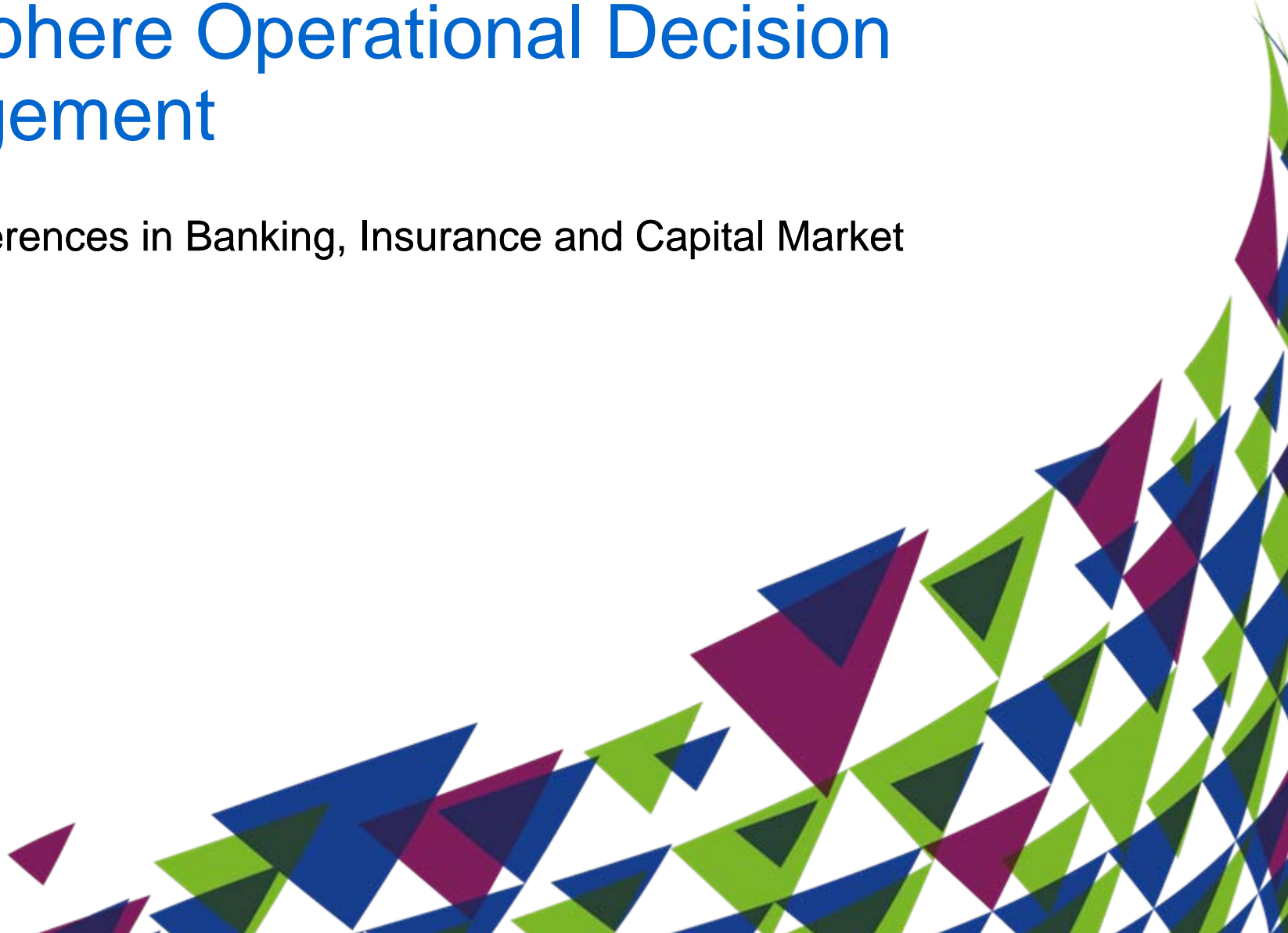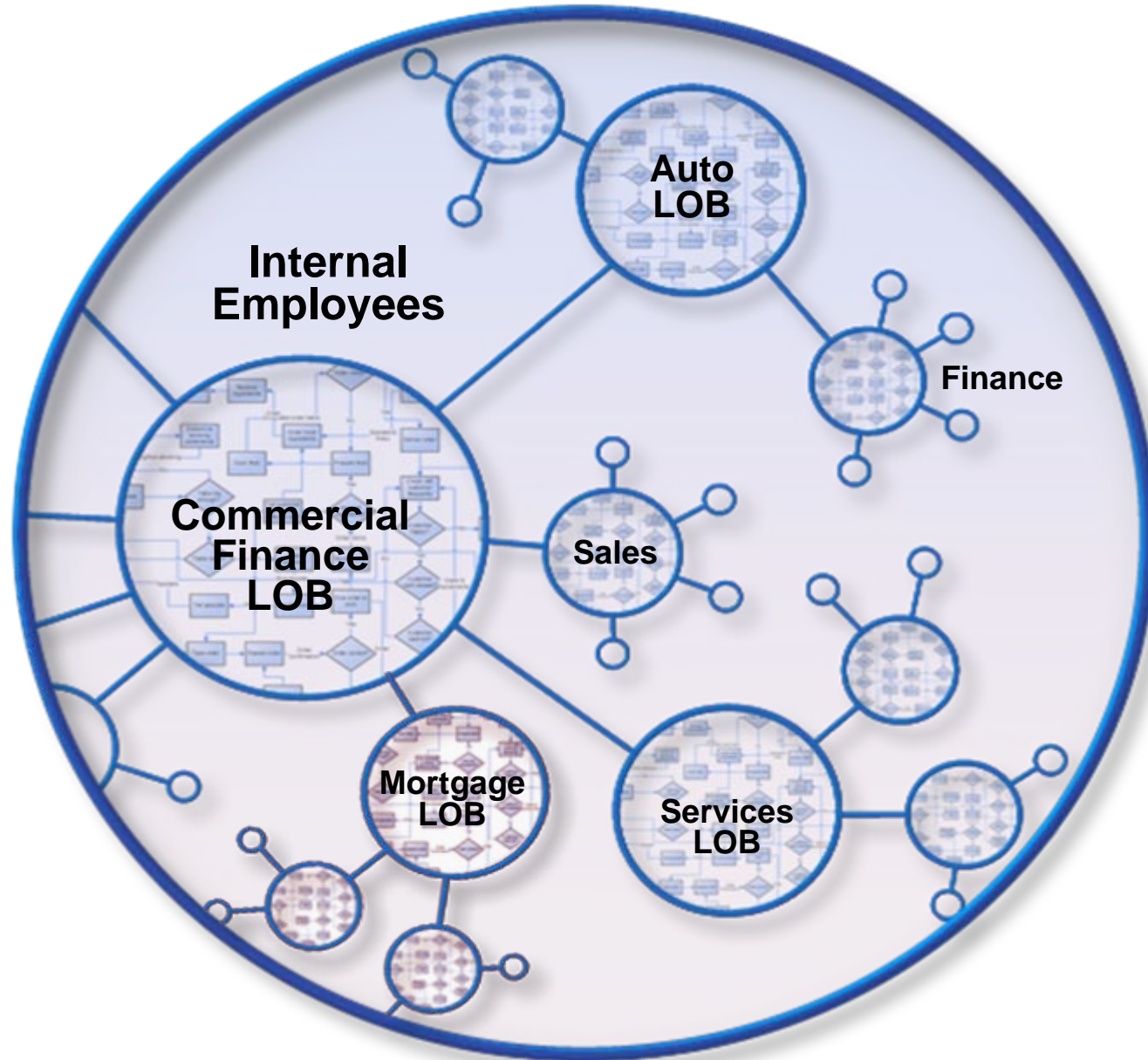# Building Agility using IBM BPM and WebSphere Operational Decision Management

