



MAX 2006

Using Business Rules to Drive Dynamic Experiences with Adobe

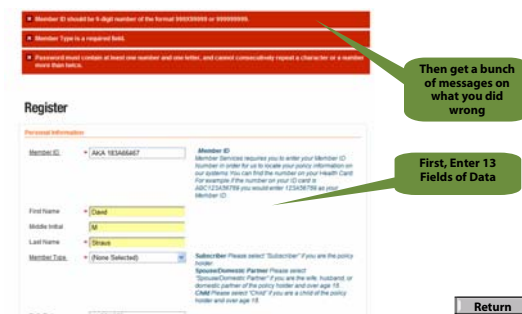
- Dynamic User Interactions
- Dynamic Business Process
- Dynamic Document Generation

David Straus / Joe Chiaro
Corticon Technologies / Adobe



2006 Adobe Systems Incorporated. All Rights Reserved. 

Example – Dynamic Interactions




Member ID should be a 9 digit number of the format 999999999 or 9999999999
Member Type is a required field
Password must contain at least one number and one letter, and cannot contain only repeat characters or a business email address

Then get a bunch of messages on what you did wrong


First, Enter 13 Fields of Data

Return

2006 Adobe Systems Incorporated. All Rights Reserved. 

Agenda

- The Value of Dynamic Experiences in Business Applications (10 Min)
- How Can Business Rules Be Used to Drive Dynamic Experiences with Adobe (10 min)
- Demonstrate Example Dynamic Experiences (20 Minutes)
- Summarize (5 min)
- Q&A

2006 Adobe Systems Incorporated. All Rights Reserved. 


Example – Business Agility and Sophistication

Use Case – Financial Service – Fee Rebate

<ul style="list-style-type: none"> • Today: Simple decisions <ul style="list-style-type: none"> • Decision Criteria <ul style="list-style-type: none"> • Overdraft History last 6 months, • Average balance • Action/Result <ul style="list-style-type: none"> • Platform Officer Determination • Attempt to Cross-Sell Overdraft Product 	<ul style="list-style-type: none"> • Desired: Cross PL Decisions <ul style="list-style-type: none"> • Desired Criteria <ul style="list-style-type: none"> • DDA – Overdraft History • DDA – Average Balance • Customer Value Score • Current Sales Cycle • Current Customer Complaint • Existing High Value Product • Party Role Relationship • Action/Result <ul style="list-style-type: none"> • Variable
---	---


2 to the 2nd = 4 Rules 4 to the 7th = 16,384

Return

2006 Adobe Systems Incorporated. All Rights Reserved. 

What is a Dynamic Experience


- From the User Perspective **Example**
 - An Application that Responds to Each Interaction
 - An Application that is Relevant and Interacts Appropriate to my Last Action
 - Results and Feedback are Provided Immediately (e.g. Appropriate and Available Products)
- From the Business Owners Perspective **Example**
 - Improve User Experience (Internal and External)
 - Applications are Agile – Applications Change in Hours/Days not Weeks/Months
 - Increase the Businesses Ability to Add Desired Sophistication to Applications
- From the Information Technology Perspective **Example**
 - Meet Businesses Requirements
 - Increase IT Agility - Compress the Spec/Code/Test Cycle
 - Increase Business's participation, while maintaining needed IT controls

