

Automating Controls for SOX



Four Critical Components of a Business Rule Management Solution

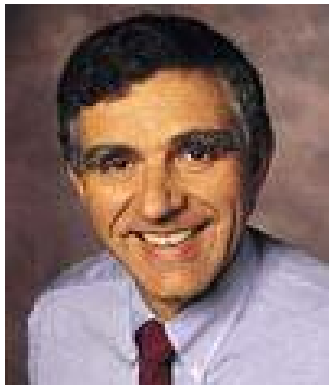
Tuesday, May 11, 200

4 p.m. Eastern / 1 p.m. Pacific

Hosted by



Welcome



Frank Derfler
VP, Market Experts
Ziff Davis Media
www.derfler.net

Featured Speaker



Michael Morel
Marketing Director
ILOG, Inc.

Introduction to ILOG



Changing the rules of business

- Founded in 1987
- Publicly traded (NASDAQ, Euronext)
- FY03 - \$92 Million Revenue
- Over 2000 customers
- Over 380 ISV / OEM partners
- 620 employees worldwide
- Leader in business rule management, optimization & visualization software technology
- Operating in 30 countries



Today's Agenda



- **Financial Control Maturity model**
- **Sarbanes-Oxley Challenges**
- **Four key components in a Business Rule Management Systems (BRMS)**
- **Reducing the on-going cost of SOX**
- **Summary**

Today's Agenda



- ➔ • **Financial Control Maturity model**
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Control maturity comes in stages

Source: IT Governance Institute, 2003



	Stage 0 Non-existent	Stage 1 Initial/Ad Hoc	Stage 2 Repeatable & Intuitive	Stage 3 Defined Process	Stage 4 Managed & Measurable	Stage 5 Optimized
Characteristics	NO control process or related procedures Compliance challenge not understood or recognized	Controls, policies, and procedures not in place Compliance challenge recognized NO employee awareness of responsibilities	Controls in place but not fully documented Event and disclosure process in place NO ongoing control evaluations	Controls in place and adequately documented Ongoing evaluation and remediation of controls Broad employee awareness	Initial use of technology to manage Effectiveness of controls evaluated on a periodic basis Minimal event and disclosure process re-evaluations	Technology leveraged to fullest extent Enterprisewide control and risk program in place Self-assessment process to evaluate design and effectiveness of controls
Implications	NO capability to be in compliance	Insufficient controls and documentation to support attestation	Controls in place Documentation can not support attestation	Sufficient documentation to support attestation with MAJOR on-going effort	Lowered effort to maintain control documentation	Reduced costs, improved decision making and internal resources used effectively Information is timely and reliable

