [Get a prospectus or fact sheet](#)
- [Download a form or application](#)
- [Learn about MFS 401\(k\) plans](#)
- [Understand 529 Plans](#)

MFS Tax Center [Click](#)

MFS.com US Investor Non-US Investor US Institutional Investor

login to mfs.com register news center about MFS careers contact us search help

Products & Performance News & Commentary Education & Planning

Welcome to MFS Investment Management® for Non-US Investors

Shortcut to our funds Select a fund

Log in or register for mfs.com

Investment professionals Investors [Continue](#)

Market Watch

News & Announcements

[Week in Review: U.S. markets hit record highs this week](#)
A look at key events influencing U.S. and global financial markets for the week.

[Calm opens way for stock gains](#)
James Swanson, CFA, is Senior Vice President and Chief Investment Strategist of MFS.

[MFS Global Perspective - September 2006](#)

I want to...

- [Register with mfs.com](#)
- [Get MFS® Meridian™ Funds prospectus or fact sheet](#)
- [Check MFS® Meridian™ Funds Monthly Management Results](#)
- [Learn about investing](#)
- [Get information on additional investment products](#)

Bringing a world of opportunity to a world of investors

160 investment management professionals worldwide

Learn more about MFS® Institutional Business [Next](#)

MFS.com US Investor Non-US Investor US Institutional Investor

login to mfs.com register news center about MFS careers contact us search help

About MFS Institutional Advisors Strategies & Performance White Papers & Perspectives Information Center

Welcome to MFS Institutional Advisors

Market Watch

| | | |
|---------|-----------|--------|
| DJIA | 11,346.02 | -0.09 |
| S&P 500 | 1,360.27 | +0.80 |
| NASDAQ | 2,310.27 | +10.28 |
| DJVA | 257.47 | +0.18 |

Updated as of 3:35 PM ET 8/9/06 [Click to Desktop](#)

News & Announcements

[Week in Review: U.S. markets hit record highs this week](#)
A look at key events influencing U.S. and global financial markets for the week.

[Calm opens way for stock gains](#)

I want to...

- [Read the latest White Paper or Commentary](#)
- [Research an Institutional Investment Strategy](#)

Bringing a world of investment opportunities to institutional investors

Agenda

- **Project Overview**
- **Project Details**
- **Successes and Challenges**
- **Q&A**

Agenda

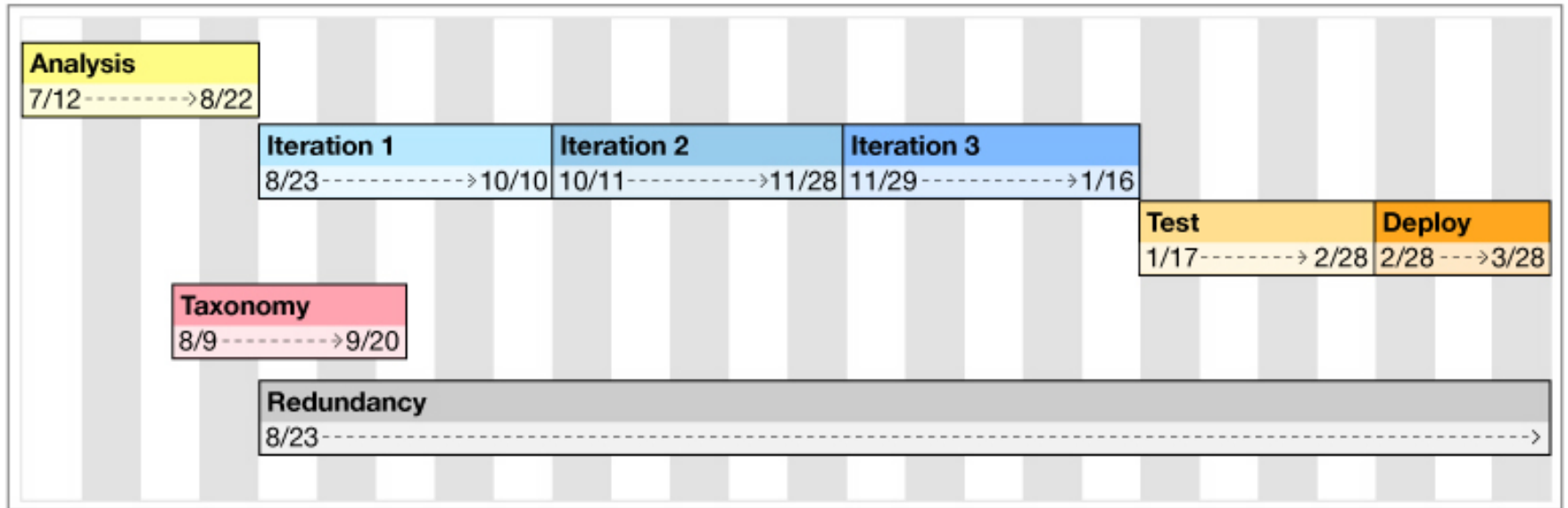
- **Project Overview**
 - **Goals**
 - **Approach and Timeline**
 - **Project Development Team**
 - **Other Participating Parties**
 - **Scope Snapshot**
- Project Details
- Successes and Challenges
- Q & A

