Powering Dynamic Processes with ILOG BRMS

ILOG BRMS Briefing

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- The Path to Dynamic BPM

- Understanding BRMS

- How BRMS Complements BPM

- ILOG BRMS and IBM

Etymology

From French **dynamique** < Ancient Greek **δυναμικός** (dunamikos) "powerful" < **δύναμις** (dunamis) "power"

Pronunciation

- IPA: /daɪˈnæmɪk/
- 🔊 Audio (US)^{help, file}

Adjective

dynamic (*comparative* **more dynamic**, *superlative* **most dynamic**)

1. Changeable; active; in motion.
   The environment is **dynamic**, changing with the years and the seasons.
   He was a **dynamic** and engaging speaker.
2. Powerful
3. Able to change and to adapt (*also in computing*)
4. (*music*) Having to do with the volume of sound.
   The **dynamic** marking in bar 40 is forte.

Synonyms

- (*changeable, active*): active, fluid, moving
- (*powerful*): energetic, powerful

Antonyms

- static

Source: http://en.wiktionary.org/wiki/dynamic

http://www.dynamicarchitecture.net

83%

Expect substantial or very substantial change

The change gap

Triples

98%

Plan business model changes

Source: IBM Global CEO Study 2008

- **Reduces organizational agility**
  - Difficulties in responding to evolving business conditions

- **Reduces employee productivity**
  - Manual intervention required to deal with complexities of operations

- **Increases load on IT**
  - Keeping applications/systems updated & current across the enterprise consumes time and resources

BPM is a discipline consisting of software and expertise to improve the performance, visibility, and agility of business processes

How does it work?

BPM improves processes that span IT systems, people and information by:

- Providing tools for modeling and implementing end-to-end processes

- Orchestrating and automating process activities across functional boundaries

- Integrating disparate systems and data/information sources

- Providing real-time visibility and actionable insights to enable continuous process improvement

Business Processes

Sales	Operations	Partner	Finance

Understanding BRMS

Easy, Fast, Reliable Change with BRMS

- Eliminate decision silos
- Make decision logic accessible to Business and IT
- Reduce maintenance time/cost
- Increase decision automation
- Implement fine-grained, context-specific logic

Where Business Rules Typically Exist

```
#ifdef __WIN__
 /*
   Before performing any socket operation (like retrieving hostname
   in init_common_variables we have to call WSAStartup
 */
  {
   WSADATA WsaData;
   if (SOCKET_ERROR == WSAStartup (0x0101, &WsaData))
   {
     /* errors are not read yet, so we use english text here */
     my_message(ER_WSAS_FAILED, "WSAStartup Failed", MYF(0));
     unireg_abort(1);
   }
  }
#endif /* __WIN__ */

 if (init_common_variables(MYSQL_CONFIG_NAME,
                      argc, argv, load_default_groups))
   unireg_abort(1);                        // Will do exit

 init_signals();
 if (!(opt_specialflag & SPECIAL_NO_PRIOR))
   my_pthread_setprio(pthread_self(),CONNECT_PRIOR);
```
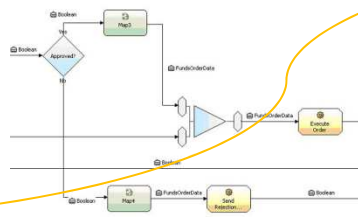
Applications

