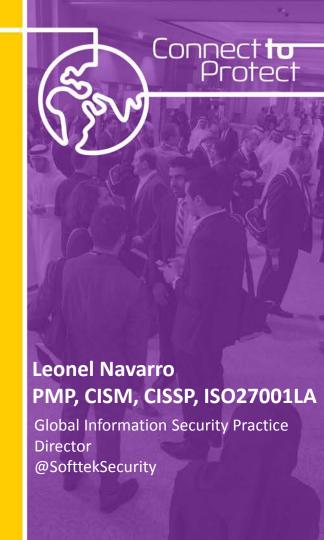
RSA*Conference2016

Abu Dhabi | 15–16 November | Emirates Palace

SESSION ID: CIN-W04

Maximizing Security and Compliance through Digital Third Party Risk Management





Back in 1962

















https://en.wikipedia.org/wiki/The_Jetsons



- Agenda
 - 3rd party risk management: the challenge
 - The state of digital 3rd party risk 2016: Insights
 - Takeaways



Two Worlds Convergence



Physical

- Raw Materials
- Logistics
- Storage
- Warehouses
- DistributionCenters



Logical

- Applications
- Networks
- RFID / WiFi
- Information Exchange
 - PII / Healthcare
 - Banking
 - Logistics

RSAConference2016 Abu Dhabi



Business Challenge







RSAConference2016 Abu Dhabi



You are using systems in every direction, seeking to automate work to achieve company goals...



Like it or not, you have little choice other than to trust others with your information, and rely on their services and systems



RSA Conference 2016 Abu Dhabi



How many 3rd Parties do you integrate into your business?

Cost and reputation damage explosion



"19% of organizations suffered reputational damage as a result of a 3rd party supplier" - Forbes Insights Fallout: The Reputational Impact of IT Risk.

"49% of companies have experienced a data breach through one of their vendors" - Data Risk in the Third Party Ecosystem, Ponemon Institute, April 2016.

■ "65% of companies experienced a supply chain disruption due to cyber-attacks" - IT Disruption Risk, APQC, April 2015.



Cost and reputation damage explosion



- "More than half of organizations suffer damage to at least 20% of its value" 2016 Cost of Data Breach Study: Global Analysis, Ponemon, June 2016.
- "\$221 cost per record lost (US)." 2016 Cost of Data Breach Study: Global Analysis, Ponemon, June 2016.
- "28% of the supply chain disruptions lead to reporting balance sheet impacts" Supply Chain Risk Management Study, Supply Chain Insights LLC, July 2015.



RSAConference2016 Abu Dhabi



What do you think is the % of data breaches associated to 3rd Parties?

Source of data breaches







The State of Digital Third-Party Risk 2016 Report - http://en.softtek.co/tprisk2016



Digital 3rd Party Risk Management is the bridge to do so properly and securely.



RSAConference2016 Abu Dhabi



Which of your vendors represent the highest risk to your organization?

Digital Third-Party Risk Management



- Third-party risk profiling
- Risk-based assessment
- Effective due diligence
- Support in remediation
- Continuous process & metrics based





The state of Digital Third-Party Risk Report 2016





- 1,236 Security & Risk Assessments from 2014 and 2015
- 286 Controls aligned to ISO 27001
- 14 Security Domains





Top 10 Security controls that third parties fail on initial assessment



Rank	Control	Security Domain	Failing Control	
1	Secure disposal or reuse of equipment	Physical and Environmental Security	52.8%	
2	Information systems audit controls	Operations Security	50.6%	
3	Policy on the use of cryptographic controls	Cryptography	49.5%	
4	Management of technical vulnerabilities	Operations Security	46.1%	
5	Removal or adjustment of access rights	Access Controls	32.9%	
6	User access provisioning	Access Controls	26.4%	
7	Unattended user equipment	Access Controls	26.3%	
8	Screening	Human Resource Security	24.8%	
9	Network controls	Network Security Management	24.6%	
10	Policies for information security	Information Security Policies 22.2%		



The State of Digital Third-Party Risk 2016 Report - http://en.softtek.co/tprisk2016