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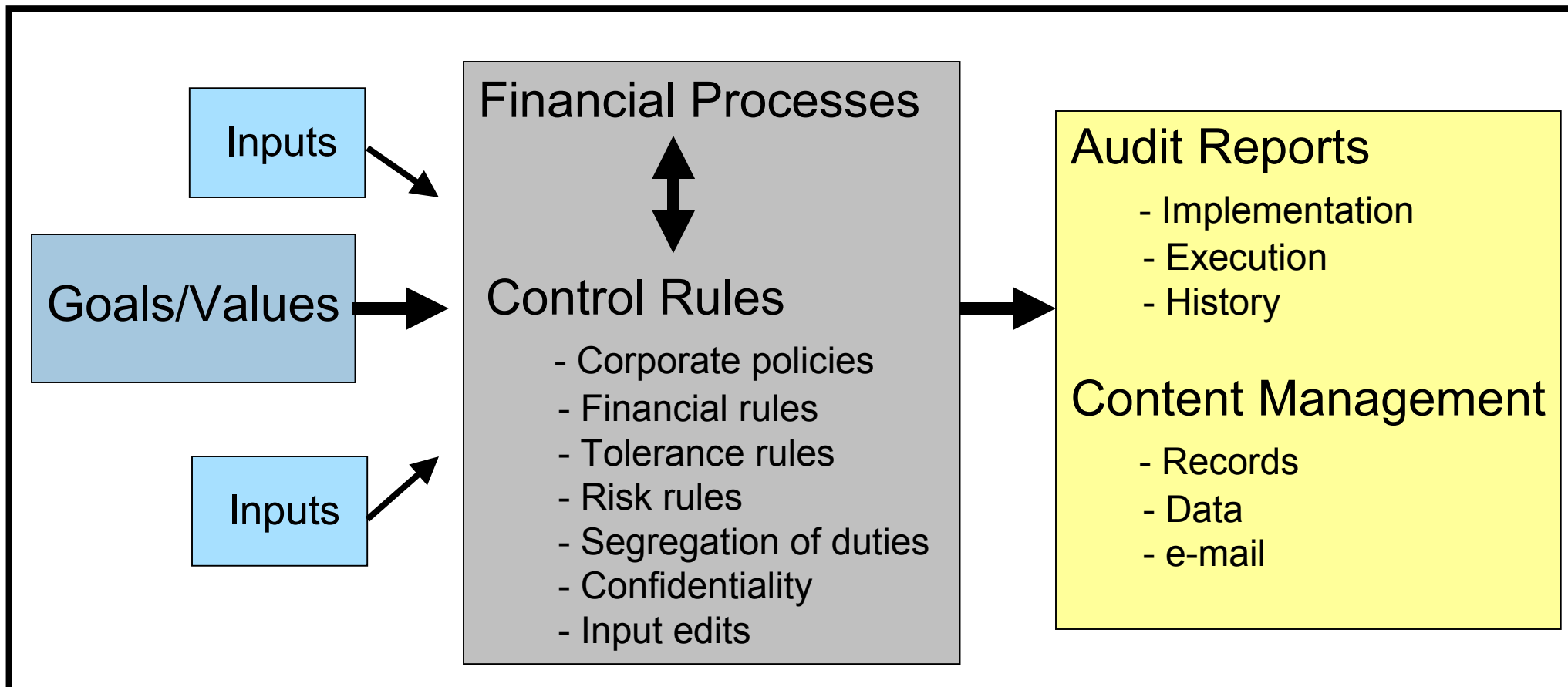
To Pass SOX 404

SOX "value"

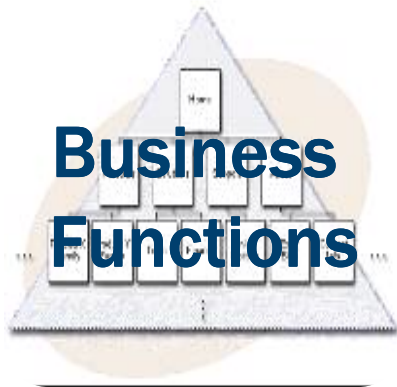
Rules is a major component of financial controls



Financial Control Framework

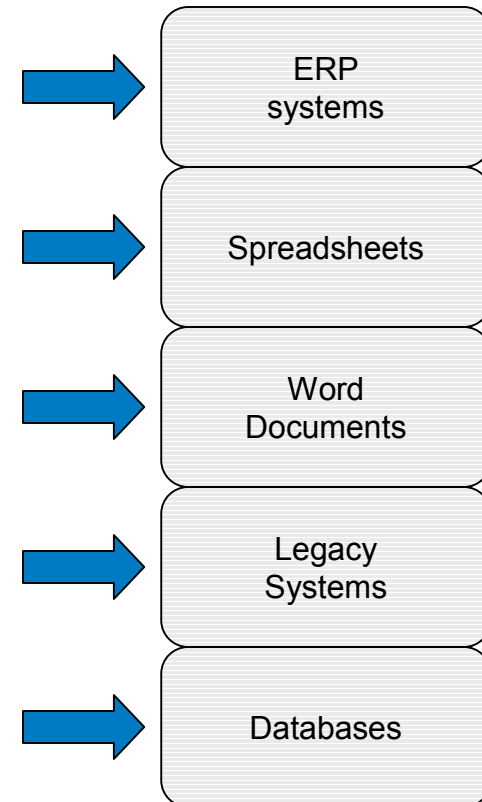


Just about every business function contains financial control rules



- Accounts Payable
- Accounts Receivable
- Sales Commissions
- Compensation
- Order management and validation
- Contract Management
- Claim Processing
- Credit scoring
- Fraud control
- Security

Maintained in ...



