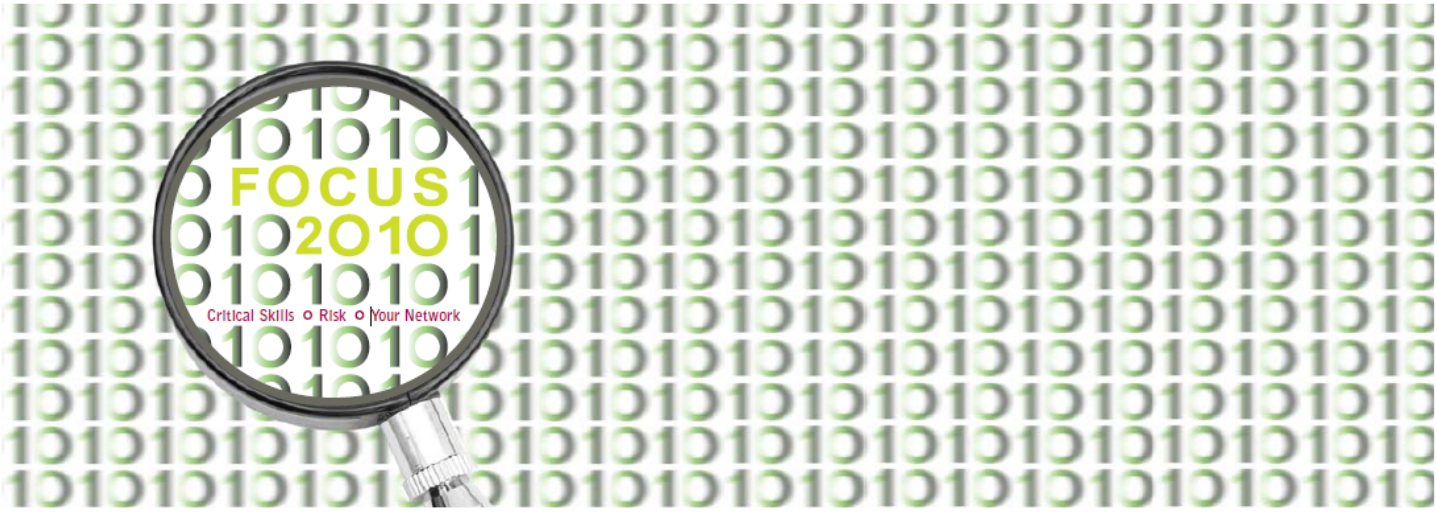
10th Annual SF ISACA Fall Conference

October 4 – 6, 2010



G11: Convergence of Security and Compliance - An Integrated Approach to Information Risk Management

Larry A. Jewik and Ramy Houssaini,
Kaiser Permanente

ISACA®
Trust in, and value from, information systems
San Francisco Chapter

The Convergence of Security and Compliance

– An Integrated Approach to Risk Management

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Ramy Houssaini, Director, Information Security - Strategy

ISACA Trust in, and value from, information systems
San Francisco Chapter

FOCUS 2010
Critical Skills ○ Risk ○ Your Network

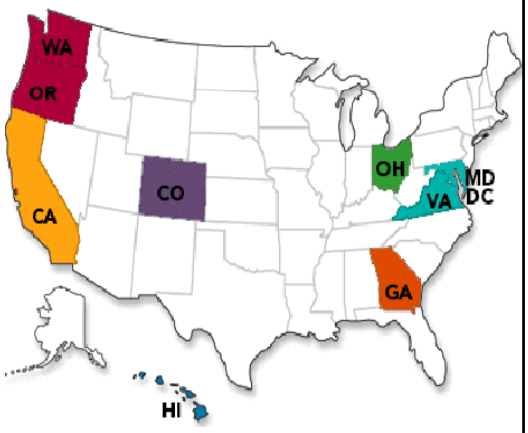
Discussion Roadmap

- Current Compliance Landscape
- Integrated View of Risks and review of Risk Framework
- Integration Case Study

About Kaiser Permanente

- One of nation's largest not for profit health plans
- 8.6 million members
- 179,000 employees and physicians
- 35 Hospitals, 454 Medical Office buildings
- 8 Regions, serving 9 states and the District of Columbia
- $42.1 billion annual revenues
- 3 organizations
  - Kaiser Foundation Health Plan, Inc
  - Kaiser Foundation Hospitals and subsidiaries
  - The Permanente Medical Groups

