

OMG BRWG Case Study

Henry Bowers

Product Manager, Business Rules

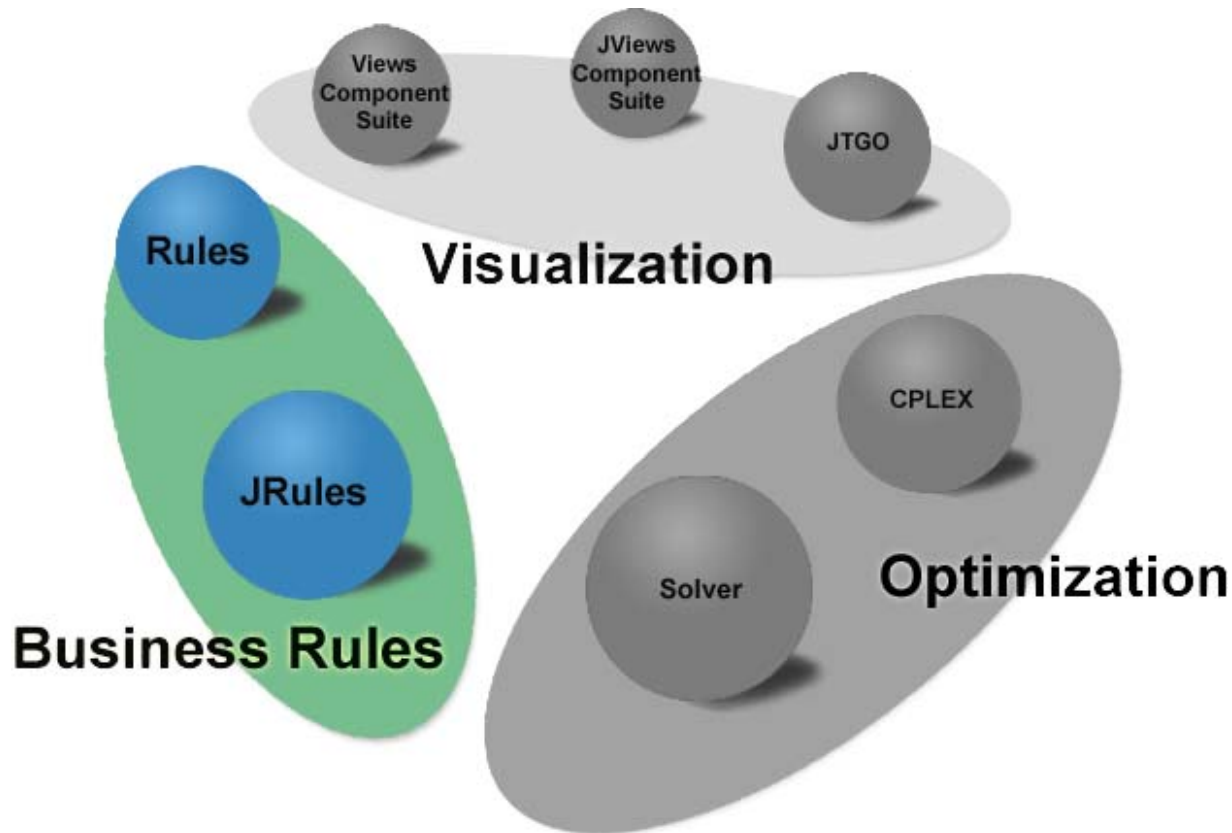
June 2002

ILOG Company Background

- ❑ Founded in 1987
- ❑ 590 employees (03/02)
- ❑ 2,000+ customers
- ❑ Selling in 30 countries
- ❑ NASDAQ/Euronext