Financial controls are not under control !

POLL # 1



- **What is your timeframe for automating your financial control rules?**
 - **No plans**
 - **Within the next year**
 - **Within the next 6 months**
 - **Implementing now**

Today's Agenda



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“Operational applications” automate many control rules required for SOX compliance



But: Key assumptions are made about these control rules

<i>Assumption</i>		<i>Reality</i>
Financial control rules are stable		Financial control rules constantly change based on internal and external factors
Financial control rules can be consistently applied across heterogeneous applications		Each application manages rules differently and it can be very difficult to coordinate rules across applications
Rules can be managed effectively by IT		IT tends to implement change slowly and the best people to implement changes are in the business
Auditing control rules across applications and geographies is straightforward		Audit is very difficult across applications and geographies and can lead to increased risk



The *dynamics* of business reality does not match assumptions

A system is needed to automate control rules not managed by operational applications



- **Effective SOX compliance requires:**
 - **A system that allows easy change of financial control rules**
 - **A centralized system that ensures that control rules are consistently applied across applications and geographies**
 - **A system that allows business users to manage and update control rules**
 - **Audit reports that document valid implementation and management of control rules**

Today's Agenda



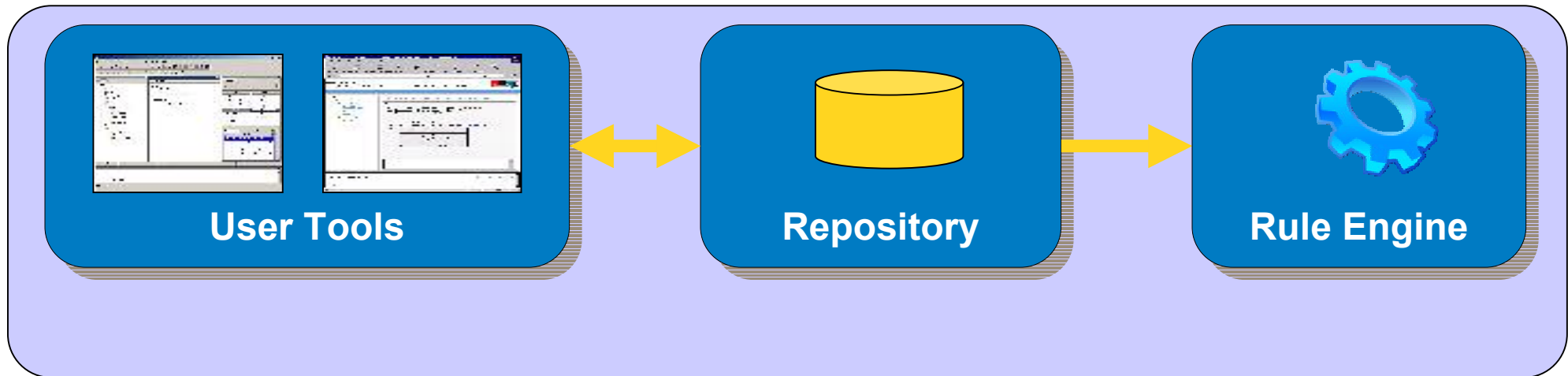
- Summary of Sarbanes-Oxley Requirements
- Sarbanes-Oxley Challenges
- ➔ • Four key components in a Business Rule Management System (BRMS)
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- Summary

What is a Business Rule Management system (BRMS)?