Documents

People

Processes

Business Rule Management System

User Tools

Rules are Defined, Analyzed and Maintained

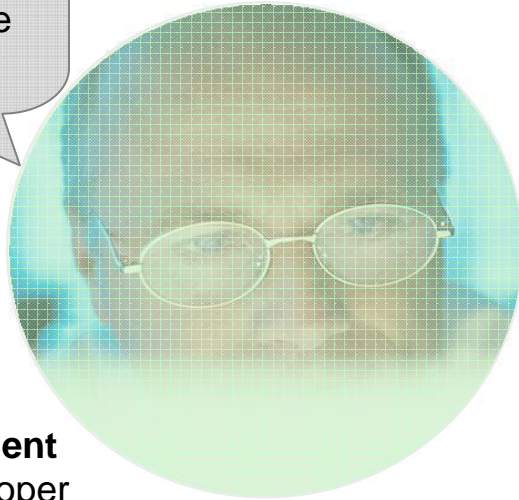**Rules + Metadata**

Rule Repository

Rules are Stored and Shared

Rule Server

Rules are Deployed, Executed and Monitored

I need a comprehensive rules development and maintenance environment

I need easy, efficient and reliable policy change delivery
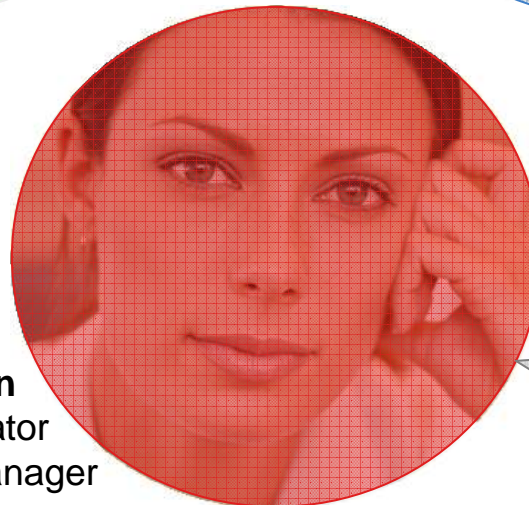
Development
Rule Developer
Rule Modeler
Business Analyst

Line of Business
Business Partner
Policy Manager
Line of Business Manager

Production
IT Administrator
System/Ops Manager

I need performance, scalability, monitoring and reliability of operations
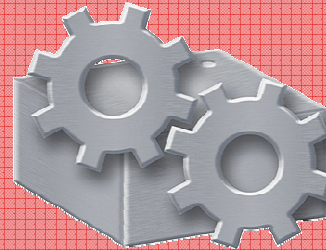
IBM ILOG JRules

Rule Studio

Rule Scenario Manager

Rule Team Server

Developers

Business Users

Rule Execution Server

Administrator

Reduced lead times for changes

Reduced time to create or update product promotions from weeks to hours (retail)
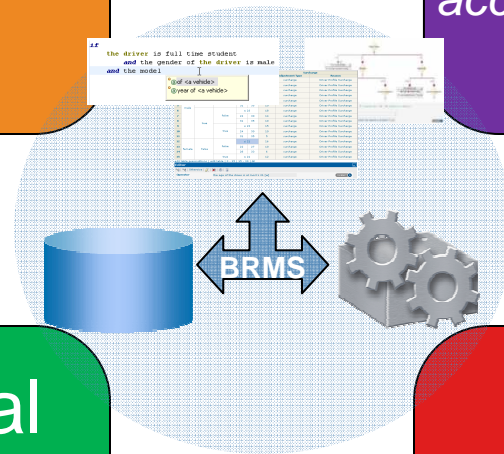
More personalized client interactions

10x improvements in acceptance of cross-sell offers (retail banking)

Internal/external compliance

Support of regulations that vary by customer location and product line (insurance)

Business – IT alignment

Reduced new policy implementation by 50% (financial services)

BRMS

Watch ILOG customer testimonials at: http://www.ilog.com/dialog/

How BRMS Compliments BPM

DNA of the Agile Enterprise

Process Mgmt

- **Describes the "how" of the core activities of the enterprise**
- **Combines automatable and human elements**
- **Is fundamentally concerned with operational efficiency of the organization**