ILOG Product Lines



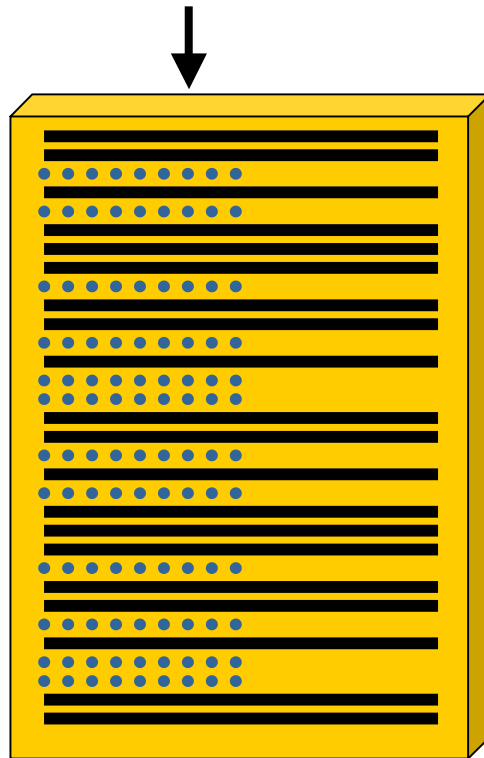
Context

❑ Business Rules

- ❑ Implement policies and constraints
 - who, what, where, when, why
- ❑ Are active across a single application or process
- ❑ Execute in a Business Rule Engine (BRE)
- ❑ Persist through a Business Rule Management System (BRMS)

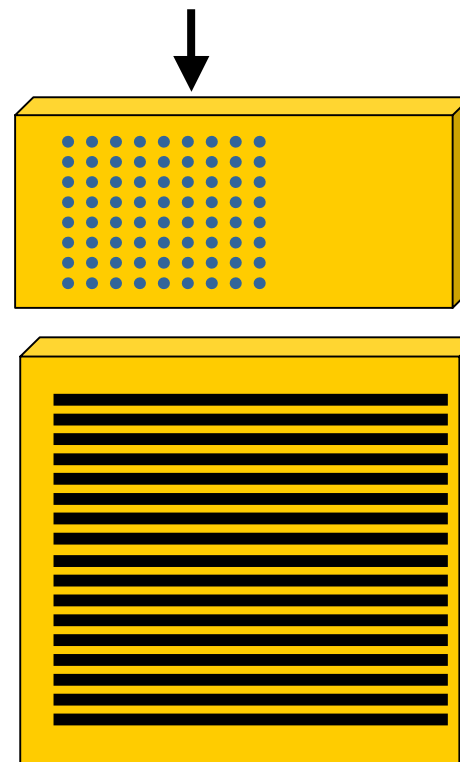
Why Business Rule Management?

Business rules are moving from here...



Application Code

...to here, and then being changed "on the fly"