- **An intuitive application for business users to author and maintain rules**
- **A complete and secure environment for developers to manage and deploy rules**
- **A system that controls access to rules by role-based access levels**

Typical BRMS functions



- A desktop for Managers, Business Analysts and Developers to model, deploy and manage control rules
- A repository to manage and store control rules
- A engine to deploy control rules

Key Component # 1: Business Rules Language for Compliance



- **Business user oriented/“english-like”**
- **Support for a compliance model**
 - **Compliance events**
 - **Compliance cases**

Business Rule Language for Compliance



Software Revenue Recognition example

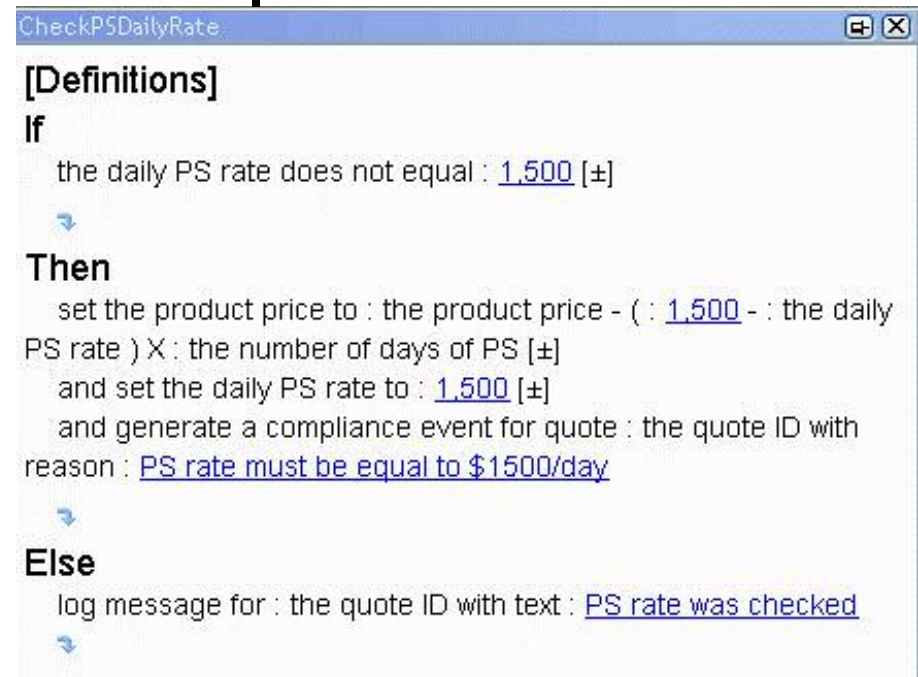
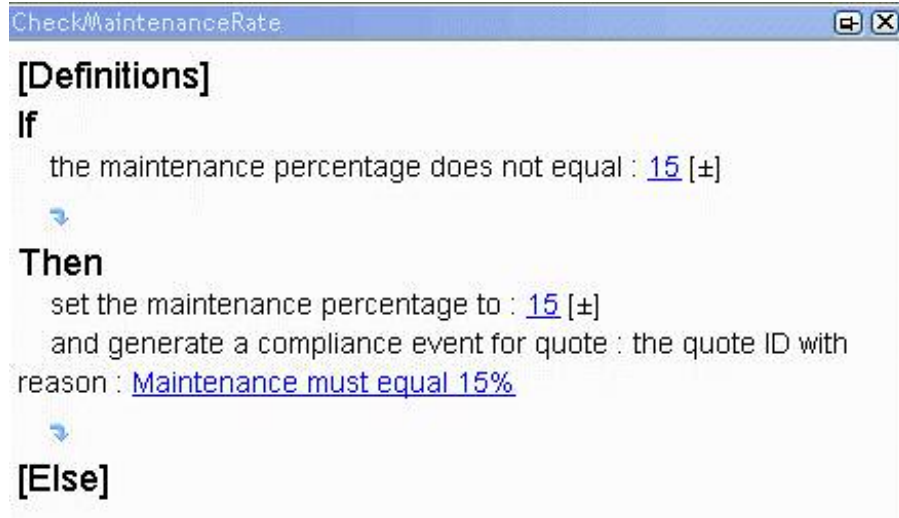
Quote Process

Enter customer quote
for software, maintenance,
and consulting

Ensure pricing of
maintenance meets
control requirements

Ensure pricing of
services meets
control requirements

Generate quote



Key Component # 2: Traceability and Auditability



- **Rule testing tools**
 - Used to implement control rules
- **Compliance/control reports**
 - Used to track control violations in real time
- **Audit trail reports**
 - Used to report control rule definitions and effectivity
 - Used to record control history