Rules Mgmt

- **Determines the "what" of enterprise activity**
- **Is focused on automating decisions**
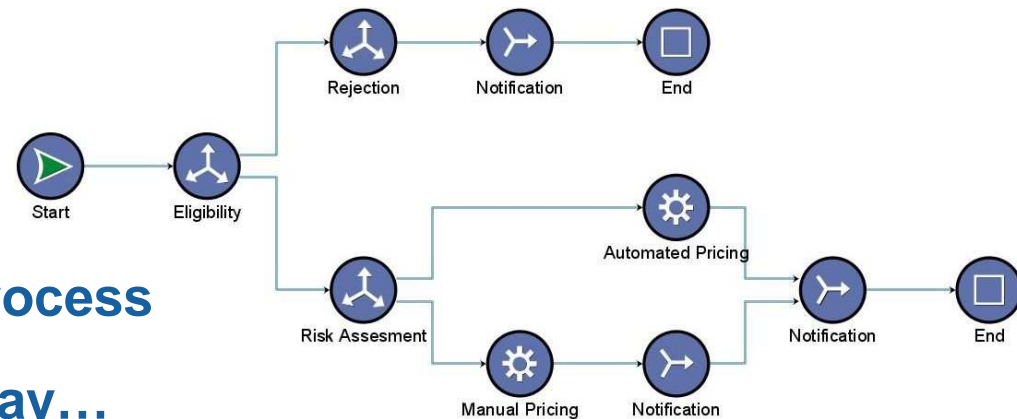- **Is fundamentally concerned with the operational intelligence of the organization**

✓ Increase business agility by allowing business users to manage decision logic

✓ Streamline and stabilize processes by externalizing decision logic

✓ Enable re-use of decisions across different processes, applications and systems

✓ Enable automation of complex, variable decisions

✓ Effectively manage large and evolving sets of rules

Managing the Decision Intensive Process

Streamlined process

works fine <u>today</u>…

- **Until**
  - **New Product**
  - **New Policy**
  - **New Regulation**
  - **New Pricing Rules / Model**
  - **New Scoring Rules / Tables**

…

Your 'streamlined' process in x months

- Processes become too complex to maintain

- Update times are too long

- Improving the process becomes increasingly difficult

Your 'streamlined' process in x years

Data Validation

Eligibility

Pricing

Transparent Decision Service (TDS)

```
definitions
    set 'name' to the first name of the driver ;
if
    the number of accidents the driver  has been involved is more than 2
then
    set 'high risk driver' to true ;
    add eligibility error: "The driver (" + name + ") has been involved in too many accidents" ;
```

Change Once, Impact Anywhere

Business Systems

BRMS

User Tools

Rule Repository

Execution Server

Transparent Decision Service

Business Processes

Business Decisions

ILOG BRMS-BPM Examples

Customer	Process	Results
Vision Service Plan (VSP)	Healthcare Claims Processing	• Speed to market gain over 50% • Changes to business rules now implemented in days • Achieved significant productivity gain on 1M+ claims processed on a monthly basis
Join a March 25 webcast featuring VSP at: http://www.summitwebseminars.com/ILOGSOA/		
Bank of the West	Commercial Loan Origination	• 93% improvement for application approval (15 days to 1) • Greater control & easier audits driving significant cost savings
Junta de Castilla y León	Government Social Benefits Eligibility	• Better service delivered to the citizens: clear & consistent application processing • Transparency & auditability of all scoring, eligibility & computation rules • Rapid response to changes in central or regional government policies

ILOG BRMS and IBM

Why ILOG BRMS?

- **Longtime WebSphere Partner**
  - ILOG BRMS integration with WebSphere BPM
  - ILOG BRMS complements WBS Fabric, WebSphere Business Events + Industry Frameworks and Solutions

- **"SOA Specialty" certification**
  - ILOG supports Eclipse, SCA, CEI

  Ready for

  IBM | **SOA**

  Specialty

- **IBM FileNet Partnership**
  - ILOG awarded FileNet "*ISV Partner of the Year 2006*"

- **Support for Mainframe Systems and Legacy Applications**

- **ILOG's BRMS Leadership**

- **Now IBM Family!**

How does JRules fit with WPS?