Global References in Banking, Insurance and Capital Market
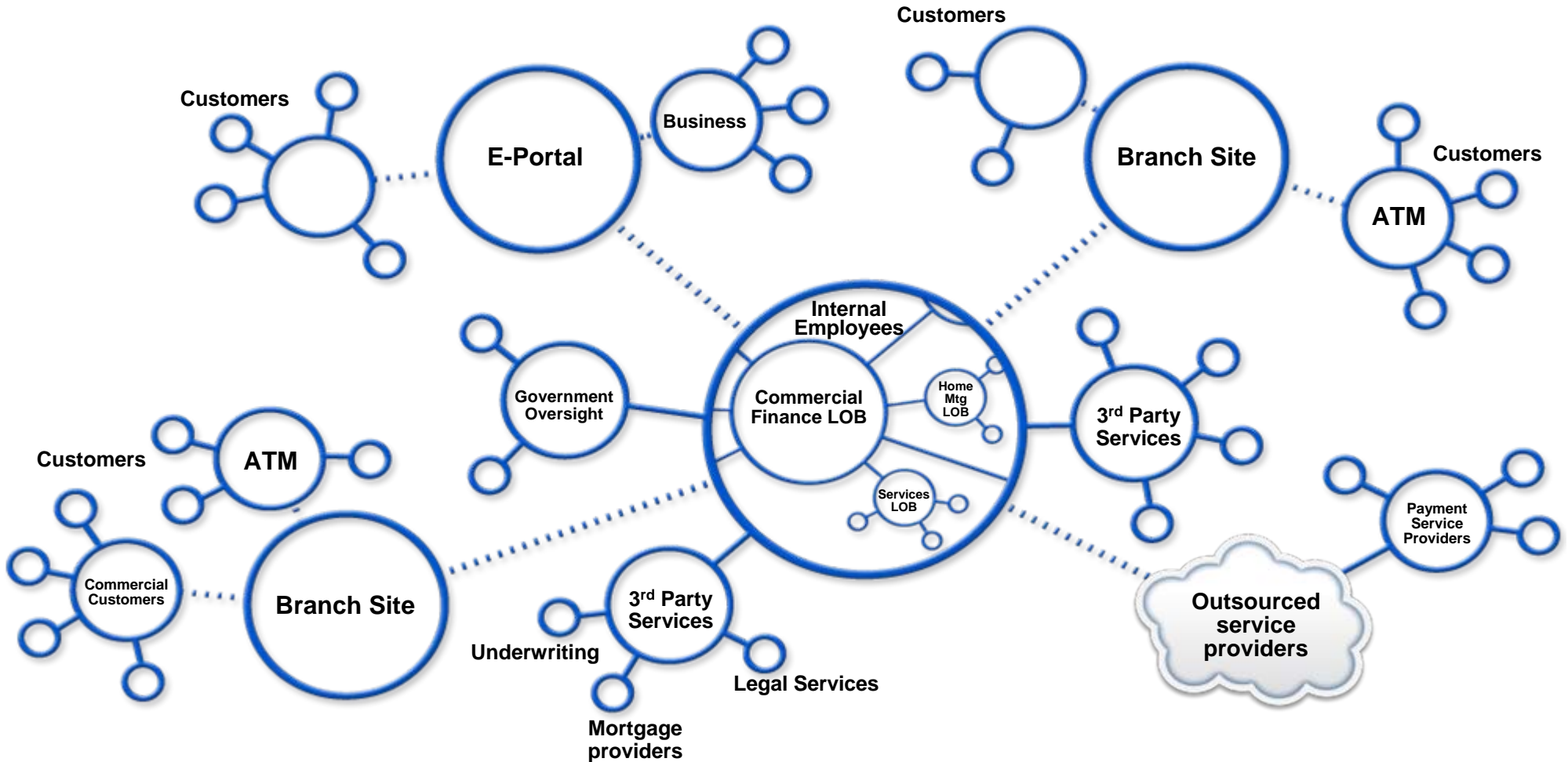
Complexity exists internally within Financial Organizations

and externally within the broader business network

Banks need end-to-end Process Management and Agile Operational Decision Management

… to manage exceptions and cases…

… and for scalable transactions…

… everything you need to manage end-to-end business networks

Winners will *Transform the Business Model* with *Integrated Risk Management* to focus on the *Customer*

IBM

Transformation Today Means:

- Simpler Business Led Change

- Optimized Processes and Decisions

- Full Process Visibility and Governance
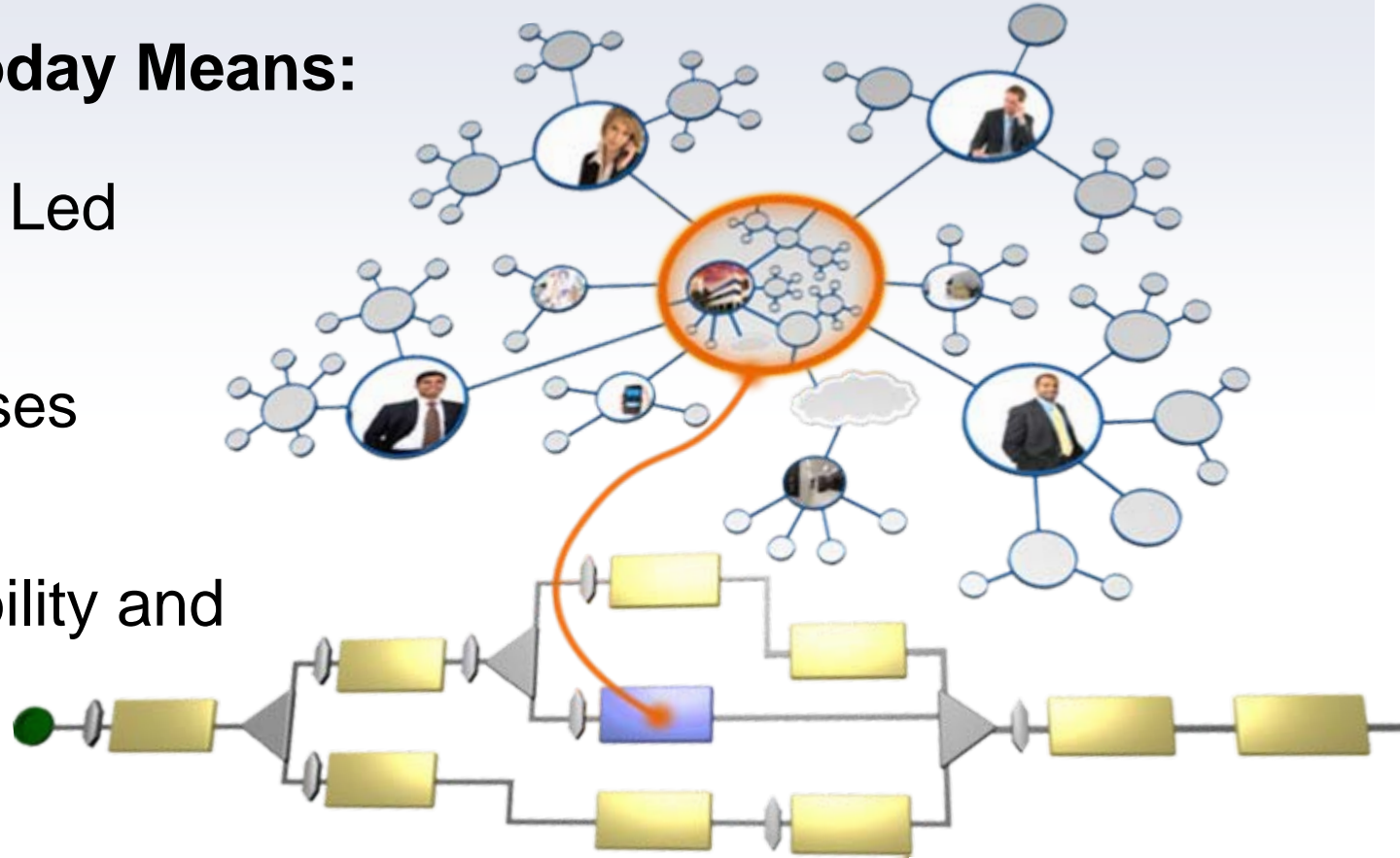
Agile Processes and Decisions with
Business Process Management and
Operational Decision Management

Tangible and Proven ROI

Cross Selling

14 million

New Business in
2.5 Months

Business Empowerment

200 Processes

Built by
business users

Loan Processing

30 Minutes

Instead of 17 days

Process Improvement

460 Percent

Increase in average amount
of loans processed

Business & IT Teaming

145 Companies

Companies removed their
paper process

Banking Process Focus Areas

- Lending: Core Banking Transformation
  - Automate and streamline high-touch lending process to reduce costs.

- Account Opening: Customer Care and Insight
  - Provide better customer service and reduce errors and non-value added time.

- Cross Selling and Up Selling: Customer Care and Insight
  - Enable real-time credit decisioning for increased revenue and profitability

- Fraud and Anti-Money Laundering: Integrated Risk Management
  - Identify suspicious activity and accurately assess the level of risk in relation to customer impact.

It's Time to Take Advantage of a Complex and Changing Marketplace

IBM

TMB

Complexity and Change

- Heavily competitive SME and Retail Loans markets call for new innovative product campaigns and promotions
- Customers retention problem. Customers are moving to other banks for more attractive products.
- Slow time to market for loans promotions

The agility and capability of our bank to **quickly** respond to a customer's demand is one of our key success factors "

Fabienne Libert
EVP -- Head of Credit Risk Intelligence
TMB

Innovation and Growth

- Business decisions are now directly contributed by loans business users without high level of intervention
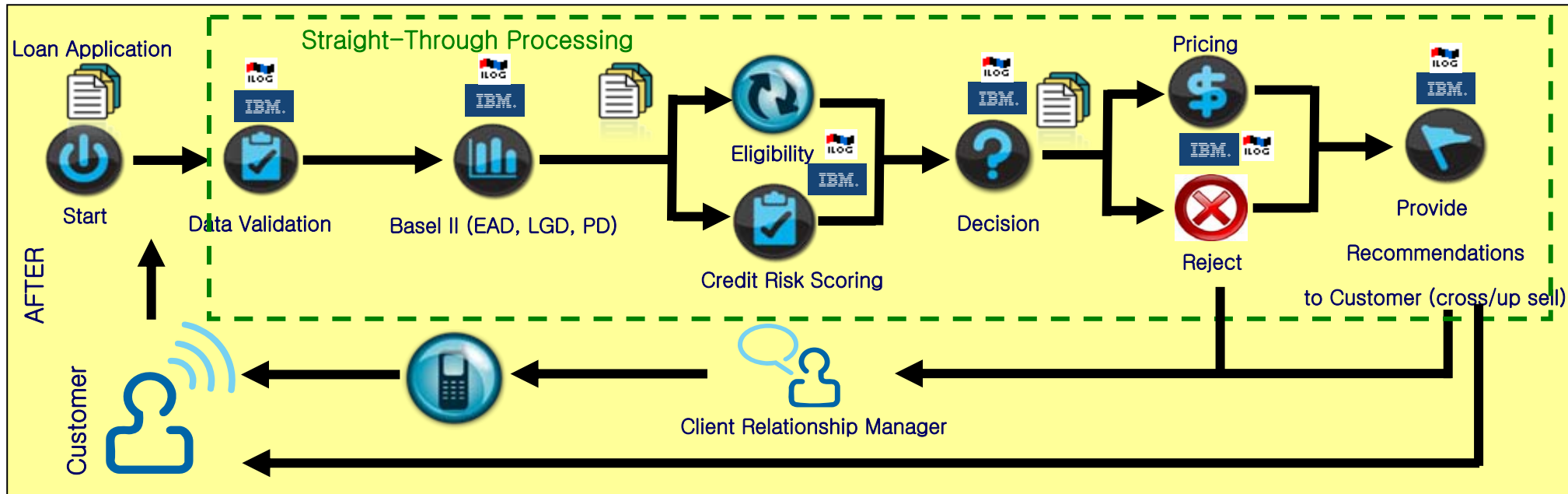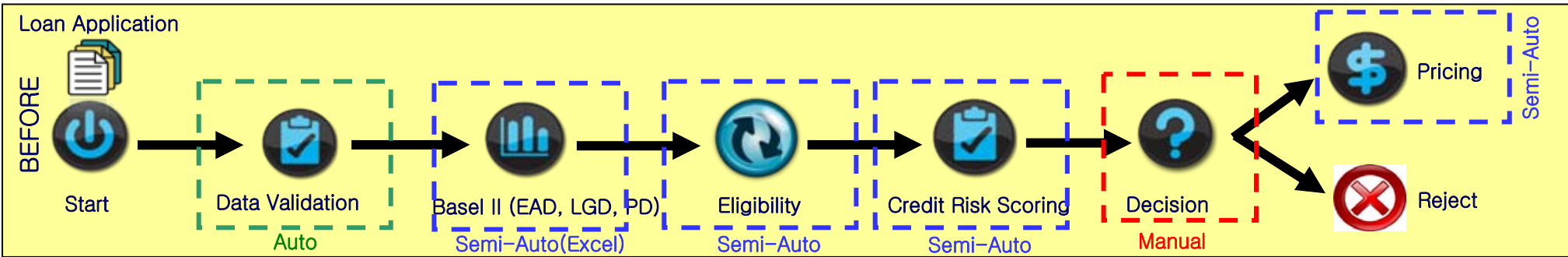- Faster time to market
- Customer Satisfaction