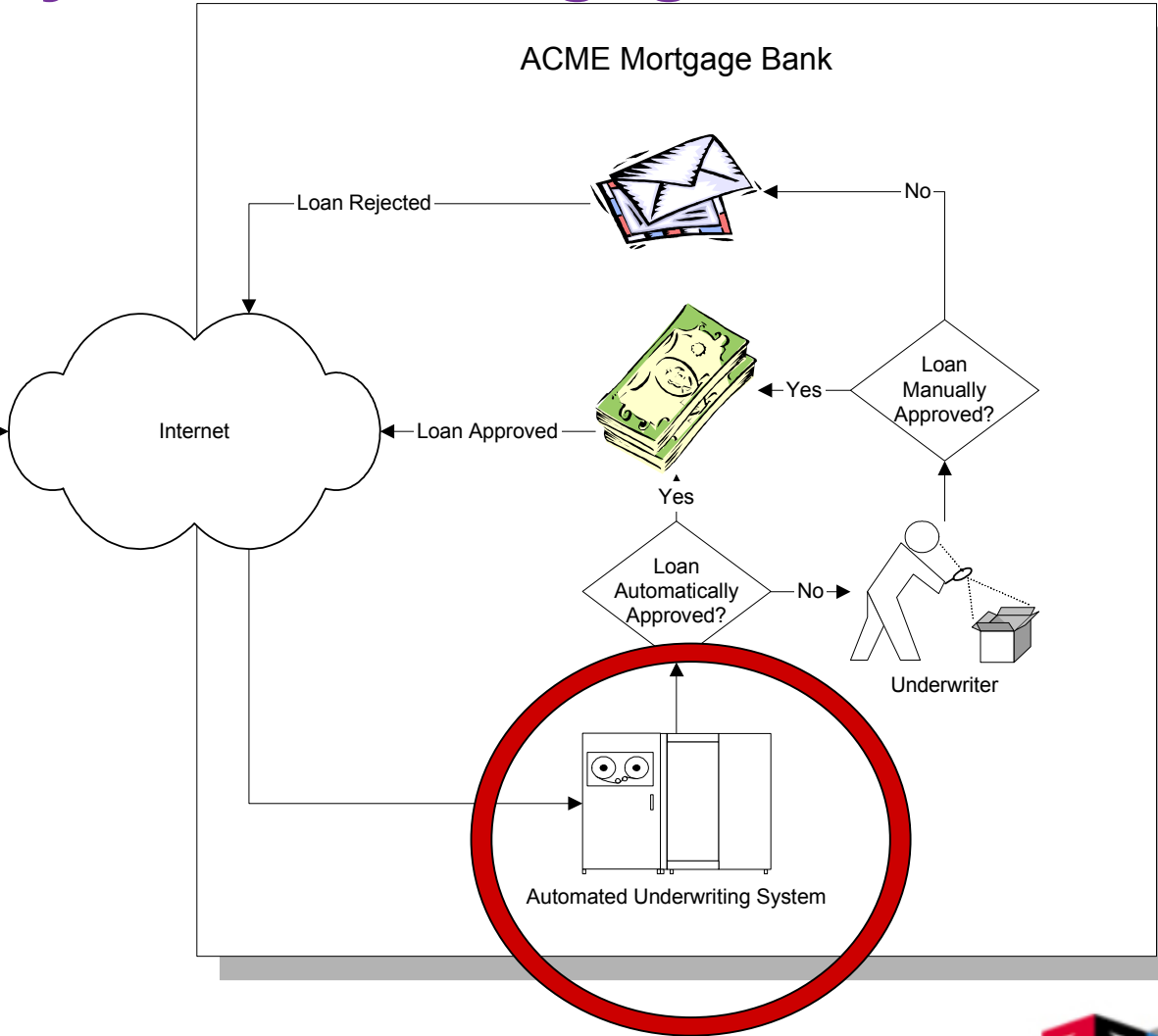
Business Rules

Application Code

Case Study: ACME Mortgage Bank



Borrower



Underwriting System Development

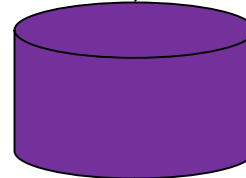
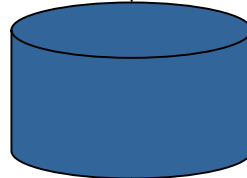
Development Environment

- Credit Policy Analysts
- Pricing Specialists

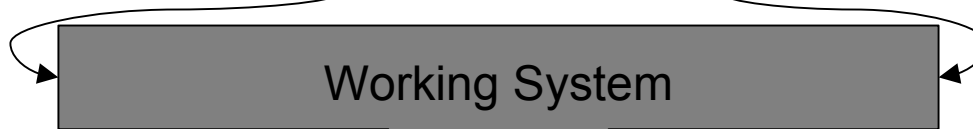


- Application Architect
- Developers

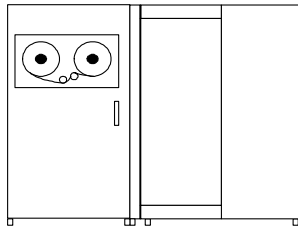
- Business Rules
- Business Object Model



