



# Where is the true value in Security and how do you make it deliver Privacy?

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.....any effort to protect private infrastructure and assets—whether physical or virtual—**“is more a matter of business models and regulation ... than of technology.”**

Ross Anderson,  
Professor of Security Engineering  
University of Cambridge,



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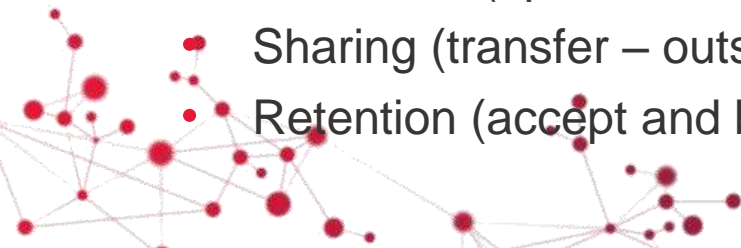
# It's all about risk management

- Clients are keen to understand the risk to their organization:
  - Strategic Risk
  - Financial Risk
  - Reputational Risk
  - IP Risk
  - Identity breach Risk
  - Regulatory Risk (SOX, Privacy Regs etc.)
  - Corporate Liability
  - Availability Risk
  - Hostile geo-political Risk

I need to understand the **possible risk** to my business (impact on profit, brand reputation) and how to **manage it**

There are four major categories of dealing with risk:

- Avoidance (eliminate, withdraw from or not become involved)
- Reduction (optimize – mitigate)
- Sharing (transfer – outsource or insure)
- Retention (accept and budget)



# Challenges in managing the risk

- **Changing threats:** increasingly dynamic and advanced threats
- **Limited IT resources:** these may not be IT security staff – strong IT security personnel have become costly to hire and retain
- **Demonstrating value:** Pressure to demonstrate risk reduction, compliance and adherence to best practices
- **Increasing complexity:** Threat and risk complexity leading to increased technology and process complexity
- **Increased expenditure:** training and capital expenditure increases while value over time quickly decreases
- **Operating costs:** need to reduce operating costs while improving services
- **Need to be ahead of the threat** – proactive versus reactive



# Because we put cyber on the front of it, is it new?

## Cyber Crime Anatomy



# How to measure risk management success

- Cyber security model needs to be risk based
  - No silver bullet or infinite funding model
- **Risk = Threat x Vulnerability x Impact** (Not new)
- Can't change the threat
- **Can** change the vulnerability (lots of definitions and therefore options)
  - *A weakness in design, implementation, operation or internal control (ISACA)*
- **Can** reduce the impact
  - *greatest reduction in data breach costs by having a strong security posture, incident response plan and CISO appointment (Ponemon)*
- Determine KPI's



# Global Threat – Global SOC



# GMSS Portal

**CGI** Global Managed Security Services

Logo Client (150px X 70px)

Global Dashboard | Service Reports | Client Documents | Service Portfolio | Contact Us | Help

Service Dashboards | HIDS | NIDS | Log | Inc. & RFI

MSS > John Hancock > Global Dashboard

### Global Managed Security Services

We detected <b>402</b> Threats on your network last day	We detected <b>19</b> High severity NIDS events last day	We detected <b>2</b> High severity HIDS events last day	There are <b>1</b> Incidents or RFIs opened
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### Top 10 countries by activity detected

John Hancock | Global | Day | Week | Month

### RSS

#### IT Security News

- [Google Releases Google Chrome 31.0.1650.63](#)  
09/12/13 11:56 AM  
US-CERT  
Original release date: December 09, 2013  
Google has released Google Chrome 31.0.1650.63 for Windows, Mac, Linux and Chrome Frame to address multiple vulnerabilities. These vulnerabilities could allow a remote attacker to hijack a web session, spoof the address bar or cause a denial of service condition.  
US-CERT encourages users and administrators to review the Google Chrome Release [blog](#) entry and follow best practice security policies to determine which updates should be applied.
- [Microsoft Releases Advance Notification](#)

This product is provided subject to this [Notification](#) and this [Privacy & Use policy](#).



