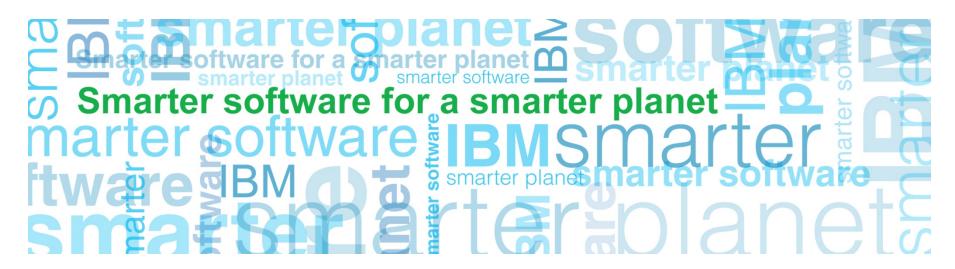


Implementing an IT GRC Program with IBM OpenPages ITG



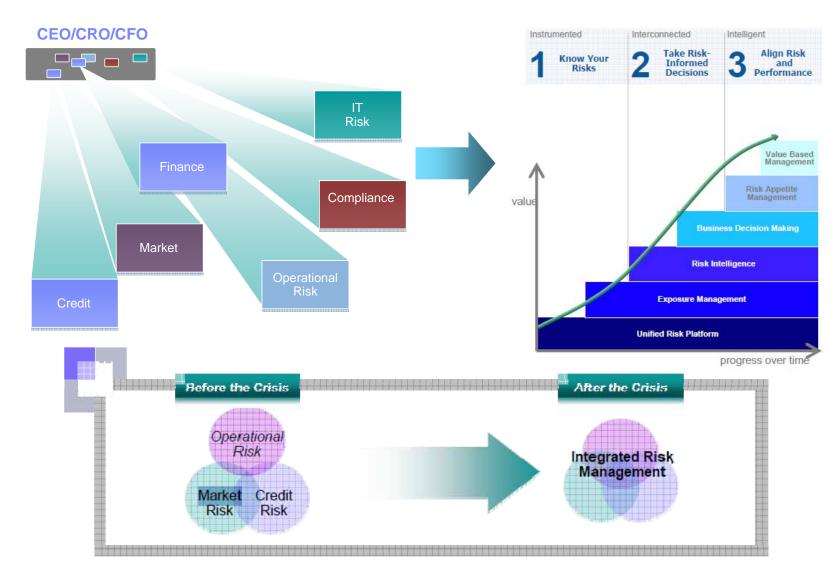


IBM Risk Approach



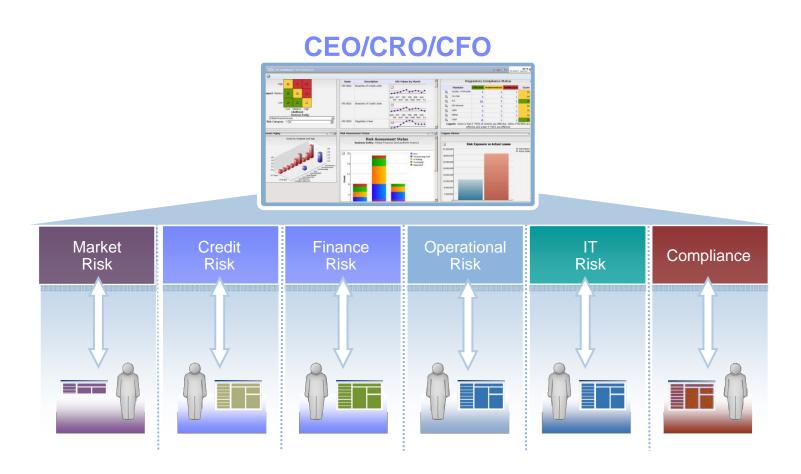


Fragmented risk approach increase cost and reduce governance ability





Integrated Risk Management Solves These Challenges





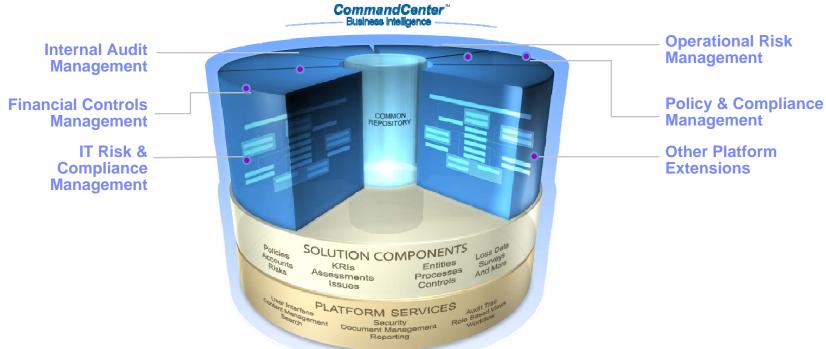
OpenPages Platform Provides an Integrated Approach to Risk Management





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Proven by the World's Leading Companies

Financial Services



Insurance



Energy and Power



Manufacturing



Retail/Consumer



Telecommunications



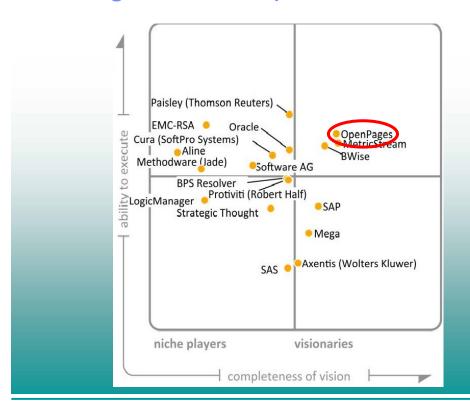


Health Services / Pharmaceuticals





Recognized Enterprise GRC Platform Market Leader







Magic Quadrant for EGRC Platforms The Forrester Wave: EGRC Platforms October 2010



July 2009



IT Risk Governance Approach





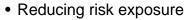
Constraints and needs

External Drivers

- Federal and state regulations for data privacy and protection worldwide
- Industry-based standards (e.g. HIPAA, FFIEC, NERC, etc)
- Hackers, viruses and malware
- External auditors

Internal Drivers

- Minimize risk exposure and loss
- Ensure regulatory compliance
- Lower costs
- Preparing for internal audits
- Minimize duplicative control testing effort
- Integrate risk and policy management with enterprise reporting



- Ensuring regulatory compliance
- Reducing control testing burden
- Reporting on risk exposure against business objectives