3rd Party Security Domain Risk Quadrant







Best-in-class and worst-in-class benchmarks



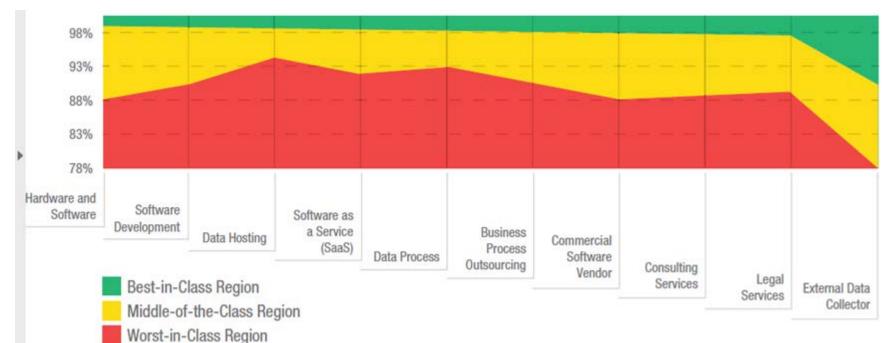
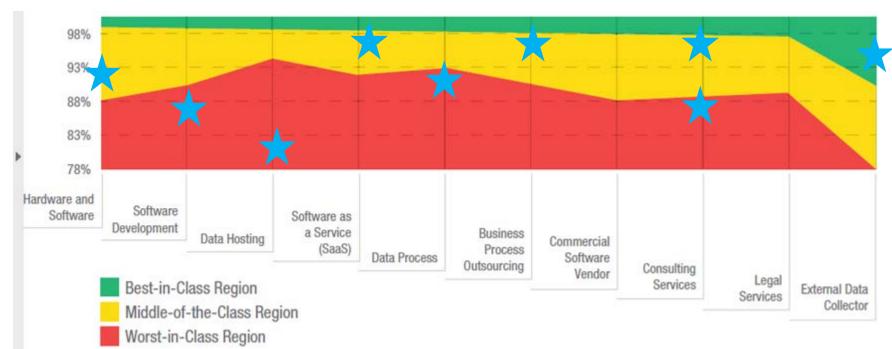


Figure 3: Best and Worst-in-Class Scores by Third-Party Activity



Best-in-class and worst-in-class benchmarks









Best-in-class and worst-in-class benchmarks



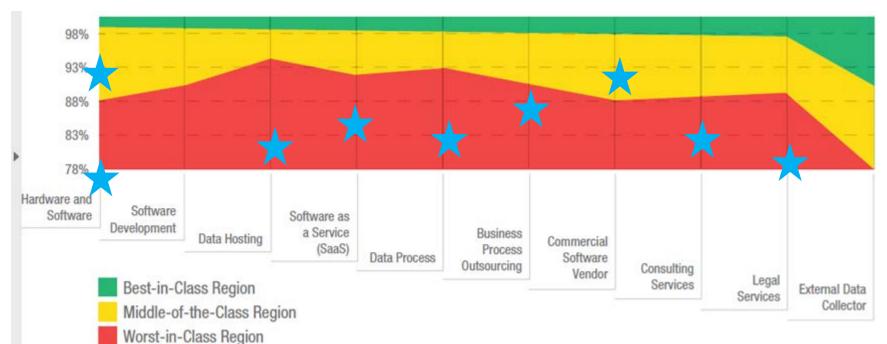


Figure 3: Best and Worst-in-Class Scores by Third-Party Activity



RSA Conference 2016 Abu Dhabi



Where would your third-parties rank against Best-in-class benchmarks?

Scoring your third-parties



Risk Level	Data Sensitivity	Data Usage	Service Location
3: High	Confidential Information	Processing	Remote with direct connection (VPN, P2P, B2B VPN)
2: Medium	Private Information	Reporting / Consulting	Remote without direct connection (email, ftp, uploads, downloads)
1: Low	Public Information	Storage	Onsite

- Classify 3rd parties based on risk profiles
- Identify risks and classify them based on likelihood and impact
 - Likelihood : Occurrence percentage
 - Impact: Integrity, Confidentiality Availability
 - Other factors:
 - Regulatory or contractual requirements
 - Sensitivity or criticality of data assets



RSAConference2016 Abu Dhabi

Scoring your third-parties



- Personalized
 - Risk Profile
 - Industry
 - 3rd-party
- Aligned
 - ISO 27001 or SANS 20CSC
 - SSAE16, SOX, PCI

+ 11
Additional
Domains

Informatio
security
policies

Software development

Physical security controls

High Privileged Accounts

Network & Infrastructure Mgmt.