# Security Maturity: based on CMMI

## Implement Continuous Process Improvement

Carnegie Mellon (SEI) Capability  
Maturity Model Integration  
(CMMI)

- Initial**
  - Reactive
  - Unpredictable
  - No Control

- Managed**
  - Reactive
  - Project base

- Defined**
  - Proactive
  - Process Defined

- Quantitatively Managed**
  - Proactive
  - Measured
  - Controlled

- Optimizing**
  - Continuous Improvement
  - Global
  - Predictive analytics



# At the business level



## Enable business

- Develop security services for innovative business models and new technologies

## Build a trust relationship

- Report regularly on evidences & trends
- Define security service catalog for projects

## Manage risks proactively

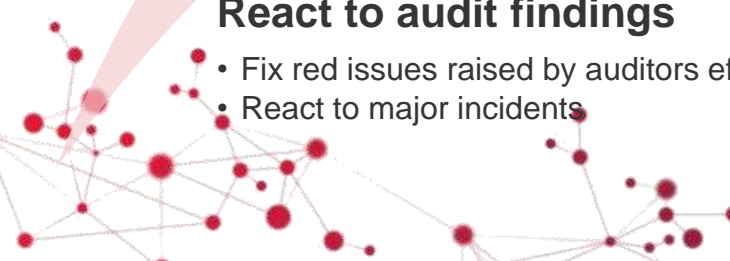
- Carry out risk assessment and manage vulnerabilities
- Implement pro-actively security measures