Control Rules Report



Revenue Recognition Report

Cases Summary

Total	Clear	Minor	Warning	Major	Critical
5	0	1 (20%)	0 (0%)	3 (60 %)	1 (20%)

Compliance Cases

1. France
2. Germany
3. U.K.
4. U.S.
5. Japan

Case	Japan	Back to Top
Time	2004/03/25 at 23:51:04 in GMT+08:00	
Severity	Major	
Assigned Person	Controller - Japan	
Number Of Events	3	

Events Details

Event Code	Severity	Type	Status	Reason	Rule Name	Diagnostic	System	Input Data
E19	Clear	Revenue Recognition	Allowed	Allowable range	CheckMaintenanceRate	Maintenance rate within range (15% ± .5%)	Quote	order00825
E22	Major	Revenue Recognition	Pending	Review by GM	CheckPSDailyRate	PS daily rate outside range	Quote	order00926
CS23	Critical	Revenue Recognition	Disallowed	Outside VSOE range	CheckMaintenanceRate	Maintenance rate outside range (15% ± .5%)	Quote	order00726

Action Details

Action	Destination
Generate HTML Report	CFO

Audit Trail Report



Business Rules Report - generated Wed May 05 09:39:09 PDT 2004

Rule Name	Last Modification Date	Creation Date	Author	Documentation	Status	Business Rule Implementation	Technical Rule Implementation
CheckPSDailyRate (in: RevRecRules)	Tue May 04 16:44:08 PDT 2004	Tue May 04 16:24:10 PDT 2004	Morel	Revenue Recognition	Deployed	If the daily PS rate does not equal 1,500 Then set the product price to the product price - (1,500 - the daily PS rate) X the number of days of PS and set the daily PS rate to 1,500 and generate a compliance event for quote the quote ID with reason PS rate must be equal to \$1500/day Else log message for the quote ID with text PS rate was checked	when { ?quote: newPackage.Quote(); ?the_product_price: int(); ?utility: newPackage.Utility(); evaluate((?quote.ps_daily_rate != 1500)); } then { ?quote.product_price = ?the_product_price - (1500 - ?quote.ps_daily_rate) * ?quote.ps_num_days; ?quote.ps_daily_rate = 1500; ?utility.generateComplianceEvent(?quote.id, "PS rate must be equal to \$1500/day"); } else { ?utility.logMessage(?quote.id, "PS rate was checked"); }
CheckMaintenanceRate (in: RevRecRules)	Tue May 04 16:42:19 PDT 2004	Tue May 04 16:40:43 PDT 2004	Morel	Revenue Recognition	Deployed	If the maintenance percentage does not equal 15 Then set the maintenance percentage to 15 and generate a compliance event for quote the quote ID with reason Maintenance must equal 15%	when { ?quote: newPackage.Quote(); ?utility: newPackage.Utility(); evaluate((?quote.maintenance_percentage != 15)); } then { ?quote.maintenance_percentage = 15; ?utility.generateComplianceEvent(?quote.id, "Maintenance must equal 15%"); }

Key Component # 3: Integration/Connectivity



- **Out-of-the-box integration to BPM apps**
 - Filenet, BEA, Fujitsu, Versata, Vitria
- **Web Services integration to Operational apps**
 - ERP, CRM, etc.
- **Standards based tools for legacy integration**
 - Java
 - J2EE
 - XML
 - Webservices
- **Extensive APIs to maximize integration options**