Lending Process Implemented with IBM BPM and WebSphere Operational Decision Management

300% Faster Time-To-Market for New Products, Campaigns and Promotions. 500% Faster in Processing Loan Applications
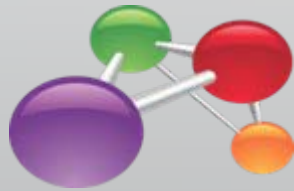
Business Challenge

Despite its success in Thailand's extremely dynamic consumer and business lending market, TMB Bank needed to learn more about its increasingly sophisticated customers and use that intelligence to reduce credit risks and personalize each customer's banking experience. Data silos increased the bank's risk exposure as distinct business units made independent lending or credit decisions. Likewise, business rules development was a manual process dependent upon IT staff. This presented a significant barrier to instituting new credit risk policies or introducing new products. The bank sought a solution that would provide effective analysis of customer data, automate and accelerate the process of altering business rules, speed new product introductions and reduce risk.

Key Business Outcomes

Hours rather than **days** to implement changes to credit risk and pricing policies and rules

Hours rather than **days** to process loan applications

Days rather than **months** to develop new loan products

Hours rather than **days** to launch new campaigns and promotions

Reduce non-performing loan ratio from **12.7** percent to **8.3** percent

Lowered year-over-year cost-to-income ratio by **17%**

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New Account Opening Problems Result in Decreased Revenues due to Customer Loss and Increased Costs

Lack of Integration Between Channels Results In …

Inconsistent customer experience

$4.5M in lost revenue due to customer abandonment

Difficulty in transferring cases and applications

Increased work for introduction of new products

Lack of Automation Results in …

$11.4M in lost cross sell and upsell

$2.4M in increased costs

90% of applications require manual intervention increasing both cost and time to fund the account

New Account Opening Impact on Global Banks…

1.5M Accounts lost / year due to client dissatisfaction

$570M lost revenue

22% of total processing costs due to maintaining lines and channels

Standard Chartered Bank
Decrease Account Opening Turnaround Time by 175%

Business Challenge

- Costly and inefficient manual process
- Numerous manual interactions decreasing efficiency and increasing the opportunity for human error
- Costly archival and rejection expenses
- Sub-par customer experience
- Lacked a method to trace the status of the app or the efficiency of the process
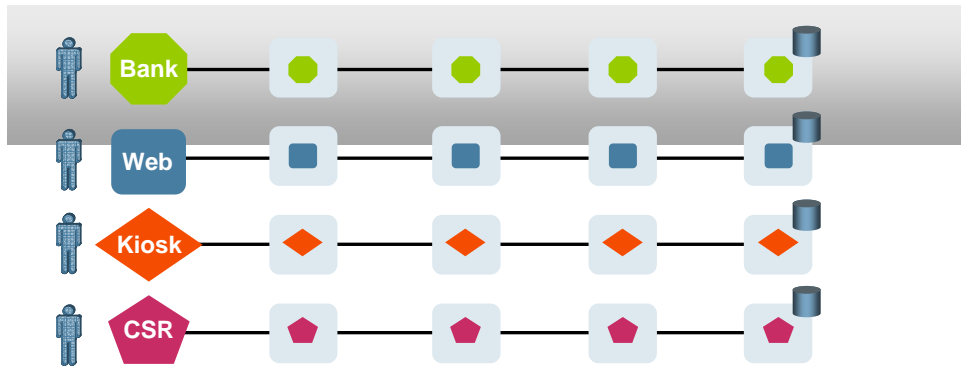- Slow turnaround time

Key Business Outcomes

- **Increased** applications processed per month by **100% to 54,000/month**
- **Lowered** staffing costs by **40%**
- **Reduced** archival and rejection costs by **25%**
- **Shortened** turnaround time from **7 days to 3 days**

Standard Chartered

BPM and Decision Management: Bringing Order to Chaos

"As Is" Process

Bank · Web · Kiosk · CSR

Different processes used to identify existing customers using different channels

Offers not tailored to customer profile. Unsuitable products are offered

Difficult to initiate a transaction in one channel and continue in another

No global product catalog available

Unable to add channels easily to existing products & services

"To Be" Process

Bank · Web · Kiosk · CSR · Catalog · Personalized Offerings
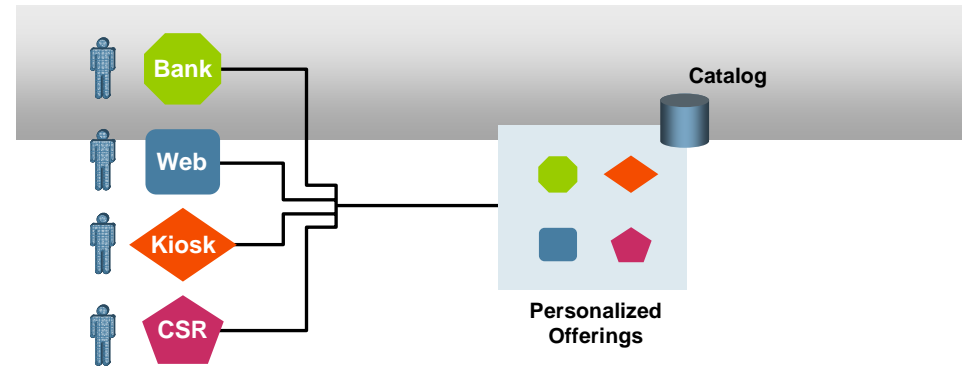
Single centralized view of customer, product, and account info

