

Welcome to today's Best Practices Webinar

Expanding a Successful BRMS

March 18, 2009 10 a.m. Pacific / 1 p.m. Eastern

Today's presentation will begin at the top of the hour. Thank you for attending!

Today's Program



- Presentation (45 minutes)
- Q&A
 - Submit a question at any time during the presentation
 - Click Q&A from the panel on the bottom righthand side of your screen
 - Type a question and click Send
- Link to recorded presentation and slides will be e-mailed to all attendees
- If you have any technical problems during the broadcast, for help call 1.866.779.3239

Summary



- It is an iterative process
 - Think big, start small, and build incrementally
- Make sure to consider
 - Methodology
 - Governance
 - Architecture
 - Rule quality
- As much about people and processes, as tools
- There is no "one size fits all"

Customer Stories...



- BRMS expansions
 - Geo / Product
 - Process
 - Standard Stack



Geo/Product Expansion

Customer Snapshot



- F500 Financial Service
 - Operating WW, insurance LOB
 - Rating engine
- F500 Commercial Bank
 - Operating in the US
 - Automated Underwriting System (AUS)

Situation



- Rating = core of insurance policy origination business
- Current rating engine not suitable for supporting new business entities, as a result of global expansion
- Any new rate structures require significant modification/re-engineering of rating engine
- Need to sunset underlying technology platform



Move toward BRMS approach

- Separate policies (Rates/Rules) from the existing system
- Streamline rates development and deployment processes
- Support new rate structures
- Provide the business with ability to update and audit rates
- Improve documentation, change controls (SOX and other audits), and testing

Start small/validate – International Rates Project

- No data/rules migration
- Low transaction volumes
- Low number of rating rules



Expand/migrate - Domestic Rates Project

- Migrate rating engine from the legacy system to a long term supported platform
- Built upon success of the International Rates Project

Timeline

- Mar Apr: Initial analysis of current rating system in order to provide project estimate
- Apr: Proposed project plan and estimate
- May Jan: Project execution (inception transition phases)
- Mid Jan: Delivered production system
 - 1 month early/under budget



- Some key decisions taken early on
 - Cost reduction
 - Migrate only subset of rates (most active) from legacy system
 - → Reduced project cost by +50%
 - Risk reduction
 - Legacy rating engine remains in production
 - All new rate deployment and rate updates take place in ILOG BRMS
 - Incremental deployment of BRMS infrastructure and rules

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Situation

- Manual, intensive process
- Inconsistency in customer counseling and scenario decisioning
- IT staff frustrated with tedious maintenance of similar business rules in multiple systems

Goals

- Lower processing cost and augment capacity without increasing staff
- Deliver consistent decisions based on needs analysis
- Shorten time-to-market



"Think big. Start small. Build incrementally."

Loan Sourcing Loan Processing Funding & Servicing Portfolio Management

- Pre-qualification
- Pricing
- Deal structuring
- Product/deal selection (best-fit)
- Loan disclosures
- Fraud detection & management
- Application submission
- Workload balancing

- Automated underwriting
- Collateral valuation
- Pricing & pipeline management
- Document tracking
- Quality control

- Alerts/triggers
- Investor remittance
- Collections & recovery
- Line management
- Dispute management

- Customer service
- Customer segmentation
- Customer retention
- Cross-sell
- Profitability & account management



"Think big. Start small. Build incrementally."

Options

- Fixed
- Adjustable rate
- 80/20
- Neg. Am

Programs

- Prime
- ALT-A
- Home Equity

Decisions

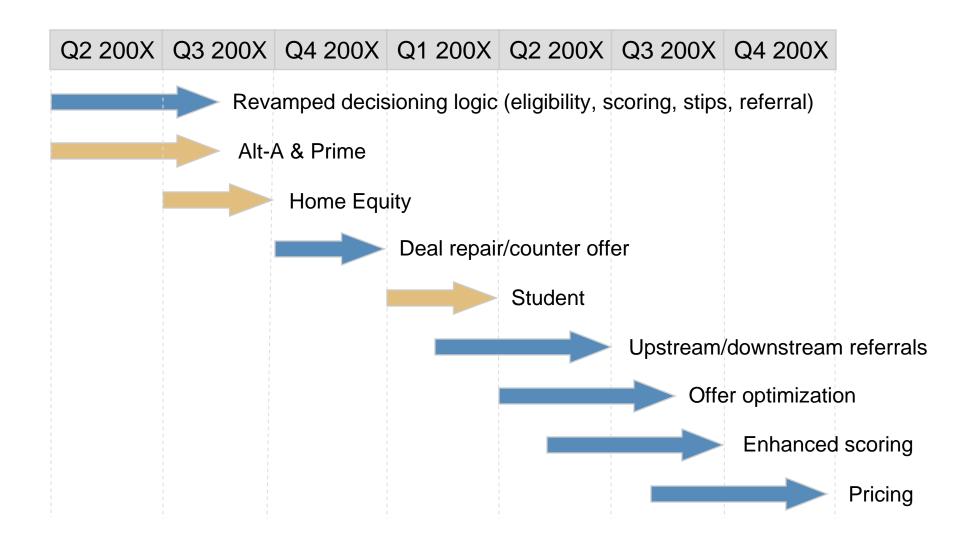
- Eligibility
- Pricing
- Credit scoring
- Condition & stipulations
- Referral, case management
- Product optimization
- Deal repair / counter offers...