2006 Adobe Systems Incorporated. All Rights Reserved. 

Impact on IT - Model-Driven Rules Management


Impact to Decision Development and Development Process

Procedural Coding and Traditional Rules Development



Resulting system often contains errors and performance issues


Corticon Model-Driven Rules Management

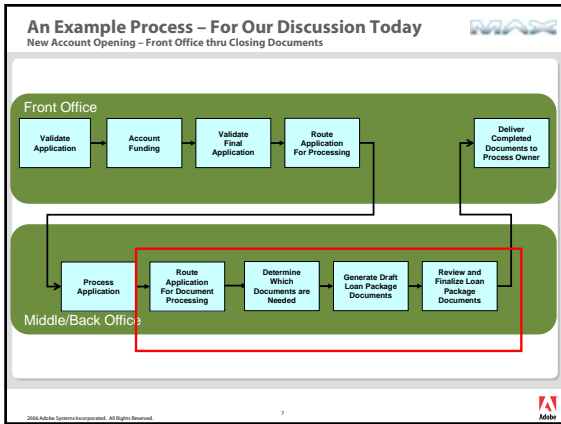


Resulting system is high quality and high performance

Requires Technical Resource

Return

2006 Adobe Systems Incorporated. All Rights Reserved. 



- ### What are Business Rules and a Business Rules Management Systems
- Business Rules allow you to;
 - Separate/Externalize the logic of business decisions from their application
 - In a form that can be understood, managed and maintained by domain experts (the people who understand the decision)
 - Consumable by applications as a standard based service
 - Business Rules Management System is a software solution that allows you to;
 - Model/Author the Business Rules associated with a Decision in a Business Friendly Environment
 - Manage Business Rule Definitions (Access Control, Approval, Change Impact, etc.)
 - Generate and Deploy Executable Decision Services (Rules Engine)
- 2004 Adobe Systems Incorporated. All Rights Reserved. 10

- ### Example – Dynamic Document Generation
-
- Financial Services – New Account Open – Document Generation
- Before
 - Over 1800 document packages generated monthly
 - Average Loan Package takes 2-3 weeks to produce.
 - Each Package includes a sub-set of 30 core legal documents
 - Each Legal Document changes based on multiple attributes (size of loan, collateralization, form of lendee, state, etc)
 - Over 100 employees in document generation process today
 - Average Cost to Produce Initial loan package is \$500 or \$10M Annually
 - After
 - Dynamically generate initial document packages based on business rules
 - Rules owned/managed by law knowledgeable staff
- 2004 Adobe Systems Incorporated. All Rights Reserved. 8

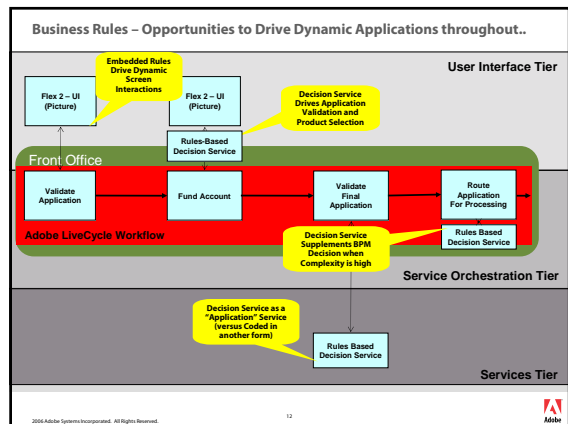
- ### What is the Value of Business Rules in Achieving Dynamic Interactions?
- Agility
 - Applications Can Change at the Rate of Business Change
 - Sophistication
 - Decisions can be defined that are far more 'complex' than could be effectively coded
 - Business/IT Alignment
 - Good Business Rules Can be Understood by "Domain Experts" – Business People
 - The form of the 'Specification' = the form of the "Code"
 - Eliminate Translation Errors
 - Model-Driven Architecture
- 2004 Adobe Systems Incorporated. All Rights Reserved. 11

Business Rules to Achieve Dynamic Interactions

What are Business Rules and a Business Rules Management Systems?

What is the Value of Business Rules in Achieving Dynamic Interactions?