- Preparing for internal audit



Solutions

Policy Management

Track and manage internal policies

Map policies to regulatory compliance initiatives

IT Risk and Compliance

Identify, manage & monitor key IT risks in the business

Incident management and remediation

Technical controls integration

Other specific risk management initiatives

Vendor risk management BCP and DR

Addressed by IBM OpenPages



OpenPages IT Governance Helps Companies Manage the Challenges Associated with IT GRC Programs

Key Features

- Integrated solution for managing IT Risk and compliance
 - Assess IT risk in context of business
 - Identify key risks, controls and/or gaps
- Support for the regulatory certification and audit process
- Track and manage IT incidents through their life cycle
- Manage common requirements across laws, regulations, standards and policies
- Integrated with UCF (Unified Compliance Framework), the industry's most comprehensive IT compliance database



- Manage IT controls, risks and regulatory requirements according to the business services they support
- Deliver improved visibility, better decision support, and enhanced corporate performance
- Reduces the complexity of IT GRC programs

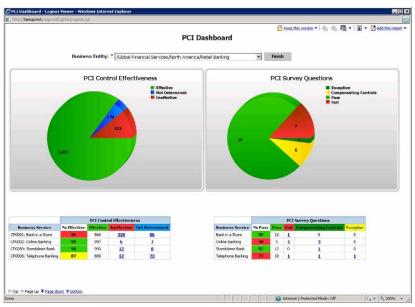


OpenPages ITG Supports the Key Use Cases

- IT Policy and Regulatory Compliance
- IT Risk Assessments and Management
- Control Monitoring and Assessment
- Integrated IT and Enterprise GRC



Use Case: IT Policy and Regulatory Compliance



Achieve and maintain compliance across multiple policies and regulations.