Service Components

Business Processes

Human Tasks

Business State Machines

JRules

Supporting Services

Mediation (ESB)

Interface Maps

Business Object Maps

Relation-ships

Dynamic Service Selection

SOA Core

Service Component Architecture

Business Objects

Common Event Infrastructure

WebSphere Application Server ND (J2EE Runtime)

ILOG provides a WID plugin that includes a wizard to generate the SCA component

The end result is an SCA component with an operation for each ruleset

Integrating with WPS through SCA

An Integration Developer can use the JRules SCA component without any knowledge of the business rules

Also, the business rules can log CBE events to the CEI framework, to produce a detailed and integrated audit trail
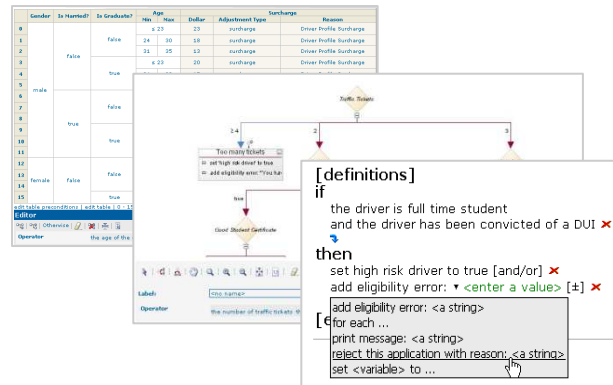
- ## Integrated Tooling

  - ### Development Environment Built on Eclipse

  - ### Integrates with SCC systems (Rational Clearcase)

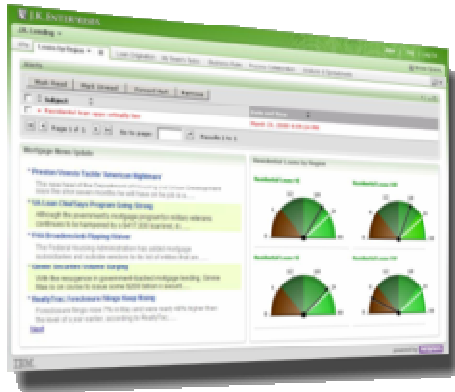 - ### Generates SCA-compliant service

- ## Run-Time Integration

  - ### 100% J2EE

  - ### Common Event Infrastructure (CEI) support
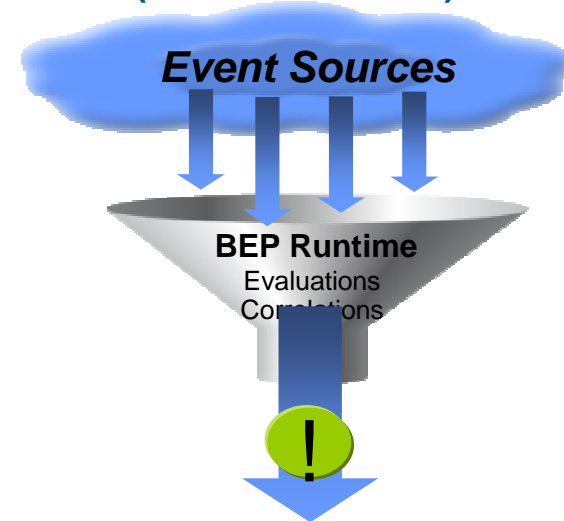   - Supported by WebSphere Monitor

  - ### JMX Support
    - Supported by Tivoli

Decide
(Business Rules)

Monitor
(BAM)

Detect
(Business Events)

Event Sources

BEP Runtime
Evaluations
Correlations

Orchestrate

Business Process Management

Know What's Happening, When to Act, and What to Do

ILOG BRMS Information Resources

- **On-demand Webinar Series – all available at**
  http://www.ilog.com/products/businessrules/
  - Early education
    - **Buyer's Guide** - what one needs to know when buying a BRMS
    - **BRMS in Action** - role-based usage scenarios demos
  - Advanced education
    - **Best Practices** - implementation best practices & methodology
    - **Hot Tips** – deep technical insights
  - IT Modernization & Transformation

- **BRMS Resource Center –** http://www.ilog.com/brms
  - Free 6 month trial download
  - White papers
  - Use cases
  - Forums and blogs on business rules

Questions & Answers

Thank You