2004 Adobe Systems Incorporated. All Rights Reserved. 9



Some Real Applications – Corticon + Adobe

- Dynamic Interaction with Adobe Flex™ 2– Combining Flex with Business Agile Rules to Manage Dynamic Interactions of Field Animation
- Externalize Decision from a UI (Flex) or Process (LiveCycle Workflow) that has an Agility (Dynamic) change requirement (e.g. which products are appropriate for this user profile)
- Dynamic Document Assembly – Rules Make Document Selection and Document Generation Dynamic

2004 Adobe Systems Incorporated. All Rights Reserved. 13

What is Dynamic Document Generation

Automatically generate legal documents based on the information available at the initiation of any document based process (i.e. the Commercial Loan Application)

```

    graph TD
      A[Commercial Loan Application  
Adobe LiveCycle FLEX] --> B[Determine What Documents are Needed  
Corticon Business Rules Management]
      B --> C[Constructs Legal Documents  
Adobe LiveCycle Assembler]
      C --> D[Adobe PDF]
      C --> E[Microsoft Word]
      B --> F[Construct a Customized Document Description for Each Needed Document  
Corticon Business Rules Management]
      F --> G[Get Document Segments Specified by Rules from Database  
Adobe LiveCycle Assembler]
      G --> H[(Database of Contract Text Segments)]
  
```

2004 Adobe Systems Incorporated. All Rights Reserved. 14

Demo

2004 Adobe Systems Incorporated. All Rights Reserved. 14

Anatomy of a Document And the Challenge – Documents are Variable

Variables within Legal documents that come from the 'Application' or Transactional System

Sections of Text that are unique to a given document based on certain criteria such as "State" or "Type of Collateral"

This document is Confidential and the Property of Corticon Technologies and only available for distribution to Adobe Systems Incorporated. 17

Dynamic Document Generation

2004 Adobe Systems Incorporated. All Rights Reserved. 15

Creating the Dynamic Document Generation Environment

```

    graph TD
      A[1. Document Decomposed into its 'sections'] --> B[Each section is created and maintained via a friendly UI]
      A --> C[2. Rules for Assembly are Documented]
      C --> D[Assembly Rules are Modeled, Verified and Testing in a friendly spreadsheet-like UI]
      B --> E[(Content Management System)]
      D --> E
      E --> F[Each section's content is stored in a content management system]
  
```

2004 Adobe Systems Incorporated. All Rights Reserved. 18

How it Works: Creating A Specific Document

Creating Section 1 with Special Language per State

Document is outlined in the vocabulary and related to the commercial loan application

Like MS Excel a sheet exists for each section of the legal document

The 'rules' are written in plain English by the domain expert (lawyer)

A general rule is written to assure a block of common text is included regardless of the "State"

Conditional rules are written to align certain text with specific states

2004 Adobe Systems Incorporated. All Rights Reserved. 19

Dynamic Document Generation - Conclusion

- Takes significant time and cost out of complex document generation across many vertical implementations
- Can be completely created and maintained by the domain experts who understand the content and context of the legal documents
- It can change at the speed of business change
- Takes advantage of the document centric business process automation and document security, approval and control that made Adobe famous

This document is Confidential and the Property of Corticon Technologies and only available for distribution to Adobe Systems Incorporated

2004 Adobe Systems Incorporated. All Rights Reserved. 22

Business Rules Determine Which Documents

2004 Adobe Systems Incorporated. All Rights Reserved. 20

Presentation Summary and Conclusions

- Adobe Brings a Dynamic Set of Tools for User Interaction, Process Management and Document Management and Generation
- Add Model Driven – Business Rules Management to Add Significant new Opportunities to:
 - Increase Dynamics Interactions
 - Increase the Agility and Sophistication of Business Driven Decisions
 - Create New Alignment and Value between the Business and IT

2004 Adobe Systems Incorporated. All Rights Reserved. 21

Rules Configure Document Segments for Each Selected Document

2004 Adobe Systems Incorporated. All Rights Reserved. 21

Offer: A Production Business Rules Solution*

to the First 20 Qualified Attendees

*Valid for End User Organizations. Production Environment limited to 1 Designer and 5 Decisions Services (250 Business Rules)

2004 Adobe Systems Incorporated. All Rights Reserved. 24

Better by Adobe.™