Insight into customer choices & preferences. Customization of products now available

Use channel of choice with consistent info. Start in one channel continue in another

Global, company-wide, product catalog available

Channels can be added quickly & easily

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Business Outcomes

G500 Commercial Bank revamps decision support systems to improve experience & interaction with 10M+ personal & business customers

Business Outcomes

- Increased frequency of cross sell offers by almost 2.5 times
- Increased offer acceptance from 3% to 20%-30%
- Growth rates exceeded business case benefits 12.5M added revenues in 2.5 months

Key Business Outcomes

- **Enhanced the client experience** by providing personalized financial advises during credit application

- **Drive Share of wallet** growth with optimized cross-sell, while managing risk

- **Maximize opportunities** for best customers & solidify customer relationship

- **Increase growth rates** with targeted offers to attract more customers from the competition

Banking Process Focus Areas

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Challenges in Integrated Risk Management

"Our current system is causing unacceptable delays in event fulfillment. We currently run our own legacy system which is traceability. Our operations can not promptly react to emerging fraud schemes. Furthermore change implementations are error prone"

"Our current system does not provide sufficient flexibility & traceability. Our operations can not promptly react to emerging fraud schemes. Furthermore change implementations are error prone"

"Our overall exception processing volume has grown significantly since our initial deployment. As such, staffing requirements to review suspicious transactions has also grown significantly, driving up our operational costs & causing customer satisfaction issues"

Manual Processes

Inconsistent and Low Data Quality

Multiple sources of information and data

Lack of Auditability

Inconsistent and Manual Procedures

Continuous changes in regulations

Leading Retail Bank
Rules-based Integrated Risk Management

Business Challenges

The leading retail bank must continually manage its risk profile and ensure compliance with regulatory requirements. With requirements growing and changing, the bank's traditional risk management processes proved labor-intensive, time-consuming and costly. The bank wanted to improve the effectiveness of its client risk management operations while reducing the daily staff workload.

Solution

The bank used a business rule management system (BRMS) to create a more flexible solution with increased ability to proactively manage client risk. The BRMS-based solution assists client managers in the detection and daily handling of risks, reducing staff workload. The new solution also moves the bank **from an event-driven approach to a client-driven approach**, providing more relevant information for decision-making.

Business Benefits

▪The intelligent system uses objective criteria to identify risk and present recommended actions. By automating business rules and replacing manual effort, the system frees employees to focus on high-value cases and take more targeted action.

▪The system is instrumented and automated to detect more than 200,000 high-risk cases a day and take appropriate actions that can significantly mitigate risk exposure across the overall customer portfolio. Gain 1 hour/day/advisor (13 000 advisors in 2500 branches)

▪The interconnected system links sales managers to both the risk management and commercial business divisions of the bank, providing a holistic view of risk and opportunity.

By focusing proactively on client information rather than responding to events, the bank can manage risk more effectively.

- IBM WebSphere® Operational Decision Management (ILOG JRules)

- IBM WebSphere Application Server

- System z running z/OS

- IBM Software Services for WebSphere

Integrated Risk Management Solution

✓ **Data Gathering**

○ **Decision Automation**

○ **Tracing Events**

○ **Adjusting to Change**

○ **Auditing**

- **Decision Management for:**
  – Data Consolidation, Selection & Cleansing
  – Data Consistency across applications
  – Intelligent Data Routing

➜ *Regulators expect all Compliance or Financial Reports to be based on <u>consistent underlying data</u> & are increasingly cross-checking reports for consistency*

Integrated Risk Management Solution

Data Gathering

✓ **Decision Automation**

Tracing Events

Adjusting to Change

Auditing

- **Decision Management for Detection & Investigation:**
  - Data Validation
  - Rating, Scoring & Prioritization
  - Compliance Checking
  - Exception Handling
  - Qualitative Questionnaires
  - Behavioral Policies

➔ *Moving from Transaction Processing to Exception Handling not only reduces errors but allows better understanding of what is causing the errors*

Integrated Risk Management Solution

Data Gathering

Decision Automation

✓ Tracing Events

Adjusting to Change

Auditing

- **Decision Management for:**
  - Tracing a transaction throughout its lifecycle
  - Generating Compliance Reports with all detailed exceptions

➔ *Analyzing Traces and Reports allows to understand which / when / how Policies and Rules are breached and why.*

Integrated Risk Management Solution

Data Gathering

Decision Automation

Tracing Events

✓ Adjusting to Change

Auditing

- **Decision Management for:**
  - Authoring Rules & Policies by the Business Users
  - Editing / Changes in a Business Language (no coding required)
  - Testing / Simulation by the Business Users

➔ *Empower business users with dedicated tools to define, test and manage business rules and better collaborate with IT*