Project Overview: Goals

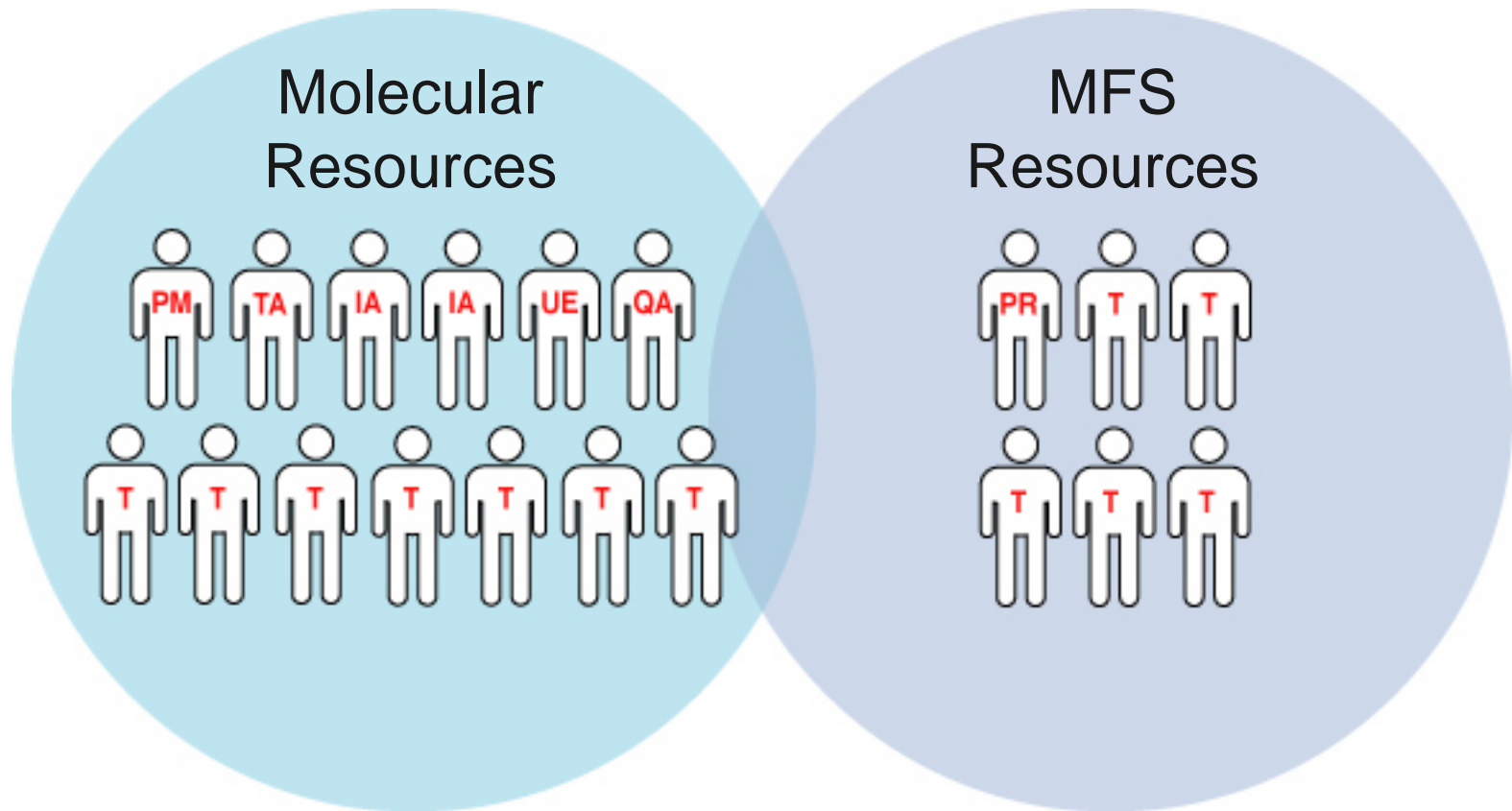
- Migration to Websphere Portal Platform from ATG:
 - Establish a platform that can scale to provide a unique set of knowledge and information based on the user's role
 - Merge 7 sites into 1
 - Migrate existing functionality at a minimum, plus additional features – scope was variable
 - Uninterrupted customer service
 - Launch on time
 - Launch within budget – Multi-million dollar effort

Project Overview: Timeline & Iterative Approach

MFS 2004 Redesign



Project Overview: Project Development Team



PM = Project Manager

TA = Technical Architect

IA = Information Architect

UE = User Experience

QA = Quality Assurance

T = Technical Engineer

PR = Production Resource

Project Overview: Other Participating Parties

- MFS Network, Security, and Compliance
- IBM – WebSphere Portal and WAS
- @stake – Security planning and consulting
- DST – third-party transaction vendor