(As of December 31, 2009)



Convergence of Compliance and Security

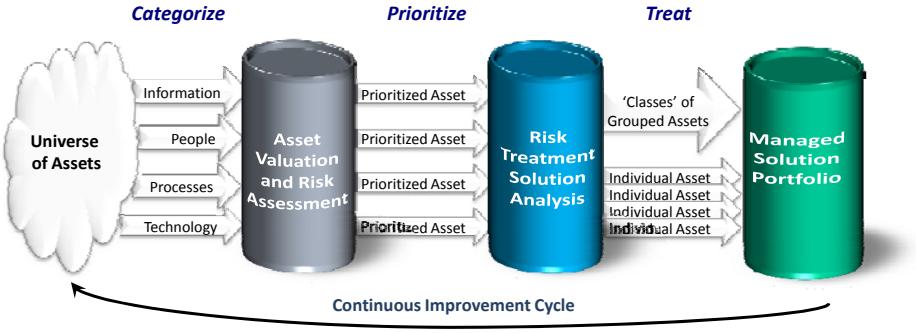
Compliance Overload

Brand Impact

More Aggressive Enforcement

Risk Management Approach

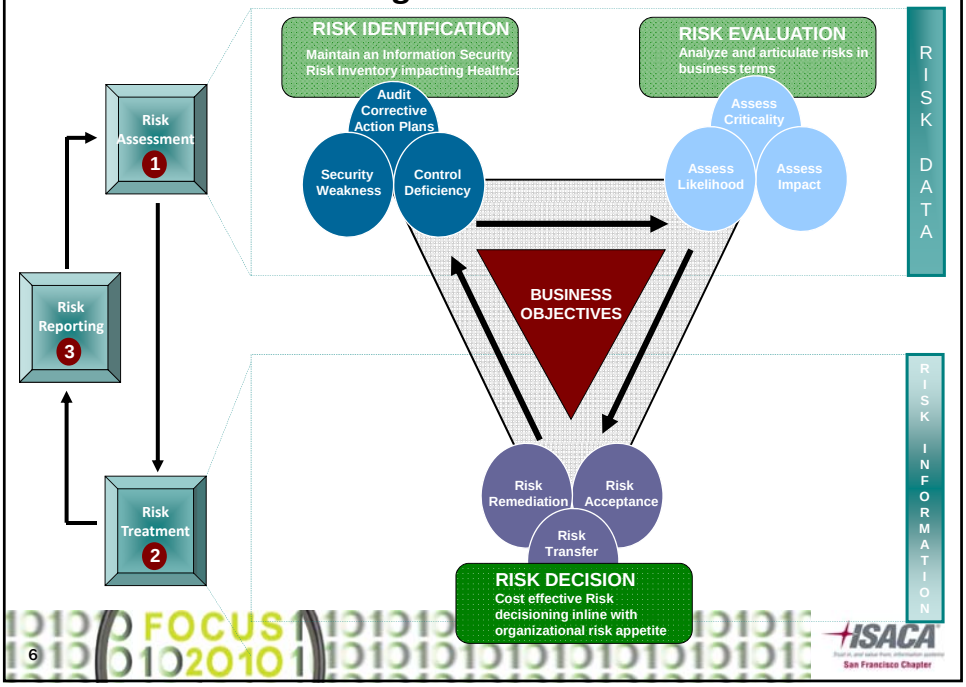
Security Risk Management aims to establish a comprehensive lifecycle that ensures risk treatment solutions address all high value assets



Define the Program Scope → Create Consistent, Repeatable Ratings → Establish Logical, Sustainable Treatments → **Provide a Defensible Risk Posture**

This continuum of control sets and maintains the standard of due care that defines acceptable information risk