Channels

- Retail
- Wholesale
- Web

Project Timeline





Lessons Learned



- Mitigate risk and maximize visibility to management
 - Migrate baseline and enhance; iterations with quarterly milestones
 - Blend product and functional coverage
- Provision for new roles/skillsets
 - Rules Business Analyst (BA), Rules Architect/Developer
- Involve BAs from get-go
 - Streamline rule writing
 - → 3 BAs: 6000 rules, 60,000 test cases in 6 months



Process Expansion

Customer Snapshot

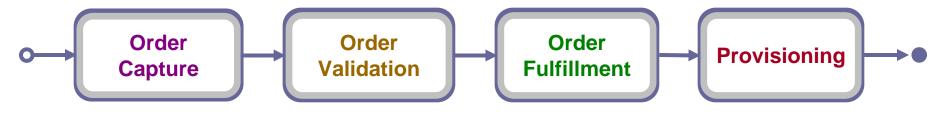


- F500 Telecom Operator
 - Operating multiple networks: mobile, fixed-line, VoIP...
 - Order management
- F500 Commercial Bank
 - Operating in the US
 - Consumer loan processing

Order Management Process Overview



Key decision services



- Eligibility
- Risk scoring
- Product selection & configuration
- Product & service recommendation
- Pricing & promotions

- Online validation
- Batch validation
- Gate-keepers

- Dynamic processes
- Exception handling
- Mediation to existing systems
- Functional middleware

- Translation of sales order into technical order
- Technical order configuration based on customer equipment

F500 Telecom – Order Management



situation

- 30 to 40% of received orders contains errors
 - 20,000 orders a day to handle
- Costly & time-consuming manual processes
 - Orders of 1,000+ fields verified semi-manually
 - Each invalid order costs over \$100 in handling and processing along with regulatory fines

Goals

- Upgrade legacy with automated, flexible, and scalable eligibility decision service
- Lower TCO with centralized maintenance of business rules
- Improve policy formulation pre-legislation through simulation and impact analysis

Initial Focus



Order Capture

Order Validation

Order Fulfillment

Provisioning

- Eligibility
- Risk scoring
- Product selection & Configuration
- Product and service recommendation
- Pricing and promotions

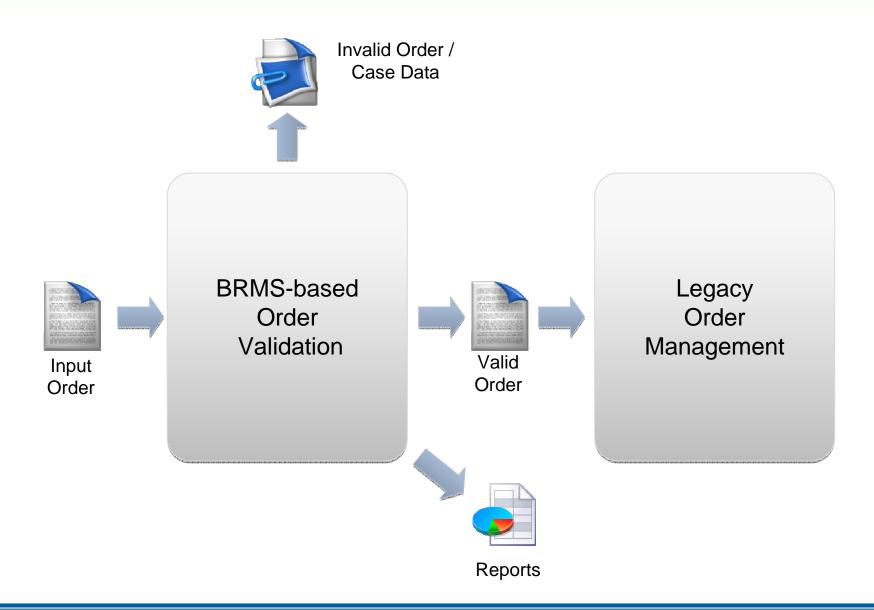
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First Step Toward Legacy Transformation