OpenPages ITG Capabilities

- Map IT policies and standards to authoritative sources such as ISO/IEC 2700x, COBIT®, PCI, FFIEC, HIPPA and NIST
- Assess and monitor compliance and manage exceptions
- Establish and implement best practice control frameworks for IT assets
- Executive and regulatory compliance dashboards

Business Benefits

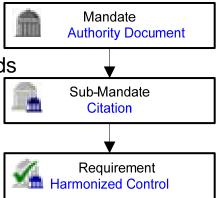
- Provide confidence that compliance is achieved and corporate policies and procedures are enforced
- Quicker reaction time to changes in laws and regulations
- Minimize redundancies within control framework



IBM OpenPages ITG Includes UCF IT Regulatory Content

- 400+ Authority Documents in 23 Guidance Areas
 - Types: Laws, standards, best practices, etc.
 - Guidance Areas: Healthcare, energy, banking, payment card, records management, UK, Asia, US Fed, US States, IRS, etc.
- 27,000 Citations
 - Section identifiers plus Guidance
- 3800+ Harmonized Controls in 13 Impact Zones
- UCFmap enables easy browsing, filtering and loading UCF content

Leadership and High Level Objectives	Audits and Risk Management	
Product Design and Development	Acquisition of Technology	
Operational Management	Human Resources Management	
Records Management	Technical Security	
Physical Security	Systems Continuity	
Monitoring and Reporting	Privacy	
System Hardening through Configuration Management		





Piloter l'efficacité des contrôles



IT Control Effectiveness by Mandate

Reporting Period: Current Reporting Period Business Entity: |/Global Financial Services Finish Mandate Type Jurisdiction | Applicability | % Controls Effective Industry Standard | Global Global AGA Report No. 12 - Cryptographic Protection of SCADA AICPA/CICA Generally Accepted Privacy Principles Common Practice Unassessed 83.3 m BIS 76; Electronic Banking Group White Paper; October 2000 Global 0.0 Law / Regulation Global <u> BITS Framework for Managing Technology Risk for IT Service Provider Relationships</u> Common Practice Global Global 25.0 m Bank Protection Act 12 USC 1882 Law / Regulation Global Global 100.0 CobiT 4.0 - Level 1 83.8 Common Practice Global Global Common Practice Global Global 81.8 Cobit 4.0 - Level 2 Common Practice Global Global <u>83.3</u> Law / Regulation Global Global 50.0 m FDIC: FIL-43-2003 Guidance on Developing an Effective Software Patch Management Program Law / Regulation Global Global 90.0 m FFIEC - Information Security July 2006 Law / Regulation Global Global 72.2 Law / Regulation Global Global 66.7 FFIEC Development and Acquisition Booklet (Dated April 2004) 100.0 FFIEC E-Banking Law / Regulation Global m FFIEC Fed Line ■ Global Law / Regulation Global 100.0 FFIEC Operations Law / Regulation Global Global 80.0 m FFIEC Retail Payment Systems Handbook (Dated March 2004) Law / Regulation Global 100.0 Global m FFIEC Wholesale Payment Systems Booklet (Dated July 2004) Law / Regulation Global Global 100.0 m FRB 12 CFR Part 30 - Safety and Soundness Standards Law / Regulation Global Global 100.0 MIPAA Security Law / Regulation Global Global 75.0 m ISO 15489 - Part 2 Common Practice Global Global 100.0 m ISO/IEC 17799 (2005) Part 1 Global Common Practice | Global 83.9 <u>⋒</u> ISO/IEC 20000-1 Common Practice | Global Global 100.0 MERC CIP-003-1: Security Management Controls Industry Standard | United States | Local m NERC CIP-006-1: Physical Security of Critical Cyber Assets Industry Standard | United States | Local | 85.7 MERC CIP-007-1: Systems Security Management Industry Standard | United States | Local | <u>75.0</u>



Use Case: IT Risk Assessments and Management



Identify and manage IT risks that impact business performance.