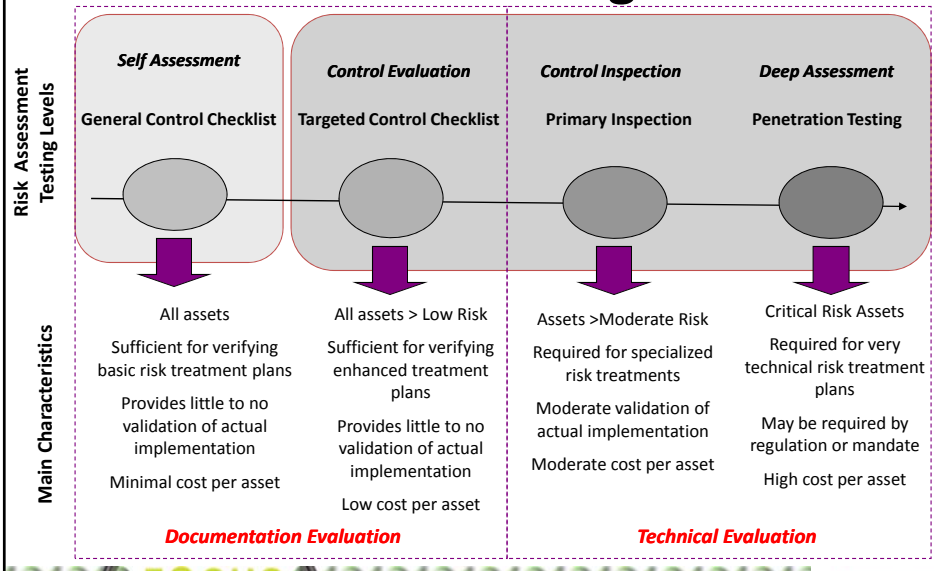
Information Risk Management Framework



Risk Management Process

- Risk Identification
  - Security weakness reported in the environment tracked for detailed risk assessment activities to help define the risk profile
- Risk Assessment
  - A risk-based approach that recommends different protection methods depending on the asset's value, the susceptibility to various threats, and the organization's cost/benefit analysis of protection methods
- Risk Decision
  - Enforce Business Owner accountability to implement risk mitigation plans necessary for reducing inherent risks in their business areas to an acceptable and reasonable level

Risk Assessment Testing Continuum



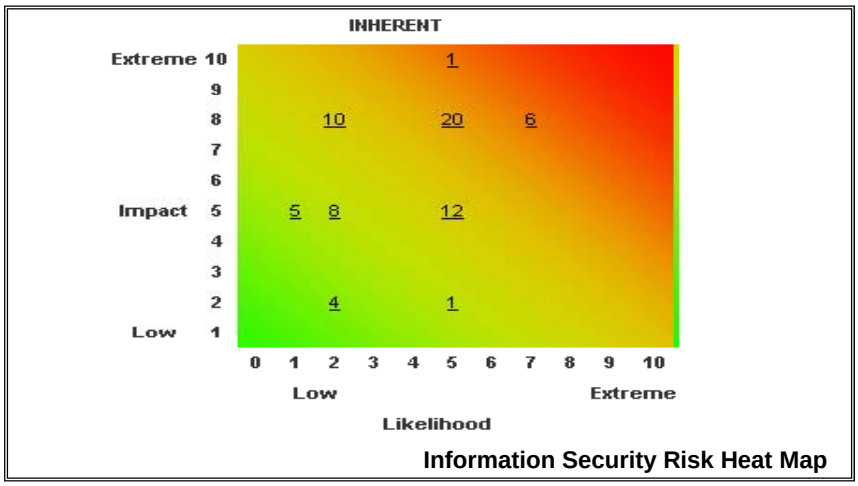
Risk Decision & Agiliance

Governance Risk Compliance (GRC) Tool

- The Need for GRC
  - Fragmented Risk Information throughout the Enterprise resulting in limited management line of sight of Information Risk, duplication of assessment efforts and suboptimal resource utilization
- GRC Vision
  - Establish a risk decision platform based on an integrated and comprehensive view of risk information throughout the Enterprise
- Success Criteria
  - Accelerate the convergence of GRC processes
  - Substantially reduce the cost of Compliance Demonstrability by enforcing Continuous Compliance
  - Support a data driven approach to information security
  - Enable a risk based approach to decision making

Risk Identification

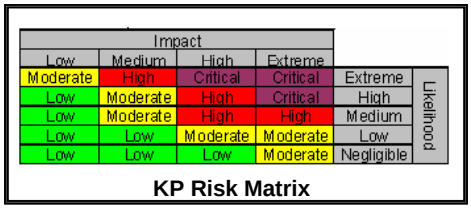
- Information Security Risk Inventory actively maintained in a GRC Platform