Integrated Risk Management Solution

Data Gathering

Decision Automation

Tracing Events

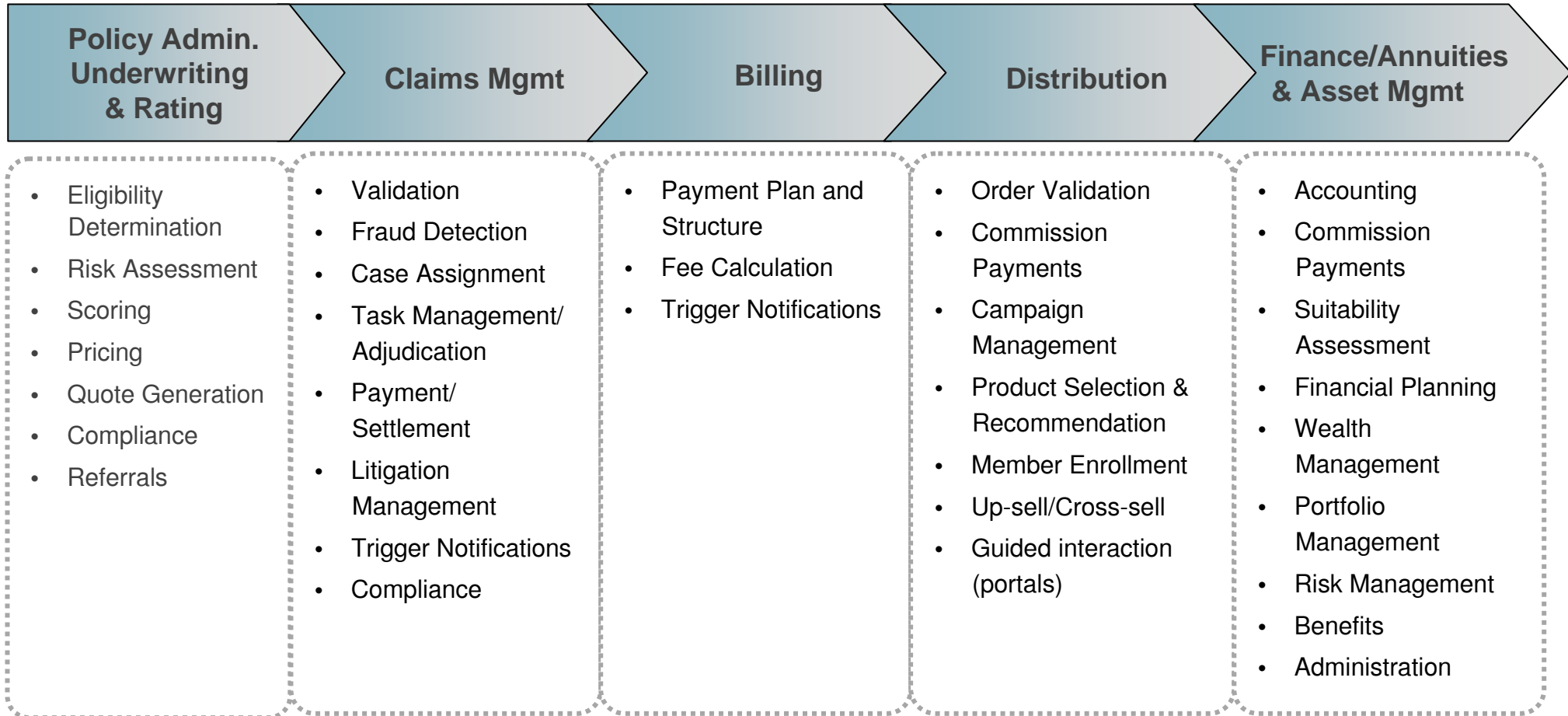**Adjusting to Change**

✓ **Auditing**

- **Decision Management for:**
  - –Generating a Full Audit Trail Report
  - –The full History of any Rule / Policy is logged, throughout its lifecycle

➜ *Managing the validation of Rules in an automated process allows the embedding of the Best Practices in the system*

IBM BPM and WODM Solutions Across Insurance Process

Policy Admin. Underwriting & Rating	Claims Mgmt	Billing	Distribution	Finance/Annuities & Asset Mgmt
• Eligibility Determination • Risk Assessment • Scoring • Pricing • Quote Generation • Compliance • Referrals	• Validation • Fraud Detection • Case Assignment • Task Management/ Adjudication • Payment/ Settlement • Litigation Management • Trigger Notifications • Compliance	• Payment Plan and Structure • Fee Calculation • Trigger Notifications	• Order Validation • Commission Payments • Campaign Management • Product Selection & Recommendation • Member Enrollment • Up-sell/Cross-sell • Guided interaction (portals)	• Accounting • Commission Payments • Suitability Assessment • Financial Planning • Wealth Management • Portfolio Management • Risk Management • Benefits • Administration

Fortune 500 P&C Insurance Company
Underwriting (Commercial Lines)

IBM

Business Challenge:

- Rules were hard coded and decentralized
- Manual processing
- Carrier was unable to enforce risk and underwriting guidelines
- Build an agile underwriting system that supports growth strategy and speed up requirements

Business Solution:

- Carrier embarked on a legacy modernization project and built a web-based underwriting system
- Based on IBM BPM and WebSphere Operational Decision Management (WODM)
- Enabled business users to apply new rules in real time, shortening the previous manual hard-coding time resulting in speed to market gains of over 60%

Why Smart Insurance?

Increase in straight through processing rate from **17 to 76%.** Increased new business quotes by **40%**. Speed to market gains of over **50%** with rule changes in **less than a week vs 5 months**. Able to obtain underwriting decisions at multiple points during the process and proactively segment unacceptable business

- IBM WebSphere Application Server
- IBM WebSphere Operational Decision Management (ILOG JRules)
- IBM BPM

Worksafe Victoria Reduces Claim and Fraud
Reduce Costs from 5% to less than 0.5%

Business Challenge:

- Needed a modernized claims and fraud detection system
- Manual processes and long settlement cycles with greater potential for fraud

Business Solution:

- Modernized claims and fraud detection
- Leveraging Decision Management and analytics to automatically score and analyzes claims based on over 800 different factors
- Went from claim validation, adjudication, payment and settlement to identifying and routing suspicious claims
- Delivered agile payment processing

Why Smart Insurance?

Reduces the time needed to process claims from **2 weeks** to **1 day**. Improved invoice throughput by **300%**. Reduced payment cycle from **30 days to 1 day**. Increased STP from **40 to over 80%**. Saves the company millions of dollars annually.

- IBM WebSphere Operational Decision Management (ILOG JRules)

Read the case study and watch the video on ibm.com
http://www-01.ibm.com/software/websphere/industry/insurance/

Major Life Insurance Carrier
Reduces Time to Market for Promotions and Incentives by 70%

Business Challenge:
- Needed an update payment process
- Needed more flexibility in management of commercial terms and conditions

Business Solution:
- Revamps commission payment process with WebSphere Operational Decision Management (ILOG JRules)
- Process supports a homogenous multi-channel strategy. Decision Management used for validation, commission calculation and stimulation for and automate regulatory rules

Why Smarter Insurance?

With the new system, carrier has more flexibility in the management of specific commercial terms and conditions; easily enforce regulatory rules that vary from country to country and support new policy sales, anniversary payments, renewals by agent/broker.