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Solution

- An ILOG BRMS based solution
 - to automate enrolment validation, eligibility check, case assignment & exception handling
 - to centralize all rules into a single platform for improved control & auditability
 - to enable accurate & swift policy formulation

Benefits

- Improved reliability of order driving greater efficiencies
 - \$M savings per month.
- Greater customer acquisition & retention
 - Faster order processing, real time order status updates...
- Shorter time to market quick implementation of LSOG & ASOG policy updates

Subsequent Expansions





- Eligibility
- Risk scoring
- Product selection & Configuration
- Product and service recommendation
- Pricing and promotions

- Online validation
- Batch validation
- Gate-keepers

- Dynamic processes
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Customer Snapshot



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Quick win - "Best bang for the buck"



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- Customer service
- Customer segmentation
- Customer retention
- Cross-sell
- Profitability & account management



- Start with pre-qualification
 - High impact on <u>customer service</u>: better differentiate
 - Deliver services the way the customer wants (e.g. Web, 24x7)
 - Transition sales force from transactional to strategic focus
 - Rapid deployment of new products
 - Dynamic pricing in an interest-rate sensitive market
 - High impact on <u>operational efficiency</u>: cost reduction
 - Fully automated "straight through" processing
 - Exception-based
 - Allow more time to focus on diversification and "gray area" loans



Divide and conquer

- 2 teams: application integration and rule content/testing
- Weekly iterations

Validate and radiate

- Tackle most-complex product first
 - Copy/paste/simplify
 - Use vendor expertise upstream and gradually take over
- Convince most conservative operational users first
 - Side-by-side pilot program
- From pre-qualification to automated underwriting
 - Reuse and expand decision services

Lessons Learned



- Think decision services
 - Right atomic level
- Blend ROI and time-to-market decisions
 - Why not data validation?
- Invest on analysis during inception
 - Invest enough time doing analysis upstream
 - Accelerate implementation downstream
 - Common ground, shortened migration, greater reuse ...



Standard Stack

Customer Snapshot



F500 Retailer

- Operating multiple channels
- Plug-n-play decision-support systems

G500 Financial Services

- Operating WW; banking, investment, and insurance products
- Single decisioning platform



Strategic goal

 Unify and streamline multi-channel operations, while gaining better insight on customers to deliver better experience and maximize revenues

How

- Revamp arcane transaction management with a plug-n-play decision-support system
- Phase out channel-centric legacy stovepipes
- Shift from spotty automation to STP and exception management

Multi-Channel Transaction Management



Situation

- Obsolete front-end order entry system
 - Limited functionality & home grown technologies slated for obsolescence
- Lack of decisioning accuracy leading to loss of revenue & time too many false positives...
 - Out of every 100 suspect orders only 3 are found to be fraudulent
- System lacks flexibility with rules hard coded in spreadsheets
 - Business users need to go to IT for a simple rules change, which last between 2-3 weeks

Goal

- Reduce revenue loss with new fraud detection & management platform
 - Focus on web & retail channels; new purchases & return goods
- Improve agility & accuracy
 - Put business users in the driver's set of policy definition & maintenance