- Requirements
- Logical Model
- Physical Model
- Source Code

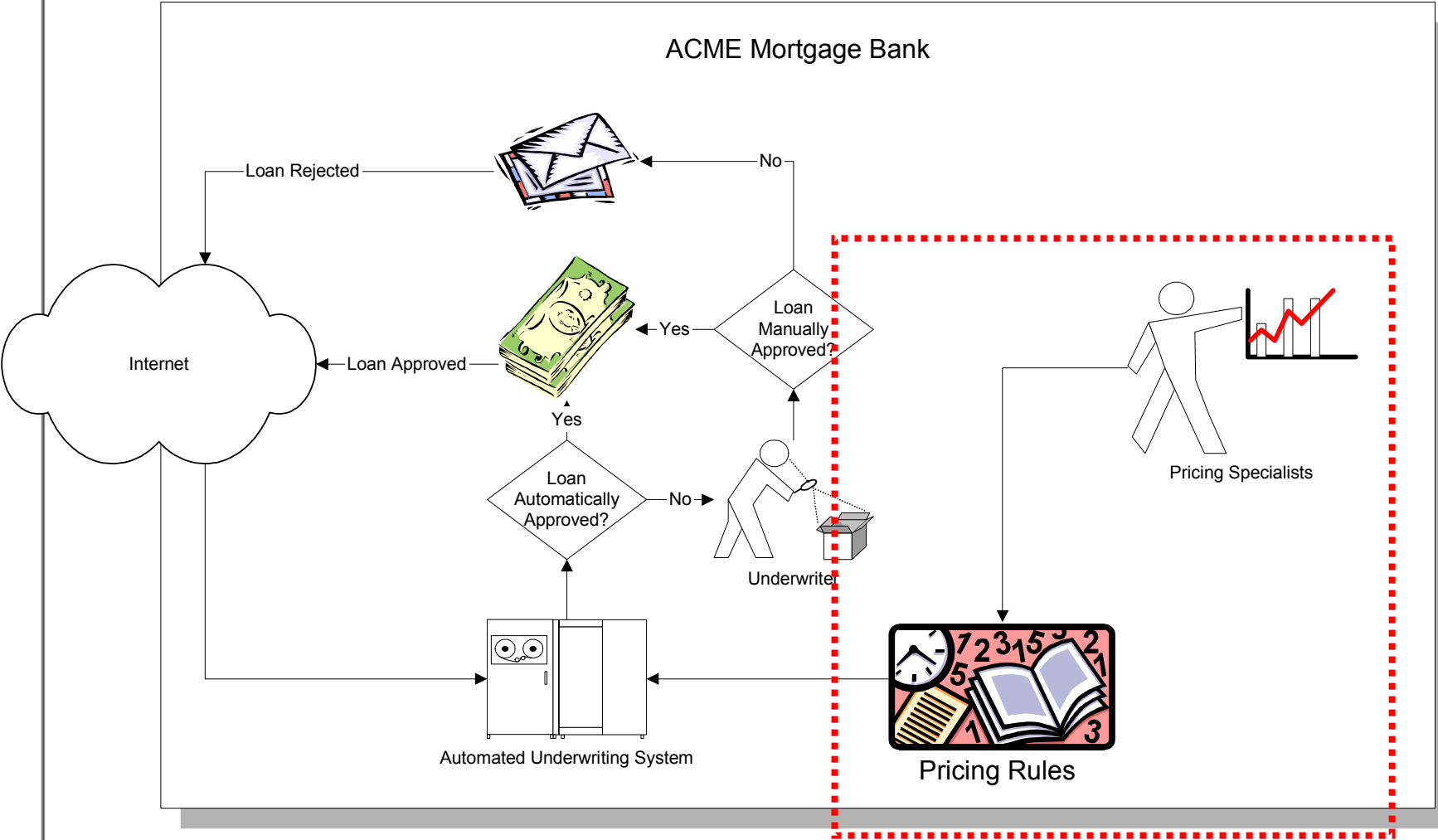


Production Environment

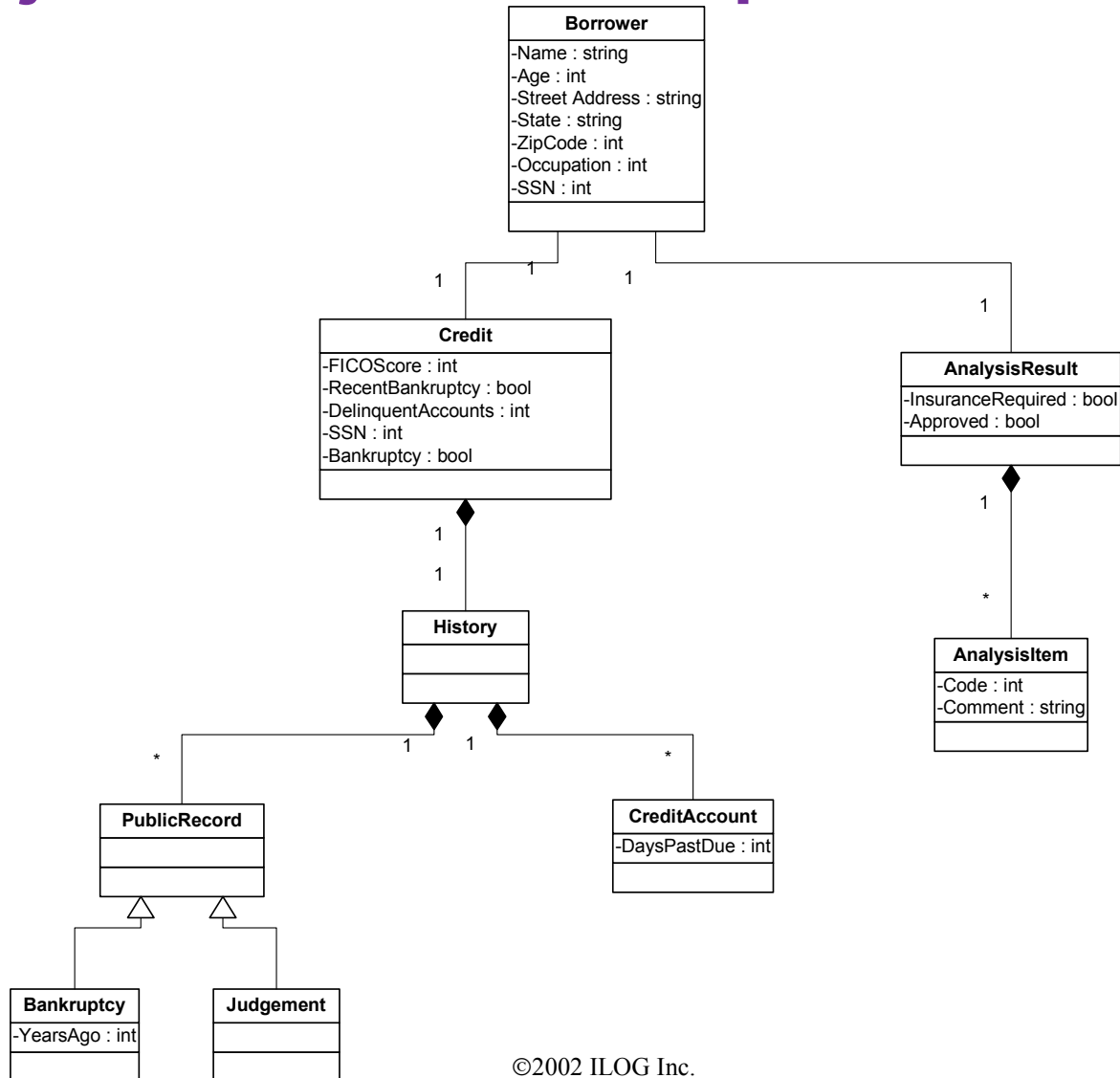


Automated Underwriting System

Runtime Business Rule Updates



Object Model – Developer View



Business Object Model

Borrower

- Name
- Zip Code
- Social Security Number

Credit Report

- Recent Bankruptcy?
- Number of Delinquent Accounts
- FICO Score
- Social Security Number

Credit Account

- Days Past Due

Analysis Result

- Loan Approved?

Underwriting Business Rules

❑ Constraint Rules

- ❑ “The FICO Score must be > 0 ”
- ❑ “The Borrower’s Social Security Number must equal the Social Security Number from the Credit Report”

❑ Inference Rules

- ❑ “If the FICO Score > 250 and the Number of Delinquent Accounts = 0 then Approve Loan”

❑ Calculation Rules

- ❑ “For each credit account: if Days Past Due > 0 then add 1 to Delinquent Accounts”

Challenges

- ❑ **Standard representation for business users**
 - ❑ Business object model
 - ❑ Business rule
- ❑ **Merged view of business and development**
 - ❑ Business object model <> Object model
 - ❑ Business rule <> Logical model
 - ❑ “Run *these* rules *here*”
- ❑ **Support for runtime business rule changes**