Project Overview: Scope Snapshot

Scope Matrix: Functionality

| # | Requirement | Comment | Migrate / Modify / New | Priority (L,M,H) | Effort (L,M,H) | Effort Hours | Owner (Req + Coordination) | UE Owner | Tech Owner | Tech review | Developers | Iteration 1 | Iteration 2 | Iteration 3 | Tech Estimate (I2/I3) | UE Estimate (I2/I3) |
|----|--|--|------------------------|------------------|----------------|--------------|----------------------------|----------|------------|--------------|----------------------|-------------|-------------|-------------|-----------------------|---------------------|
| | Functional Requirements | | | | | | | | | | | | | | | |
| 1 | General Assumptions | | Change | | | | Myriam | Steve | Markus | | Markus, Keith, Brian | X | X | X | 0 | 0 |
| 2 | Common Components | | Change | | | | Leonardo | Steve | Markus | | Markus, Keith, Brian | X | X | X | 0 | 0 |
| 3 | Groups / Sub-groups (Personalization) | Add sub role to the current role based access. Impacts profile, content targeting, content entry, and role navigation. | Change | High | M | | Markus | Steve | Markus | Keith | Markus, Keith, Brian | X | X | | 0 | 0 |
| 4 | Universal Page | Analysis required to determine all possible behaviors taking into consideration global URLs etc. | New feature | High | L | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | | X | | 47 | 56 |
| 5 | Content | Complex requirements- need further refinement | Change | High | H | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | X | X | X | 0 | 0 |
| 6 | Content - Navigation | Overall structure should be similar but portal technology and groups/sub-groups may change this | Change | High | H | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | X | X | | 0 | 0 |
| 7 | Content - Flexible Content Model | Content element | Change | Medium | H | | Myriam | Jeremy | Markus | Keith, Ramzi | Markus, Keith, Brian | X | X | | 0 | 0 |
| 8 | Content - Dashboard | Content element | Out of Scope | Low | - | | - | - | - | - | Markus, Keith, Brian | - | - | - | 0 | 0 |
| 9 | Content - Billboard | Content element | Move | Low | L | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | | | X | 53 | 23 |
| 10 | Content - Buffer Page(s) | Content element - must define if more than one buffer page type is necessary | Move | Medium | L | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | | X | | 15 | 18 |
| 11 | Content - Banner | Content element | Move | Low | L | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | | | X | 61 | 32 |
| 12 | Content - E-Forms/Contact Us | Content element | Move | Low | L | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | | X | | 96 | 25 |
| 13 | Content - Help | Content element - may require different presentation - TBD | Change | Medium | L | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | | X | | 85 | 36 |
| 14 | Content - Index Icon | Content element | Move | Low | L | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | | | X | 70 | 18 |
| 15 | Content - MFS Interactive | Content element - currently lives in its own section - should be converted to an asset type that can appear in multiple places throughout mfs.com. The Section will NOT appear on the website anymore. | Move | Medium | L | | Steve | Steve | Markus | Keith | Markus, Keith, Brian | | | X | 0 | 0 |

Agenda

- Project Overview
- **Project Details**
 - **Migration**
 - **CMS Upgrade and Taxonomy**
 - **Testing**
- Successes and Challenges
- Q & A

Project Details: Migration

- About 2/3 of the features were modified or enhanced:
 - New technology: WebSphere
 - New business requirements
- Tradeoffs:
 - User experience vs. Content Management and Portal features
 - Leveraging Portal features vs. Custom build
 - Iterative approach

Project Details: CMS Upgrade and Taxonomy

- Original goal was to revisit taxonomy to address feedback from Market Metrics on the site regarding:
 - Site organization
 - Terminology
- Content triaged and republished to the site
- Emphasis was on **placed** vs. targeted content
- Led to content triage and navigational labelling updates

Project Details: Testing

- 6 weeks of Integration and Test:
 - Portal customizations required extensive testing – a lot goes on under the covers
 - 250,000 users – more than had been supported by Portal up to that point
- Started performance testing 4 months before launch – that was still not early enough

Agenda

- Project Overview
- Project Details
- **Successes and Challenges**
- Q & A

Successes

- Iterative approach – broke the work into manageable pieces
- Taxonomy – started at the beginning of the project
- Content management – major decisions made early
- Performance testing – planned and executed during development

Challenges

- IBM Portal product was immature at the time:
 - A combination of IBM recommendations, patches, custom implementation, and workarounds were leveraged to address issues
 - The issues included: memory management, SSL, user database configuration, and performance
- Working with a combined team (e.g., culture, mix of skills) and third parties
- Management and coordination of 20+ MFS contributors

Agenda

- Project Overview
- Project Details
- Successes and Challenges
- **Q & A**

Q&A

Keys to success for Portal Initiatives

- Establish your objectives
- Build the Business Case
- **Use a Phased Approach**
- Establish a Governance Structure
- Invest in Training
- **Establish the Infrastructure**
- Design the User Experience
- **Determine or Clarify the Content Management Infrastructure**
- Plan your Information Security Needs
- **Invest in Testing**