Solution

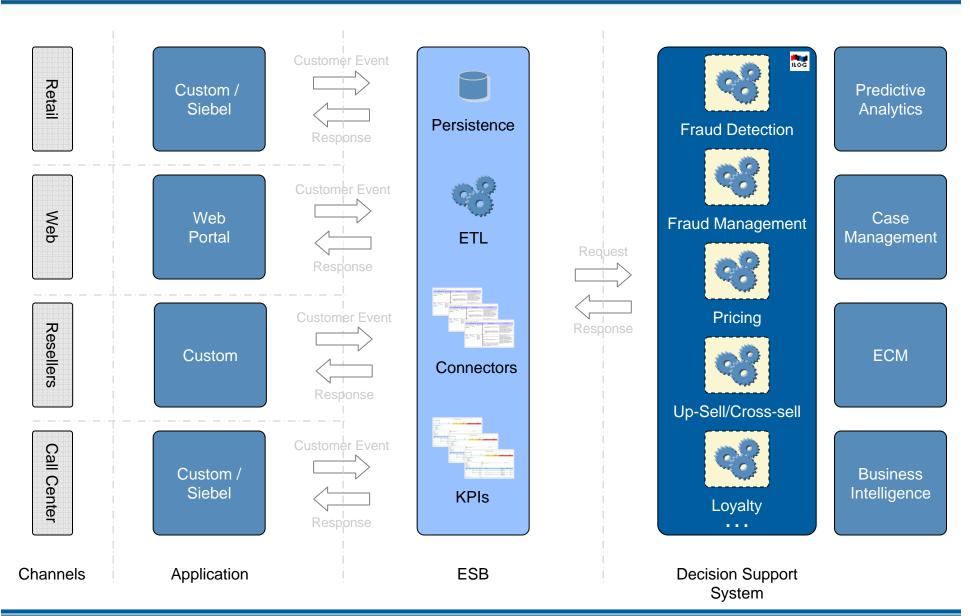
- A BRMS- based fraud detection & management platform
 - Dedicated rule maintenance interface for Business Users "Loss Prevention Group"
 - Centralized Fraud Rules Repository
 - Integrated with CRM, ERP & numerous data sources e.g. web, warehouse...

Benefits

- Reduced fraud in their transactions
 - Improved fraud detection & streamlined case management (hours vs. days or weeks)
- Reduced labor for Loss Prevention team
 - Instant screening & immediate queuing / prioritization of suspicious transactions
- Modernized transaction management
 - Set up an enterprise decisioning platform where rules can be reused for marketing, pricing...

Functional Architecture





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G500 Commercial Bank

- Operating WW; banking, investment, and insurance products
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Strategic objective

 Streamline its IT infrastructure from front-office to back-office, with the goals of continuously improving customer service and reducing costs

How

- A single platform across all divisions to standardize processes and create product factories (back-office systems able to process the products for various distribution channels/brands)
- Operate common technology development, technology support, and process management
- "Industrialization" of banking operations to scale

Decisioning Platform for SOA



Situation

- Operates in 40 countries with different regulatory frameworks, 130000 employees, 60 M customers
- Business strategy: customer focus
- Industrialization of banking operations separating back-office processing operations and distribution operations
 - Huge economies of scale thanks to a "flat" back-office paradigm
 - IT management for cost efficiency

Goals

- A single platform across all divisions to standardize processes & create product factories
- Define a reference architecture model to be reused across projects, select the best-of-breed stack of software to support a "customer-focused end-to-end business process oriented organization"
- BRMS to maximize
 - Adaptability of platform across all banks to changes in regulations and market conditions
 - Reusability of rule-based decision services

Solution

- Integration of ILOG BRMS in SOA infrastructure
 - First decision service: customer document management to determine which forms should be filled by customers for any type of interaction with a bank of the group
- Bank IT and ILOG PS adapting methodology to business rules lifecycle management::
 - Standardization of development processes and documents

Benefits

- Improve IT strategic focuses:
 - Time-to-market
 - Flexibility
 - Software quality
- Exploit opportunities to further improve cost efficiency

Blue Print Architecture



70+ BRMS-based Decision Services



- Required documents
- Process organization
- Organizational structures
- Operational security
- Documentation control
- Faster payments
- Payment factory
- SEPA
- Pricing engine
- STP manager

- Operational security
- Insurance underwriting
- MIFID
- Stipulations
- Incentives and commissions to commercial agents
- Risk management
- Security routines
- Decision box risk management

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Key Facts



- Corporate mandate
 - A C-level champion is needed to be successful
 - This person needs to be an evangelist and clearly define what constitutes success
- CIO office/center of excellence
 - Creating a team of business experts in each area yields benefits
- Strategic partnership with vendors
 - Vendor's expertise and services leveraged strategically
 - IT staff or consultants for the tactical work
- Upfront investment delivering high payoffs with sustainability
 - Cycles spent on POCs, POTs ...
- Regular assessments
 - Periodically do an honest assessment of where you are.
 - Don't be afraid to admit that improvements can be made.

Wrap-Up



- It is an iterative process
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- Make sure to consider
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 - Architecture
 - Rule quality
- As much about people and processes, as tools
- There is no "one size fits all"





Question and Answer

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- Type a question and click Send



Resources

- www.ilog.com/brms
 BRMS Resource Center -- explore, learn, try
- http://blogs.ilog.com
 Latest on all ILOG products, technology, and methodology
- http://www.ilog.com/corporate/training/
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