- IBM WebSphere Operational Decision Management (ILOG JRules)

Chinese Carrier Streamlines Processes
Integrated Customer View Improves Sales and Services

IBM

Business Challenge:

- Running property and casualty business application system with silo'ed applications
- Company needed an agile P&C business application system to support rapid development and new product launches
- Effectively manage and grow business
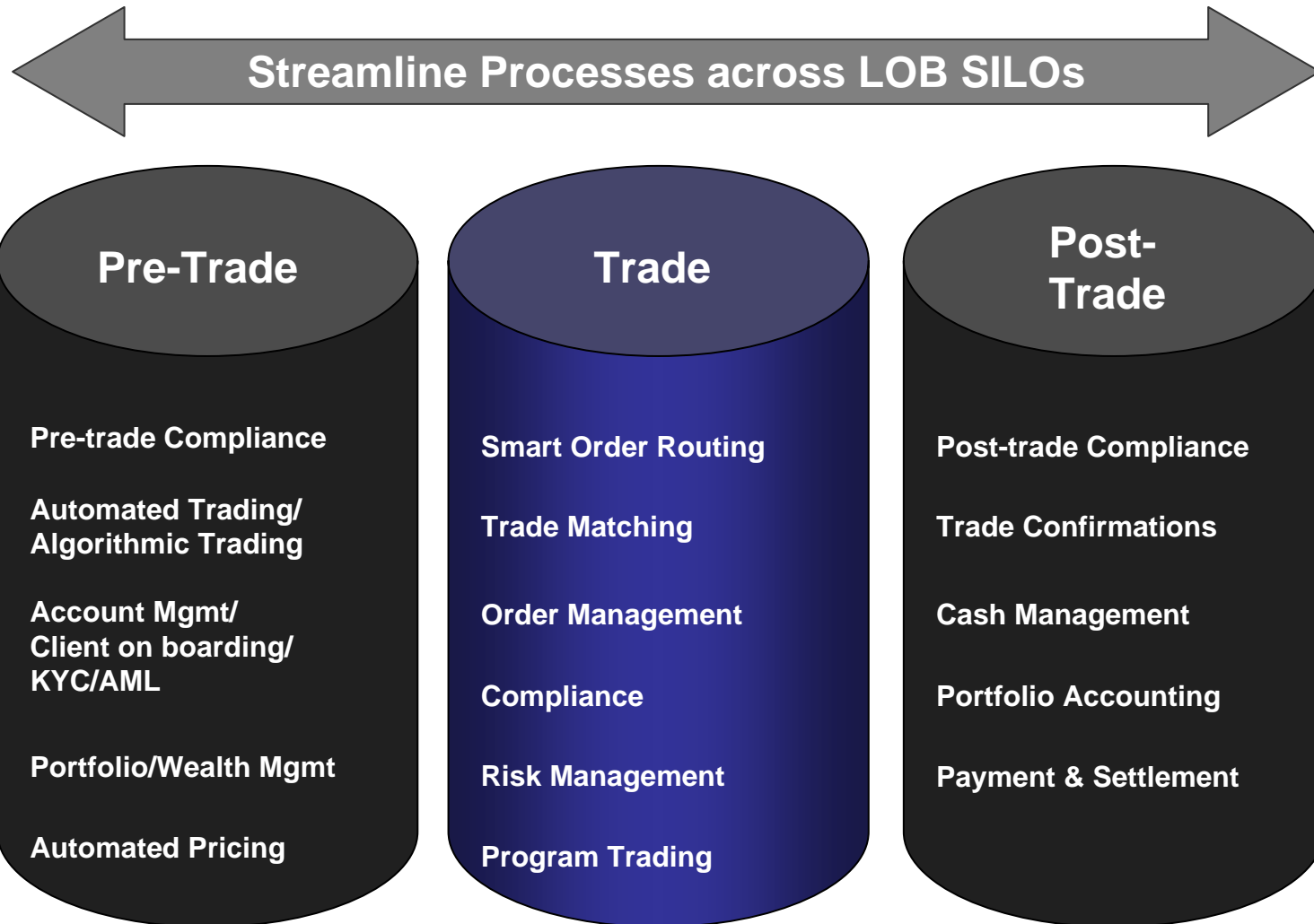
Business Solution:

- Deployed a new Core Insurance on Demand solution (CIOD) based on IBM Insurance Application Architecture solution
- Using WebSphere Technology they can optimize processes, validate and analyze customer transactions and insurance policy data
- Quick and efficient management of customer claims, requests, policy renewals and sales
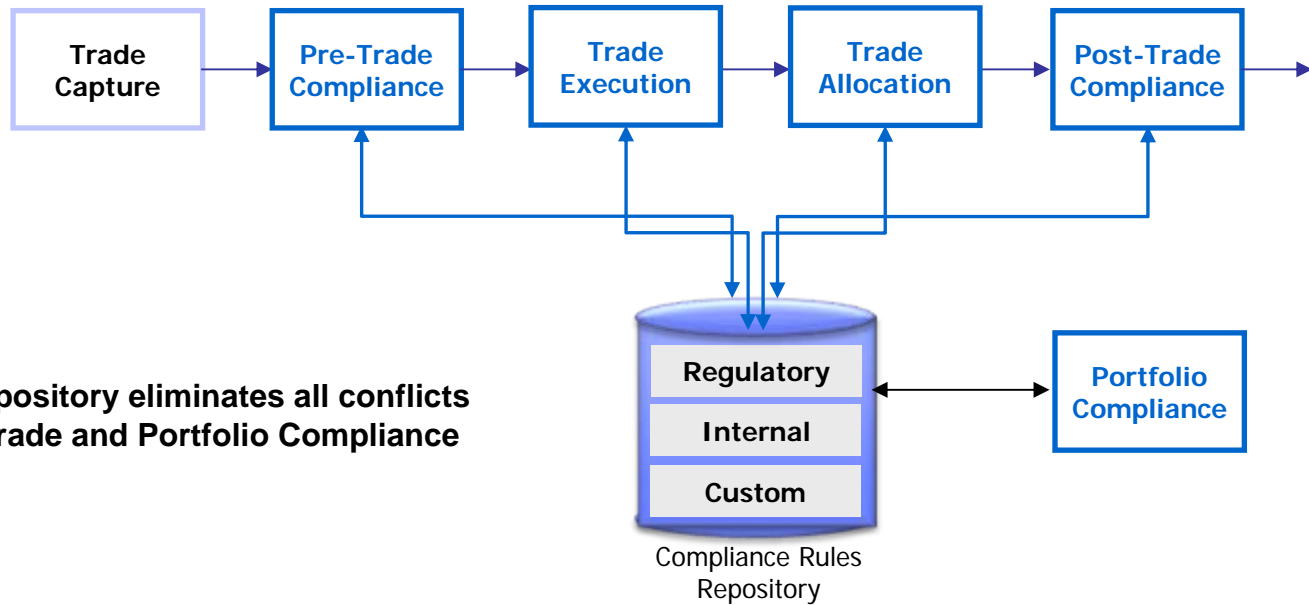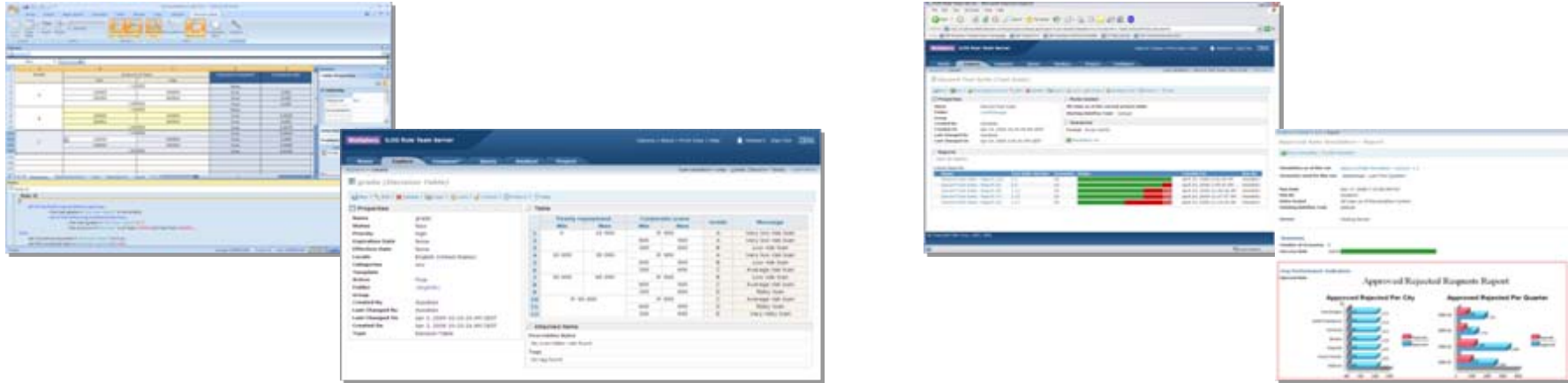
Why Smart Insurance?