OpenPages ITG Capabilities

- Risk control self-assessments, end-user surveys, key indicators, executive dashboards, automated workflow and issue remediation
- Map IT and technology risks into business processes and understand the interdependencies of risk across systems
- Top-down assessments and bottom up control monitoring

Business Benefits

- Identify key risks that can impact business performance
- Codify best practices and standardize control frameworks
- Increase visibility to risk exposure and reduce unexpected outcomes



Rapprochement entre les pertes et les evaluation des risques



Risk vs Loss

Reporting Period: Current Reporting Period

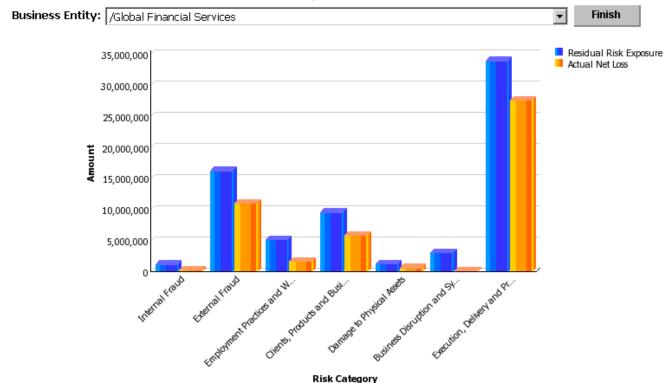
Risk Appetite: \$100,000,000

Status: All

Domain: Operational

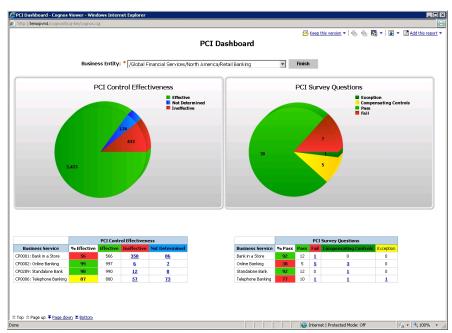
Occurrence Date Range: Jan 1, 2005 - Jan 1, 2006

Currency: USD





Use Case: Control Monitoring and Assessment



Provide business and regulatory context to IT system configurations, security and access control data.

OpenPages ITG Capabilities

- Maps best practice control baselines to IT assets and the business services they support
- Collects data to assess the state of your IT operating environment
- When integrated with your preventative and detective IT control infrastructure, automates data collection and control monitoring
- Remediate control gaps

