Agenda

- Introduction to Business Rules Management
  - What Is Business Rules Management?
  - The Business Rules Management Problem
  - The Corticon Solution
- Corticon Customer Success
- Corticon Differentiation
- Corticon Demo
- Corticon and OpenEdge
- Summary & Q&A
What Is Corticon Business Rules Management?

Software to help make the **Right Decision at the Right Time** with **Business Agility**

- Should we pay this claim?
- What offer should we make, now?
- What resource should we allocate?
What Is Business Rules Management?

Decisions are governed by business rules

Should we pay this claim?

Reject claims with invalid billing codes

BRMS – Business Rules Management Systems
(a.k.a. rule engines) externalize decision logic from applications and represent as business rules
The Problem: Automating Business Rules

Traditional approach is programming-based

- Simple rules difficult to automate, sophisticated ones impossible
- Single change can impact hundreds of rules/processes

There Is a Better Way…

“That change requires 2 years & $5M”
The Solution: Progress Corticon Business Rules Management System

- Separate decision logic from code
- Empower business users
- Ensure performance & scalability
- Enable fast, safe changes
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Progress Corticon: 500+ Customers

<table>
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<tr>
<th>INSURANCE</th>
<th>FINANCIAL SERVICES</th>
<th>GOVERNMENT</th>
<th>HEALTH &amp; HUMAN SERVICES</th>
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Progress Corticon: Key Use Cases

**Commerce (Sales & Marketing)**
Apply – Price/Quote – Recommend – Police

**Customer Servicing**
Intake – Validate – Adjudicate – Recover – Fraud

**Manufacturing & Supply Chain**
Production Planning – Resource Allocation – Logistics

**Enterprise Rules Management**
Decision Analytics as a Business & IT Discipline
Corticon Case Study: Online Insurance Sales

Complete Application
- Rules-Driven, Web-Based Questionnaire
Underwrite Application
- Automated Underwriting and Product Recommendations
Quote & Recommend
Close Sale
Generate Policy Docs
- Automated Generation of Custom Policy Documentation

Powered By Corticon
Business Rules Management System (BRMS)
- Grow revenues thru new sales channel
- Streamline process from days to minutes
- Rapidly respond to changes in market direction
Corticon Case Study: Claims Processing

BEFORE Corticon

21 Manual Steps

AFTER Corticon

7 Manual Steps

- Accelerate Service Delivery
- Reduce Costs
- Improve Service Quality
- Improve Agility
HOW CAIDAN MAKES PROGRESS

CHALLENGE:
Expand healthcare claims processing business into new states and keep up with changing regulations as HIPPA and the Affordable Care Act ("Obamacare").

SOLUTION:
Use Progress Corticon BRMS to modernize existing OE architecture.

VALUE:
Empower healthcare domain expert to manage volatile decision rules outside of the OpenEdge ABL.
Accelerate application customization covering the needs of each customer as well as state/local regulatory schemes.

Meridian Health Plan
Executing Manufacturing Process Excellence

Market Segment: Manufacturing
Application: Production Planning System Development

- Complete system re-engineering and replacement to:
  - Increase flexibility and agility in manufacturing process
  - Accommodate a wide range of ever-changing commercial and production rules

- Corticon chosen because:
  - Accelerated application development and maintenance
  - Increased business transparency and control – rules managed by industrial engineers
  - Ease of integration

See: http://www.progress.com/docs/casestudy/Columbus.pdf
Next Generation eCommerce

- World’s largest online marketplace
- Corticon used in next generation eBay marketplace
- Corticon selected over in-house rules engine, IBM Ilog, and open source due to:
  - Scalability to millions of transactions per day
  - Guaranteed rule integrity
  - Speed of development
    - Processing >40M transactions per day, <10ms per transaction
Claims Processing with BPM

- One of the world's largest life insurance and pension companies with millions of customers worldwide
- Considerable cost and FTEs reductions as result of straight-through processing
- Improved customer satisfaction (quicker claims handling)
- Less IT dependency, domain experts owns content and change process
- Staying compliant and consistent with government regulations
- Straight-through processing (STP) achievement circa 85%

Market Segment: Insurance
Application: Asset Damage (Property & Casualty)
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Corticon has **breakthrough** tools for business analysts.

Corticon positioned as **Leading Innovator** in Gartner Magic Quadrant

Corticon has developed **breakthrough** technology in the BRMS market.
Corticon Differentiation

- Model-Driven Development
  - Automate rules without coding
- Guaranteed Rules Integrity
  - Ensure safe changes
- DeTI Engine
  - Market-best performance and scalability
Model-Driven Rules Development

Out-of-the-box ready for use by
- Business Analysts
- IT Professionals

Patented Excel-like modeling tool
- No programming
- Business friendly
- One-click deployment

Proven with the most sophisticated business problems

Vocabulary consists of your business objects/terms

Rules are constructed with drag-and-drop ease

Comprehensive, extensible library of operators (akin to Excel functions)

Rule Statements provide rule documentation and traceability
What is the applicant’s risk profile?

SAMPLE RULES
- Applicants who skydive have a High Risk rating
- Applicants under 35 have a Low Risk rating
OpenEdge Coding:
35 Lines of Code for 4 Business Rules

DEFINE INPUT PARAMETER isSkyDiver AS LOGICAL NO-UNDO.
DEFINE INPUT PARAMETER applicantAge AS INTEGER NO-UNDO.
DEFINE INPUT PARAMETER parmCurrency AS CHARACTER NO-UNDO.
DEFINE INPUT PARAMETER parmAge AS INTEGER NO-UNDO.
DEFINE INPUT PARAMETER parmIncome AS INTEGER NO-UNDO.
DEFINE OUTPUT PARAMETER ruleStatement AS CHARACTER NO-UNDO.