Information Security Risk Heat Map

Risk Assessment

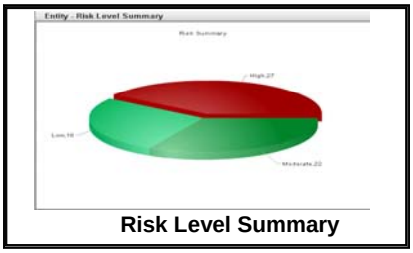
- KP Risk Matrix incorporated in Agiliance Risk Assessment Module
- Active Directory and Messaging Risk Assessments being executed in Agiliance



Impact					
Low	Medium	High	Extreme		
Moderate	High	Critical	Critical	Extreme	Likelihood
Low	Moderate	High	Critical	High	
Low	Moderate	High	High	Medium	
Low	Low	Moderate	Moderate	Low	
Low	Low	Low	Moderate	Negligible	

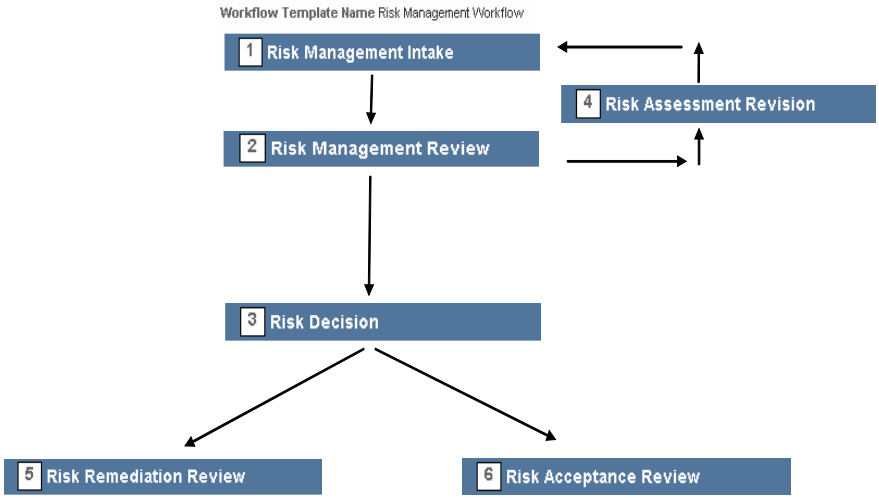
KP Risk Matrix

Risk Assessment Rating



Risk Level Summary

Risk Decision

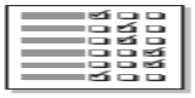


Integrating Security and Compliance

Scenario: An upgrade of a critical business process related system is taking place over an 18 months period. Compliance and Information Security teams have partnered to assess the system and ensure that it meets the desired set of controls.

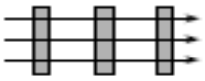
Control Design: New Systems

1. Identifying Risks



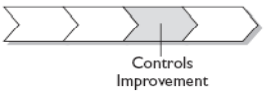
Challenges:
• The security risk vs. compliance risk debate

2. Risk Community Alignment



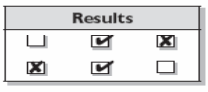
Challenges:
• Common and consistent evaluation criteria

3. Design and Assessment



Challenges:
• Managing overlap and redundancy

4. Integrated Reporting



Challenges:
• Alignment of messaging

Risk Community Alignment

National Compliance CONTACT: xxxxx SCOPE: xxxxx	**Regional Compliance** CONTACT: xxxxx SCOPE: xxxxx	**Internal Audit** CONTACT: xxxxx SCOPE: xxxxx
Technology Compliance CONTACT: xxxxx SCOPE: xxxxx	**Project Stakeholders** BUS. CONTACT: xxxxx IT CONTACT: xxxxx SCOPE: xxxxx	**Legal** CONTACT: xxxxx SCOPE: xxxxx
Information Security CONTACT: xxxxx SCOPE: xxxxx	**SOX PMO** CONTACT: xxxxx SCOPE: xxxxx	**Other** CONTACT: xxxxx SCOPE: xxxxx

Design and Assessment

Challenges in Driving Organizational Self-Sufficiency

What the Requirement States

What the Requirement Means

SOX 12.14.03
Changes requests are appropriately authorized.