Reduced new product launch time by approximately **75%**. Gained the ability to automatically **recommend insurance products** based on customers' most recent policies and past claim records. Accelerated product time to market, helping improve development and sales. Created and automated "black list" feature, which enables the client to reduce the cost and risk of insuring problem customers.

- IBM WebSphere Application Server
- IBM WebSphere Operational Decision Management (ILOG JRules)
- IBM WebSphere BPM

Improving Processes and Decision Management in Capital Markets Using IBM BPM and WODM

Streamline Processes across LOB SILOs

Pre-Trade

Pre-trade Compliance

Automated Trading/ Algorithmic Trading

Account Mgmt/ Client on boarding/ KYC/AML

Portfolio/Wealth Mgmt

Automated Pricing

Trade

Smart Order Routing

Trade Matching

Order Management

Compliance

Risk Management

Program Trading

Post-Trade

Post-trade Compliance

Trade Confirmations

Cash Management

Portfolio Accounting

Payment & Settlement

Greater Transparency & Better Audit Trails

Trade Capture → Pre-Trade Compliance → Trade Execution → Trade Allocation → Post-Trade Compliance →

Using a Business Rules Repository eliminates all conflicts between Pre-Trade, Post-Trade and Portfolio Compliance

Regulatory

Internal

Custom

Compliance Rules Repository

Portfolio Compliance

Franklin Templeton Investments
Automated Trading

FRANKLIN TEMPLETON
INVESTMENTS

Business Challenge

- Multiple legacy-based systems where rules were hard coded

- Lengthy implementation cycles (average 3-8 months to implement changes)

- Unable to provide audit trails and ensure trade and regulatory compliance to support institutional trading

- High IT maintenance costs (costs of maintaining hard coded rules in multiple systems)

Solution

Flexible trading system supporting multiple geographies (US, Europe and Asia) using WODM for validation, consolidation, trade and regulatory compliance and calculation

Key Business Outcomes

- Handle thousands of transactions and millions of SWIFT messages on a daily basis

- Improved speed to market by over **70%** by implementing rule changes in **days or real-time** versus months

- Reduce IT maintenance costs by **50%**

- Able to enforce trading and regulatory rules **across geographies** consistently

Top 10 Fortune 500 Capital Market
Equities Trade Processing
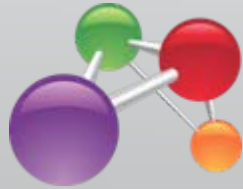
Business Challenge

- Multiple equities trade processing platforms
- Rules regarding the flow of trades hard-coded. Lengthy IT change cycles
- Trade verification and allocation, regulatory classification and exception reporting all require rapid development/deployment cycles

Solution

- Single equities middle-office trading platform
- Improve performance and scalability
- Improve exception handling
- WODM processing all equities trades globally (2,000,000/hour)

Key Business Outcomes

- Change turnaround time in **hours**, not weeks
- Greater **visibility** and **transparency** of "business" policy throughout the organization
- Improvements in processing performance
- Retirement of costly legacy applications

Leading European Equities Brokerage Firm
Block Trade Execution

Business Challenge

- Unable to detect exception order in a timely manner
- Unable to route orders to the appropriate execution path
- Unable to respond to frequently changing market conditions
- Lengthy business logic changes that require IT to modify hard coded rules
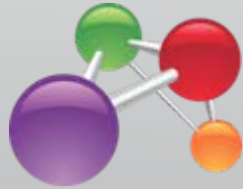
Solution

Integrate IBM WebSphere Operational Decision Management (WODM) with Fidessa's Order Management System (OMS) with auto identification and blocking of exception orders and route orders to the right resource

Key Business Outcomes

- Enhanced productivity, lower execution costs: Ability to increase trade volumes
- Better alignment between business and IT thanks to the natural rule languages
- Shorten time to make business logic updates as they are made by the Business Analysts
- Better control of trading logic thanks to auditability and traceability capabilities available to both Business and IT

Top 10 Fortune 500 Capital Market
Compliance Management Application (AML, KYC, SEC, SOX)

Business Challenge

- Unable to enforce AML, regulatory & trading rules across multiple channels
- Rules residing in multiple locations
- No means of capturing audit trails easily

Solution

- WODM used in the enterprise wide: automated trading, portfolio management, accounting, trade matching & smart order routing

- WODM used to support decision services: data validation, risk scoring, regulatory rules enforcement & trigger notifications

Key Business Outcomes

- **Consistent** enforcement of compliance monitoring across **multiple channels**

- Process **millions** of transactions daily, supporting 10 million accounts (**2 million messages per day – up to 2000 FIX messages per sec with no more than 200ms delay per message**

- Decrease risk of non compliance, trade violations & errors

- Complete **audit trails** supporting multiple processes across channels

How to Get Started?

Partner with IBM on a Process Improvement Discovery Workshop

A complimentary 2.5 day workshop to help your clients evaluate their healthcare or life sciences process improvement initiative

Read more…
http://www-01.ibm.com/software/websphere/products/business-rule-management/lombardi/workshop/

**IBM Process Improvement
Discovery Workshop**

Test drive Blueworks Live!

Document & run processes in the Cloud
www.blueworkslive.com

Sign up now for a free 30 day trial.