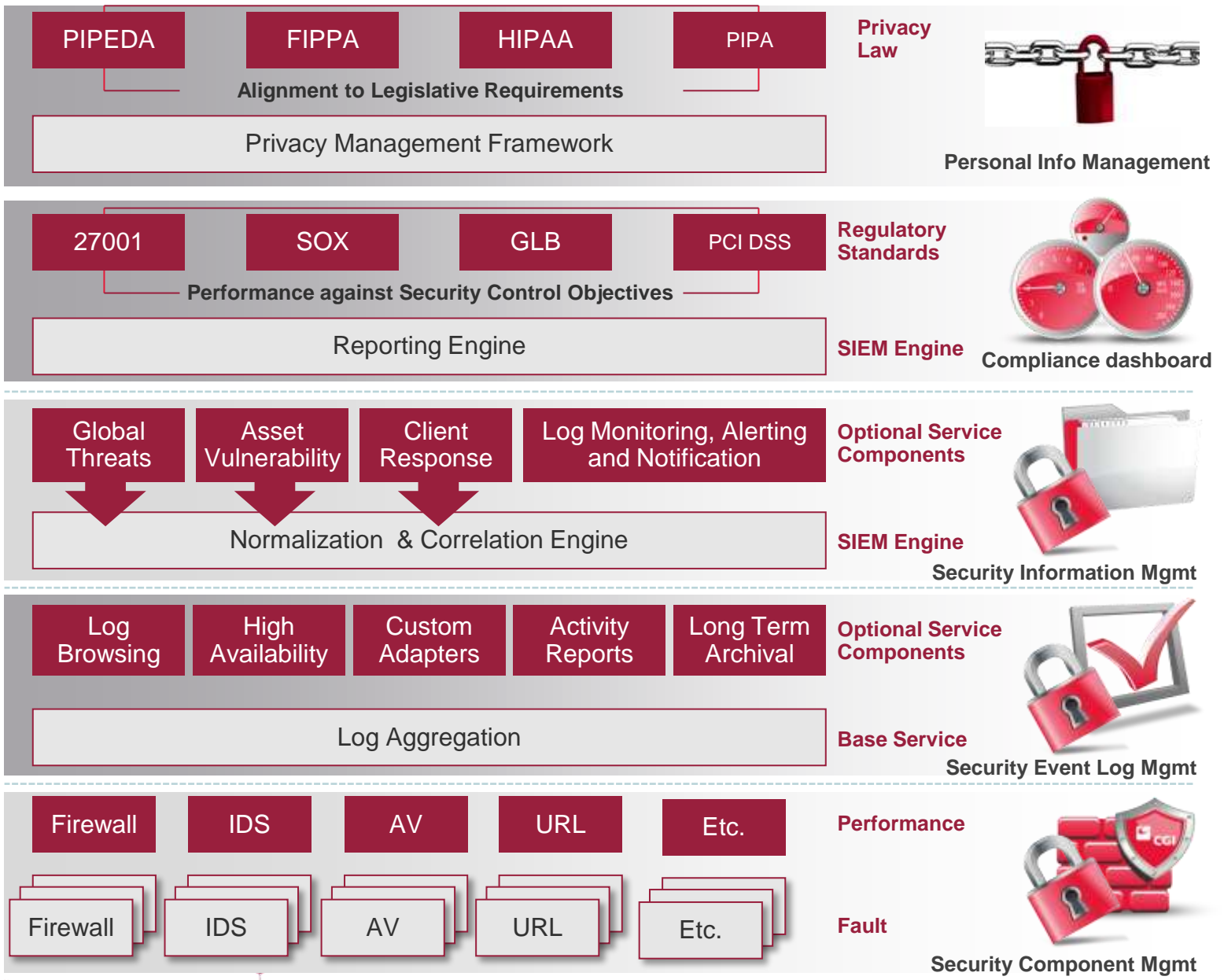
## Comply with given standards

- Enforce laws & regulations
- Define & comply with corporate rules

## React to audit findings

- Fix red issues raised by auditors efficiently
- React to major incidents





# SAS Analytics – Visual Analyzer

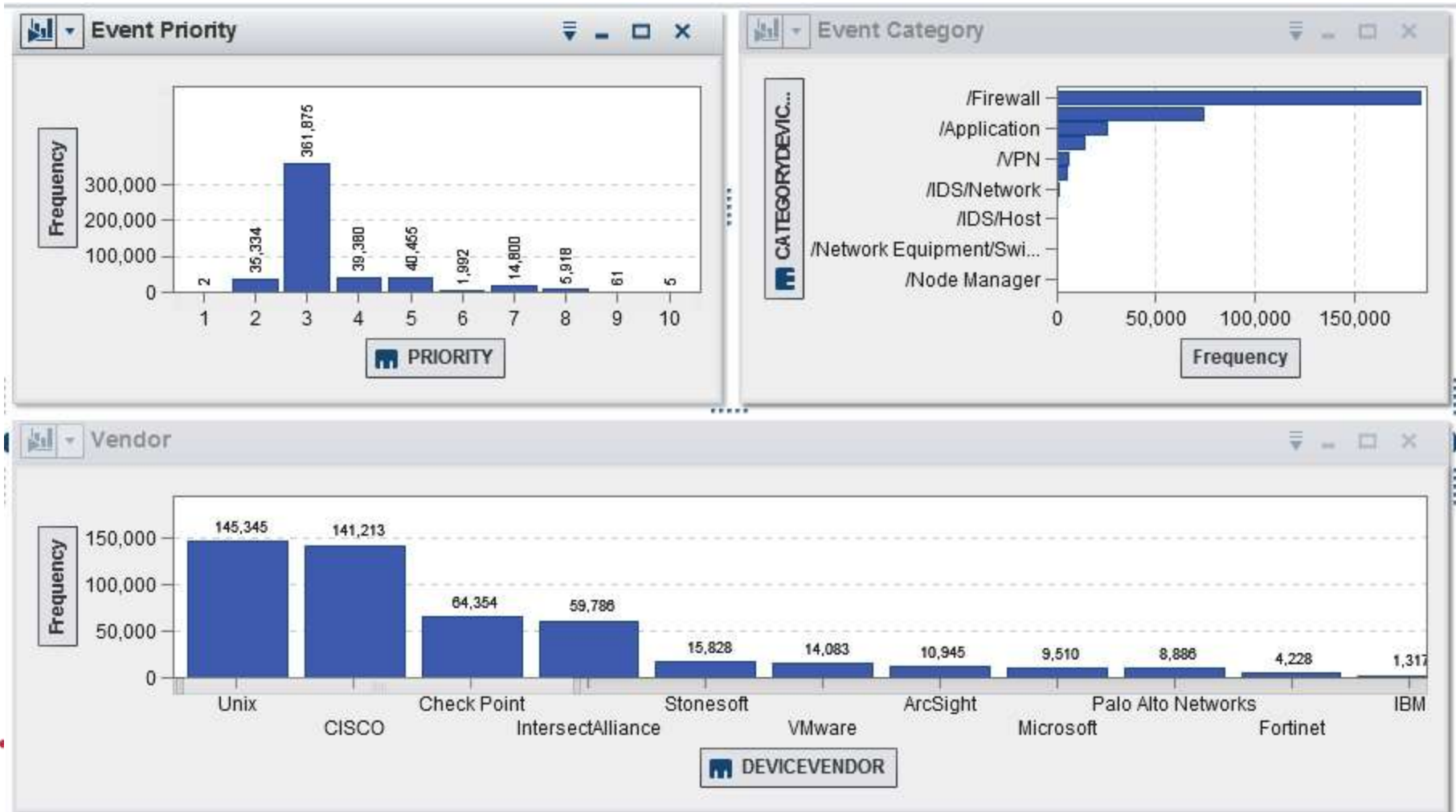
Modelling and analyzing current security posture



Predicting future security requirements



# Business Intelligence and Showing Value



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Thank You