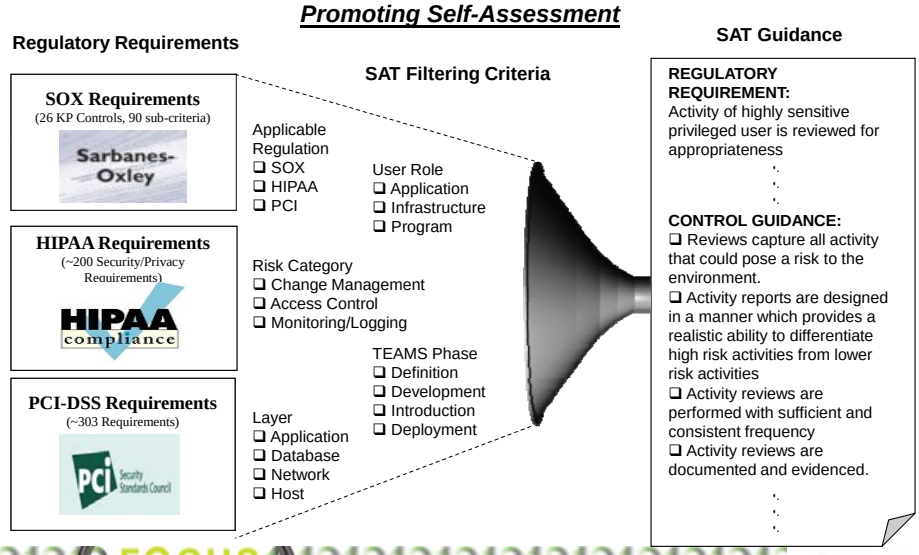
- Authorization documented for the change?
- Approval to proceed documented?
- Segregation between requestor and approver?
- Approval by all stakeholders: Business + IT?
- Automated process for managing changes?
- Change history and artifact archival?

HIPAA §164.308 (a)(4)(ii)(B)
Access Authorization
Implement policies and procedures for granting access to electronic protected health information, for example, through access to a workstation, transaction, program, process, or other mechanism.

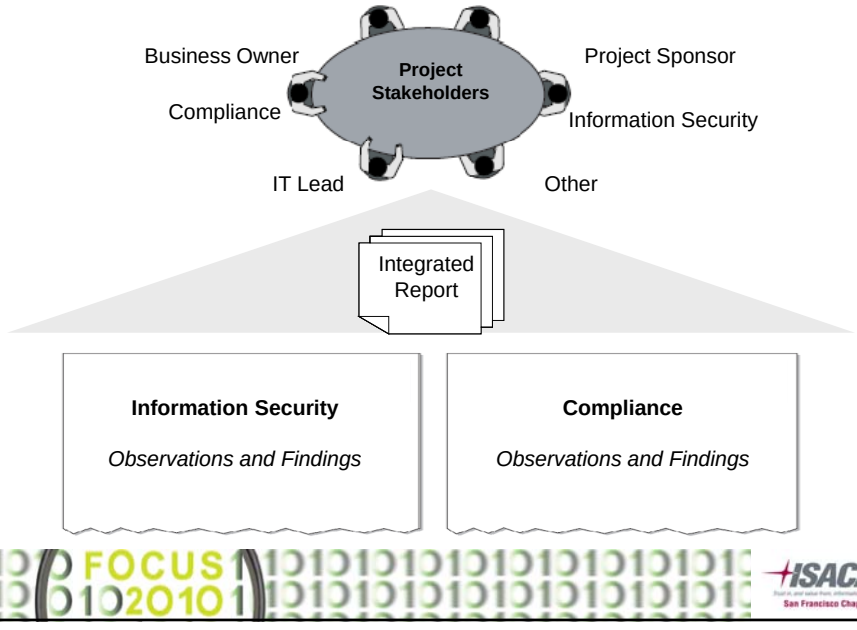
- Existing access to systems job function driven?
- Access to devices job function based?
- Mangers approve access?
- Managers review access?
- Job changes drive access changes?
- Approvers are authorized?

Design and Assessment

Promoting Self-Assessment



Integrated Reporting



Outcome: An Enhanced View of the Risk

Successes:

- Pre-Implementation Engagement
- "Normalization" of Findings, Observations
- Strength in Numbers

Work in Progress:

- Overhead in Coordinating Efforts
- Differing Missions, Perspectives on Risk

Closing Thoughts

- Adopt a programmatic approach to integration: A common set of controls is always desirable but it is possible to develop an integrated view without it.
- Focus on Risks: ultimately, risk drives decision making. Stating control deficiencies in terms of risk is important.
- Do not neglect Communication: the assessment final results should never be a surprise to anyone.

The Convergence of Security and Compliance

An Integrated Approach to Risk Management

QUESTIONS?

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