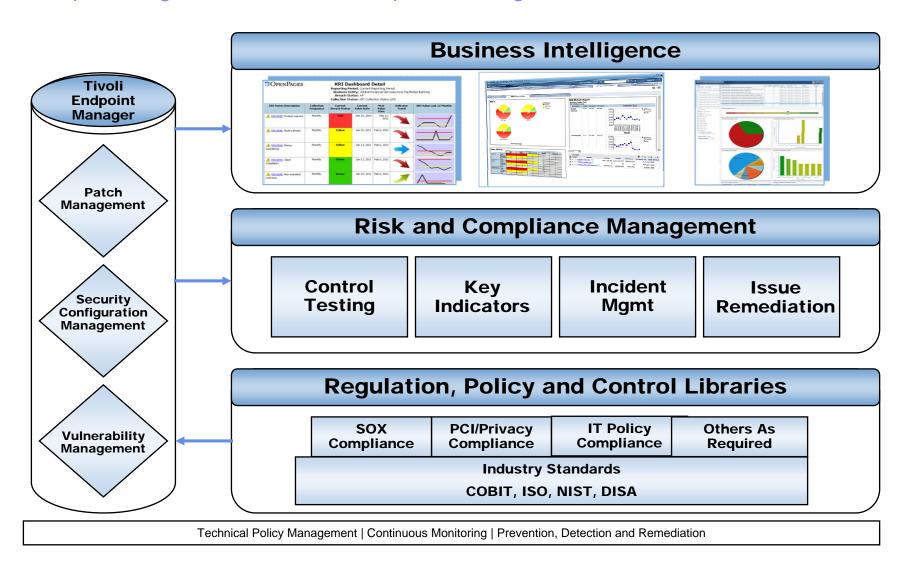
Business Benefits

- Provide risk and regulatory context for control data housed in multiple IT systems
- Consolidate data and report compliance initiatives across multiple mandates
- Effectively assess business impact of control failures, threats, vulnerabilities and incidents
- Optimize control infrastructure based on business impact



Drive effective monitoring using rich asset, security compliance and configuration management data

Example: Integration with Tivoli Endpoint manager





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Pilotage automatique par alertes

OPENPAGES

KRI Dashboard Detail

Reporting Period: Current Reporting Period

Business Entity: /Global Financial Services/Asia Pac/Retail Banking

Breach Status: All

Collection Status: KRI Collection Status (All)

KRI Name: Description	Collection Frequency	Current Breach Status	Current Value Date	Next Value Date	Indicator Trend	KRI Value Last 12 Months
⚠ KRI-0048: Product waivers	Monthly	Red	Dec 15, 2010	Feb 11, 2011	M	
⚠ KRI-0046; Nostro Breaks	Monthly	Yellow	Jan 10, 2011	Feb 6, 2011	1	
KRI-0044: Money Laundering	Monthly	Yellow	Jan 13, 2011	Feb 6, 2011	→	
⚠ KRI-0043; Client Complaints	Monthly	Green	Jan 13, 2011	Feb 6, 2011	M	
⚠ KRI-0045: Non-standard contracts	Monthly	Green	Jan 10, 2011	Feb 6, 2011	1	
⚠ KRI-0047: Payment Frauds	Monthly	Green	Sep 15, 2010	Feb 11, 2011	1	
⚠ KRI-0049: Suspense Account Balances	Monthly	Green	Jan 3, 2011	Feb 11, 2011	1	
⚠ KRI-0050: Unauthorized transactions	Monthly	Green	Jan 10, 2011	Feb 16, 2011	1	



IBM's IT GRC Approach Closes the Loop Between Oversight and Operations

IT GRC Analytics

IT GRC Management

IT GRC Execution

Applications
Database
Network
Endpoint
Access and IM

Data Governance

Operational Systems



Operations Management Cognos/SPSS

OpenPages

IT GRC Execution*

AppScan
Guardium
ISS Proventia
TEM/BigFix
TIM/TAM

Information Management

Operational Systems



Rational/Tivoli

Reduce risk, improve compliance through Business Analytics

Optimize performance

*representative solutions



Use Case: Integrated IT and Enterprise GRC for Enterprise-wide View of Risk



Integrate risk management and compliance processes to leverage GRC information and make better business decisions.

OpenPages ITG Capabilities

- Eliminates siloed risk management
- Harmonizes common IT controls across multiple regulations, including SOX, PCI, data privacy requirements and industry regulations
- Leverages a centralized repository and provides integrated, cross-module reporting, dashboards, workflow, and security

Business Benefits

- Deliver improved visibility, better decision support, and enhanced corporate performance
- Heat maps and executive dashboards provide enterprise-wide view of risk exposure
- Provide confidence that compliance is achieved, risks are mitigated and corporate policies and procedures are enforced



Benefits Summary

- Manage IT controls, risks and regulatory requirements according to the business services they support
- Codify best practices and standardize control frameworks
- Increase visibility to risk exposure and reduce unexpected outcomes
- Minimize redundancies within control framework
- Provide confidence that compliance is achieved, risks are mitigated and corporate policies and procedures are enforced



MERCI



OpenPages Data Model