DEFINE VARIABLE riskRating AS CHARACTER NO-UNDO.
DEFINE VARIABLE totalPremium AS DECIMAL NO-UNDO.

IF isSkyDiver THEN
  DO:
    ruleStatement = "Warning" + CHR(1) + "Applicants who skydive have a high risk rating regardless age."
    riskRating = "High".
    totalPremium = 150.
    ruleStatement = ruleStatement + CHR(3) + "Info" + CHR(1) + "Applicants who are " + riskRating + " risk pay a premium of " + parmCurrency + STRING(totalPremium) + ".".
  RETURN.
ELSE
END.
ELSE
  DO:
    IF applicantAge < parmAge THEN
      DO:
        ruleStatement = "Info" + CHR(1) + "Applicants less than " + STRING(parmAge) + " years of age have a low risk rating."
        riskRating = "Low".
        totalPremium = 50.
        ruleStatement = ruleStatement + CHR(3) + "Info" + CHR(1) + "Applicants who are " + riskRating + " risk pay a premium of " + parmCurrency + STRING(totalPremium) + ".".
      RETURN.
END.
ELSE
END.
ELSE
DO:
  ruleStatement = "Info" + CHR(1) + "Applicants who are " + STRING(parmAge) + " year or older and don't skydive are medium risk."
  riskRating = "Medium".
  totalPremium = 100.
  ruleStatement = ruleStatement + CHR(3) + "Info" + CHR(1) + "Applicants who are " + riskRating + " risk pay a premium of " + parmCurrency + STRING(totalPremium) + ".".
RETURN.
END.
END.
Model-Driven Rules Development

Traditional Approach

Often contains errors and performance issues

Specify

Design

Templates

Code

Test

Integrate

Deploy

Reduce development and change cycles by 90%

Corticon Approach

Model

Integrate

Deploy

Higher quality, higher performance, agility

Requires Technical Resource
**Benefits of Model-Driven Rules Management**

*Sample ROI Analysis* – Automation of single, decision-making task

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<th>Corticon</th>
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10x Improvement

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<td><strong>Total</strong></td>
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25x Improvement

*Per NCAA customer testimonial. See webinar: Extreme Agility: Achieving 25x Acceleration in Business Cycles with Model-Driven Business Rules Management*
Guaranteed Rules Integrity

- Debugging rules is a major issue with traditional rule development
- Corticon identifies logical errors during requirements specification
Corticon 5 Difference – Engine Performance

- Traditional pattern matching algorithm is Rete
  - Scales well with increasing number of rules
  - Degrades exponentially with increasing complexity of data – the “Rete Wall”

- Corticon’s patented DeTI (Design Time) algorithm
  - Scales linearly with number of rules and complexity of data
Corticon vs. Drools
Progress’ Performance & Scalability Tests

Scalability for increasing fact

Evaluation Time (milliseconds)

Payload Size

0 10 20 30 40 50 60

0 100 200 300 400 500 600

JBoss
Drools

Corticon
BRMS
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OpenEdge Application Architecture

- **Client Logic**
- **Application Logic (ABL)**
- **Abstract Schema (ProDataSet/ temp-table & Vocabulary)**
- **Physical Schema (Tables)**

- **Application Infrastructure Logic (ABL)**
- **Business Logic (Corticon & ABL)**

Volatility:
- Low
- Med
- High
Why Use Corticon?

- Puts volatile decision logic **in hands of business** (domain experts instead of just IT)
- Allows decisions to be managed in a **separate tier** with a more agile lifecycle – separation of system and business logic
- **Accelerates** logic development time and **reduces** maintenance time
- Reduces volatility of ABL logic and **dependence** on ABL experts
- Improves ease of use through **good visual tooling**
  - Build vocabularies and rules declaratively through a model driven approach
- Improves application **quality**
  - Gaps & overlap analysis – prevent technical inconsistencies
  - Use case testing on the fly
Choosing Between ABL and Corticon

- Is the business logic the result of relatively complex decisions?
- Is the business logic customized by the client?
- Are changes frequently required to the application’s business logic?
- Is quality / integrity of logic critical?

The more “yes” answers, the better the fit for Corticon!
Progress Corticon and OpenEdge

- Products Integrated Today
  - Integration White Paper Available
  - Integration Options
    - Web Services Call-Out (Decision Points) – via ABL and OE BPM
  - Requires OE 10.2 or greater

- OE 11.3 Integration Productivity Features
  - ABL API/macros to eliminate integration code
  - Shared Data Model
  - Direct Integration with OpenEdge Database (Batch Processing)
  - Improved OE BPM Integration
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EVALUATE CORTICON

Register to evaluate the industry's fastest, easiest-to-use business rules management systems (BRMS) - Corticon.

Corticon's model-driven approach delivers a 10x acceleration in application development and maintenance cycles. With Corticon, business rules are managed as business friendly models, with zero programming. This enables better alignment of business and IT resources, and empowers analysts and policy makers - those who best understand the dynamics forcing change within the organization - to safely manage the business rules. You need to experience it to believe it.

Ready to take Corticon for a test drive? Register for your 90-day evaluation today!

www.corticon.com
Better, faster decisions by automating business rules

Client Benefits:
• Mitigate Risk
• Optimize Operations
• Find New Revenue Opportunities

Patented “no-coding” rules engine

IT Benefits:
• Accelerate Rate of Change
• Empower Business Users
• Ensure Performance and Scalability
Contact Details

- Mark Allen
  maallen@progress.com

Learn More / Download Evaluation Software

- www.corticon.com