Key Component # 4: High Scalability



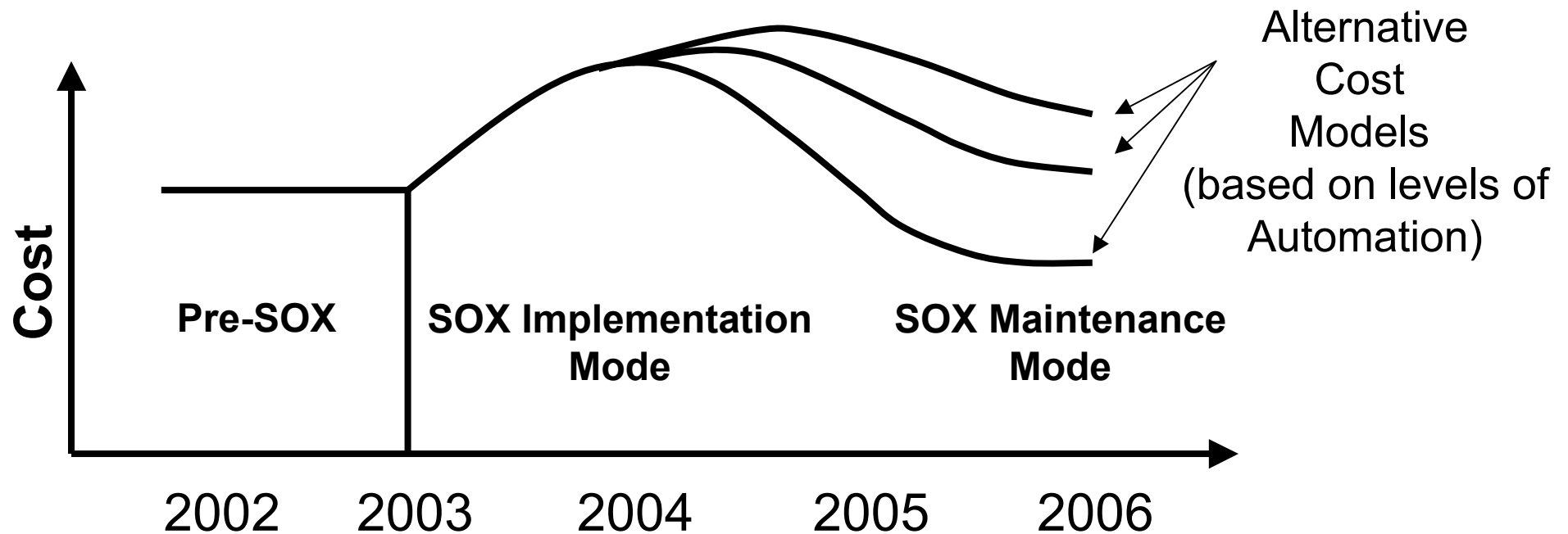
- High rule throughput
- Support for a large rule base
- Support for large number of users
- Scale across geographies

Today's Agenda



- Summary of Sarbanes-Oxley Requirements
- Sarbanes-Oxley Challenges
- Business Rule Management Systems provide the controls needed for SOX compliance
- ➔ • Reducing the on-going costs of SOX
- Summary

On-going costs of SOX will vary



Experience with other compliance regimes suggests that **automating** internal controls, testing, and audit is key to reducing long-term compliance costs (for Sarbanes-Oxley)

AMR: Nov, 2003

POLL # 2



- **What key benefits would you like to see from your SOX effort (besides keeping Management out of jail)?**
 - **Reduced costs of managing financial controls**
 - **Reduced exposure to risk**
 - **Improved management of the business (due to faster, more accurate information)**
 - **Reduced costs of complying with other regulations**

Today's Agenda



- Summary of Sarbanes-Oxley Requirements
- Sarbanes-Oxley Challenges
- Reducing the cost of Sarbanes-Oxley with Business Rule Management Systems
- Increasing the value of your compliance investment
- ➔ • Summary

A BRMS solution is the “next step” in SOX compliance



- Provides control not available in Operational applications
- Reduces on-going SOX costs
- Helps reduce risk exposure
- Supports future SOX requirements
- Provides a foundation to address other compliance requirements

Not all Business Rule Management systems are the same when it comes to SOX



ILOG can provide:

- A proven solution with leading functionality
- A solution accelerator for compliance
 - Compliance model and templates
 - Professional services compliance methodology and best practices
- Reports to meet audit and traceability requirements
- Integration into existing applications
- Scalability to meet the needs of the enterprise

Attendee Services



Get an ILOG Business Rules for Compliance Solutions Kit by visiting:

www.ilog.com/success/icomply11

The *ILOG Business Rules for Compliance Solutions Kit* contains valuable product information, case studies, and more.

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Thank You



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