System Availability Organization of information security

Human Resource Mgmt.

HR Security and Procedures

Communication & Operations Mgmt.

Access Control

Incident Management

Data Security and Change Mgmt.

Delivery of the questionnaire:

- Sending questionnaires in Excel format (encrypted)
- Online portals to share and upload documents
- Specific tools for assessment



RS∧Conference2016 Abu Dhabi

Scoring your third-parties



Level 1 : Excellent

Complies with ALL controls audited

Level 2: Good Meets all Critical and High risk controls but fails on Low level controls.

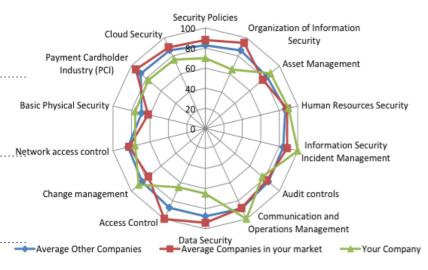
Level 3: Acceptable

Meets only critical controls, but fails on High and Low controls.

Level 4: Weak

Does not meet critical controls and is pending remediation for high and low controls.

Level 5: Poor Does not meet any critical and high controls.





Digital 3rd Party Risk Management Framework



Management – Reporting – Support

3rd Party Audit Management

3rd Party Inventory 3rd Party Profiling

Risk Assessment Evidence Gathering

Report Generation 3rd Party Mitigation Plan Metrics

Generation

Analysis

Action plan definition

Policies & Standards

3rd Party Policy
Definition

Contractual Guidelines

Training & Awareness



Remediation Support

Evidence Gathering

Verification



















Process Improvement



Scoring your 3rd parties – frequent challenges



Questionnaires

- Inconsistency of responses or incomplete answers
- No valid supporting documentation
- Key staff is not involved in the review process
- Failure to deliver requirements on time

Interviews

- Lack of confidence in controls not supported with valid evidence
 Processes are not defined or documented
- Lack of commitment to perform checkpoints



3rd Party Risk Management – Banking Case Study



At a Glance

- > Business : Banking and Finance+35,000 employees in 40 countries
- > Target Third Parties: +180

Challenges

- > Reduce 3rd party overall risk
- > Engage with sponsor/3rd-party contacts to agree upon remediation plans.
- > Empower sponsors to take decisions about 3rd-party' security controls.
- > Track 3rd-party' security assessments progress performed every 2 years.
- Analyze 3rd-party's findings to implement proactive controls.

The Solution

Establish a 3rd party risk & security audit program:

- > Provide a standard process to schedule, execute and track security audits.
- Assign and implement action items that lead to the findings' resolutions.
- > Provide the necessary metrics to report risk levels to upper management and ease decision taking.

Voice of the Customer

"The 3rd Party security audit program has standardized and improved the effectiveness of closing assessment findings. This process' consistency and follow up has significantly reduced 3rd Party risk."

Third Party Information Security Leader
Top 20 Banking Organization



3rd Party Risk Management Benefits



- Appropriate vendor alignment to company goals/policies over the time
- Risk mitigation thru right treatment
- Documented risk exposure
- Continuous follow up & continuous Happy CEO / CIO / CRO improvement

- Proactive risk identification
- Risk remediation strategy per supplier
- Cost effective solution for vendors
 - risk mitigation



Apply What You Have Learned Today









Long Term 6 months to 1+ year

- Review & adhere to the Internal
 Procurement Process (VMC)
- Procurement Process (VMO, CRO).
- Assess new suppliers to measure the level of cyber security compliance (CISO, CRO).
- Improve supplier contractual terms to include vital security requirements.
- (CRO, CISO, VMO).

RSAConference2016 Abu Dhabi



Q&A

Leonel Navarro, PMP,CISSP,CISM,ISO27001LA leonel.navarro@softtek.com
@SofttekSecurity @LeonelNavarroS