

# Third Party Risk and the Role of the Cyber Security/IT Risk Officer

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## Overview

- Third Party Risk Management (TPRM) (vendor management, new acquisitions, and joint ventures), Fourth Parties, and Fifth Parties—Stop the Madness!!!!
- Cyber Security/Information Security Risk
- Tools to aid in Risk Analysis
- Risk Analysis
- How to be successful (Understand the threats, vulnerabilities and controls—Defensive measures)

# Satchmo's Mil-Civ Translation

(Business to IT translation coming soon...)

|                          | DOD                      | Civilian World           |
|--------------------------|--------------------------|--------------------------|
| Vendor                   | DISA, contractor, unit   | Vendor                   |
| 3 <sup>rd</sup> Party    | DISA, NSA, DLA, etc      | Contracted out service   |
| 4 <sup>th</sup> Party    | ISP (subcontracted)      | Maybe cloud based        |
| 5 <sup>th</sup> Party    | Local provider/generator | Local provider/generator |
| New Acquisition          | Newly activated unit     | Company X                |
| Joint (combined) Venture | KFOR network             | Integrating Company Y    |

My goal: Identify and highlight TP risks; in order to, understand and mitigate the risks associated with security and controls

## Cyber Security and Information Risk (When the business cares)

- Reputational Risk– (New Acquisition)--\$\$\$
  - Strategic Risk--
  - Credit Risk
  - Liquidity Risk
  - Legal/compliance Risk (New Offering-China)
  - Operational Transactions Risk — from Supply chain risk
- \*\*Taken from the FFIEC IT Examination Handbook Info Base
- Frameworks include: COBIT, ITIL and ISO
  - Risk Mgt framework (RMF) for DoD IT formerly DIACAP—operating under FISMA and NIST 800-37

## Risk Analysis

- Who are Third Parties? New unit standup, military partner (combined operations), financial partners, Uniformed service (Air Force Space Command) or a unit command—Anyone providing you a product or a service
- Corporate vendors are Amazon Web services, Azure, Oracle, anything you contract out for—SaaS, PaaS, IaaS
- Know and understand the threats, vulnerabilities and controls
- Know the risk appetite (what is expected, what data is flowing, internet accessible, security tiers, etc.)
  
- Bottom line: Do the gumshoe work. SIG analysis, trust but verify—read logs, analyze signatures, look at the AD groups, bring in audit friends for a full exploration of the vendor

## Tools in Risk Analysis

- Risk Registers (Archer)—Authoritative sources—Regulatory requirements (To Policy, to Standard, to Tasks to complete) annotate, revisit, document, ratings, plus
- Vulnerability Scans, App scans, and Penetration Tests (dig deep)
- Payment card industry-qualified security assessors reports
- Service organization control reports (SOC 2 Type 2) Show and prove
- Automated reports (AV, Patching, asset mgt)
- Accurate inventory!

## Tools in Risk Analysis

- Others--Interviews, Diagrams, screen captures, etc
- Standardized Information Gathering (Santa Fe Group)
- Vendor Risk Management maturity model (your own—Santa Fe Group)
- Cyber protection teams should incorporate most of the above, COCOMs should understand the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> party relationships and the potential effect to military operations (Good luck)
- Provide your TLAs your intel requirements have them give you threat based intel (works at the Company too 😊)

## Risk Analysis

Who: Qualified, certified, common sense, cyber security guru (generalist)

What: Identify, define and validate the risk

When: Constantly

Where: on-site, off-site, cyberspace

Why: Capture and assess the risk; Identify and Propose risk reduction options

How: Everything you can get your hands on

## Oh, Math hurts

- Elements in your risk calculus (Understand the risk appetite first)
  - Business—1<sup>st</sup>
  - Architecture and design (tiers, restricted, internet facing)
  - Human Resources (new employees, seasoned, clueless)
  - Risk Management (SOPs, guidelines, concrete, enterprise, business)
  - Asset Management (What is known, where, who is watching it)
  - Identity and Access Management (multi-factor, Active directory, RSA-tokens)
  - Key Management (dynamic vs static, rotated)

## More Math

- Elements in your risk calculus
  - Data Security (encrypted at rest, back end secure, TLS 1.2)
  - Endpoint (USBs allowed, AV, patched, etc)
  - Apps (Secure development, QA, separation of duties)
  - Network (segmented, VLANs, ACLs)
  - Physical security (cameras (IP or CCTV), private/public—PCI, guards)
  - Vuln Mgt (How often, criticality, can they spell it?)
  - Change Mgt (Is it practiced, accountable, verifiable)
  - Incident Mgt (Planned, Go-kit packed, HMFIC, exercised)
  - DR/BCP (Plan, business impact analysis, exercised)

# How to be successful

- Know the risk appetite and adhere to it
- Identify and allocate appropriate resources to the TPRM program (legal, financial, Cyber Security, auditors, etc)
- Ensure senior management is on-board with a governance framework based upon risk and compliance—develop policies, standards, SOPs, and site visit checklists
- Ensure linkages between audit, TPRM and cyber security to ensure gaps aren't present
- Don't be steamrolled, don't do business as it has always been
- Play nice in the sandbox (Internally)
- Dig deep (externally)—visit the site, read the policies, understand data flow and architecture, DR/BCP, read the SIG (yawn)

# How to be unsuccessful

- Poor contracting without metrics, SLAs, etc
- Lack resources (technical, audit, vendor mgt personnel)
- Unfettered access to data by the Vendor
- Poor adherence to policies, standards, outside compliance
- Undefined processes, none or little governance, lack of priority, no data classification standards
- Stay at home
- Not watching Security/Sys Admins

## Where to go for info (depends what you are looking for)

[digitaltransactions.net/issues/current/](http://digitaltransactions.net/issues/current/)

[securitywizardry.com/](http://securitywizardry.com/)

[secureworks.com/](http://secureworks.com/)

[iso.org/iso/home.html](http://iso.org/iso/home.html)

[nist.gov/index.html](http://nist.gov/index.html)

[ssae-16.com/](http://ssae-16.com/)

[ithandbook.ffiec.gov/](http://ithandbook.ffiec.gov/)

[isaca.org/Pages/default.aspx](http://isaca.org/Pages/default.aspx)

# Questions

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