Cybersecurity: Trends and Business Impacts

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Overview

- Very brief look at a complex topic!
- Trends: Subject matter
  - Software development processes
  - Cloud computing; Smart Grid
  - Digital identity and privacy coming to the fore
- Trends: Fora
  - Formal groups remain busy and strong
  - Informal groups on the rise
- Impacts: An anecdote
Trends: Subject matter

- Growing interest in “software” development processes
  - Applies to many hardware processes too
  - Full lifecycle / supply chain assurance; etc.
  - Evaluation/control and process approaches remain

- Cloud computing: new risks, new opportunities
  - Many old concepts don’t fit well
  - Lots of new things that can be attacked or go wrong
  - Outweighed (?) by very high quality, audited security processes possible in large datacenters
Subject matter…

- Smart Grid security presents interesting but manageable challenges
- Tremendous new interest in digital identity and privacy technologies; multiple causes
  - Industry alignment on interoperable claims-based technologies (WS-Trust, SAML 2.0)
  - Lightweight, convenient (but limited) Internet technologies (OpenID) and beyond (InfoCards)
  - Clouds require claims-based and/or federation
  - Can enhance privacy through restricted claims
Trends: Fora

- Formal processes remain strong with some growth
  - INCITS (ANSI-accredited) CS1; ISO/IEC JTC1 SC27
  - ITU-T
- Consortia and informal groups as busy as ever
  - OASIS, W3C, IEEE, IETF
- Perhaps biggest growth area is ultra-informal web groups, micro-standards (“two guys and a wiki”)
  - OpenID, OAuth, etc.
  - E.g., Open Web Foundation enables new capabilities
An anecdote

- Recent conference call with the financial services (credit card) arm of a larger U.S.-based retailer
- Assessing business value of standards engagement on four fronts:
  - INICTS CS1
  - Security SIG(s) within FinServ industry
  - Digital ID work in OpenID, InfoCard, and OASIS
  - Threat reporting and response organizations
- Probably a good evaluation for many companies
Thank you!

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