The State of Computer Security

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Short Form

- In 5 years, security won't be interesting
  - That's not the same as saying it'll be a solved problem!

Who Am I?

- Industry (?what?) analyst / curmudgeon
  - Firewall researcher/product developer late 1980s
  - VPN product designer early 1990's
  - IDS researcher / CEO of NFR 1997
  - CSO, consultant, teacher, writer

Disclaimer

- This is an “industry” view
- Much of what I’m talking about will ripple in the form of changes to:
  - Budgets
  - Products to choose from
  - Leverage within the organization

This talk

- Some History
- Current State of Security
- Some Extrapolation

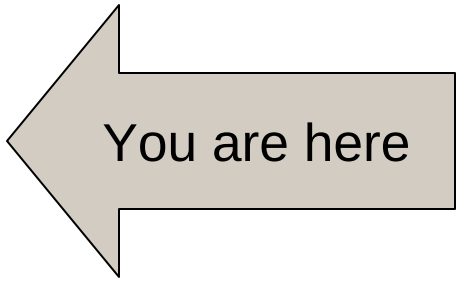
Some History

- The early days of computer security:
  - Audit function - oversight
  - Mainframe usage accounting and system log analysis
  - Often an accounting function separate from IT

Early Golden Age

- The firewall and the internet
  - Everyone going online
  - Everyone getting hacked
  - Wild west attitude and lots of attention
  - Security IPOs in the mid 1990s trigger a rush of $$$ from venture community into security

Late Golden Age



- The worm and the pro hacker
  - Everyone is online
  - Horrible levels of vulnerability
  - Exposure of data and professionalization of cybercrime
  - Venture community pulls up stakes
  - Lawmakers stake out turf and arrive

Current State of Security

- Industry Changes
- Regulatory Changes
- Technology Changes

Industry Changes

- Consolidation is everywhere
  - ISS -> IBM, Betrusted -> Verizon, RSA -> EMC2
  - IDS industry collapses into IPS (I.e.: gets bought by the firewall industry)
  - Log analysis and event management is next

Drivers

- Overinvestment in late 1990s
  - VCs fund (approximately) 200 security start-ups
  - Security market is about $20 bn
  - Subtract Cisco, IBM, Oracle, Symantec, Microsoft, McAfee
    - Top 5 vendors account for all the industry except for about $1 bn

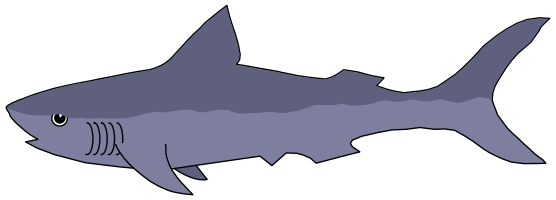
TopHeavy

- $1 bn among 190 start-ups
  - "That's not a market; that's a hobby" (Peter Kuper, Morgan Stanley)
  - Further pressure on the "little guys"
    - Think of Checkpoint and ISS as "little guys" but really where can they go? Up-market and compete with Cisco? There ***is no*** down-market (which is why ISS sold to IBM)

Industry Changes: Summary

- More consolidation
  - It'll get frantic over the next 5 years as the industry wraps itself up
  - More big one stop shops
  - 50% of the products you know and love today will disappear in next 10 years (The good news is, it will be worse for the ones you hate)

Regulatory Changes

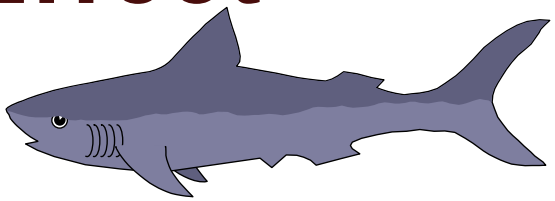


- The lawyers are here!!
  - Security practitioners have been asking for it “and now you got it!”
    - SarbOx, EU Legislation, GLBA, HIPAA, etc
    - Now ***disclosure*** regulation
    - Each state is heating up their own, slightly different!

Regulation: Part 2 “The Devastation”

- Here’s the problem
  - Security is on Capitol Hill’s radar
  - It’s an area where they can legislate that is populist, poorly understood, expensive, and the costs are borne by “the wealthy corporations” (security’s now and forevermore a regressive tax, kiss any “ROI” story goodbye!)
  - Legislation will only ***increase***

Regulation: The Effect



- Compliance dollars are being spent under guidance of liability (legal department)
  - Compliance is going to report to legal department
  - Security winds up ***competing*** for budget dollars with lawyers

Technology Changes

- Consolidation drives integration
- Integration drives one-stop-shopping
- One-stop-shopping turns security into a clickbox feature
- ***Hold*** that thought...

Some Extrapolation

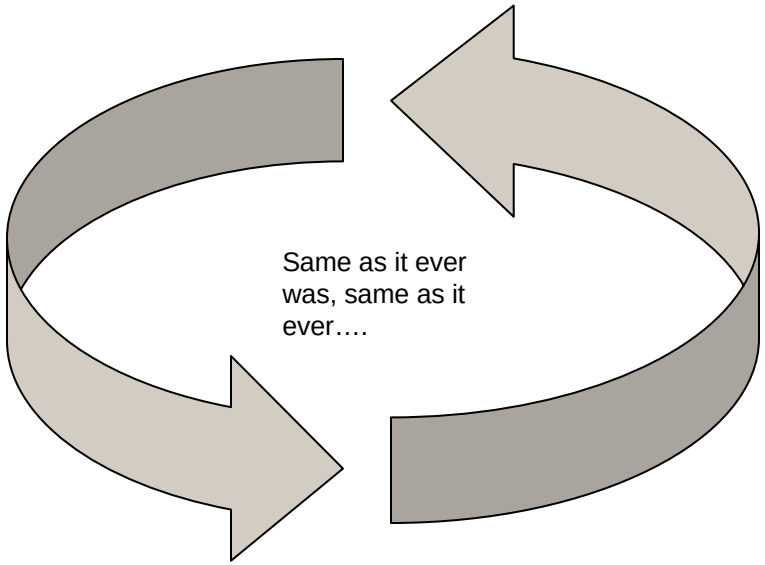
- Security gets subsumed as a "click feature" in network management
  - "Hey Bob the router guy! When you're done with turning on the VOIP in the router, turn on the IPS security features too!"

Some Extrapolation

- Security gets subsumed as a "click feature" in system administration
  - This has already largely happened in the enterprise except for website security
  - Patch management and antivirus ***are*** desktop security

Some Extrapolation

- "Pure security" practitioners get shoehorned into audit



My Take

- Security will become increasingly specialized and in 10 years most “pure” security practitioners report to lawyers
  - There will always be a few mercenary specialists chasing the “disaster of the day”

What's Still Hot?

- Sim/Siem pretty much works
  - That's what you'll be deploying next
  - (That market is ripe for consolidation and all the top players have been acquired already)

What's Still Hot?

- Data leakage will be next big thing
  - Prediction: Big failure, much bleeding, great sorrow
- In 5 years it'll be damage control on IP hemorrhage brought on by outsourcing

PS: I love Outsourcing

- Consider becoming a project manager to oversee outsourcing
  - Make a fortune as a consultant when things are “reinsourced”
  - The next big area of security activity is non-technical and involves damage control for business mistakes of early 21st century

Conclusion

- Our moment in the sun is coming to a close
  - 5 years of play left, ***at most***
- Good luck!