



Awareness as a Cyber Security Vulnerability



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Background

- TSA Cyber Security **Awareness and Outreach** (CSAO) Branch
 - Lead **Cyber Security** aspects of TSA's Transportation Systems Sector's **Sector Specific Agency** responsibilities
 - Part of TSA's Office of Information Technology, Information Assurance & Cyber Security Division (IAD)
- Mission:
 - **National Planning:** Facilitate the measured improvement of the national transportation sector cyber security posture as both described and constrained by the National Infrastructure Protection Plan (NIPP), Homeland Security Presidential Directive -7 (HSPD-7), and modal private sector needs
- Branch Capabilities focused into four core competencies:
 - **Education**
 - **Articulation**
 - **Coordination**
 - **Facilitation**
 - **Communication**
- 2011 Branch Priorities:
 - **Mitigating “Awareness as a Vulnerability”**
 - Understanding and Communicating Common Risk
 - Enabling Better Information Sharing

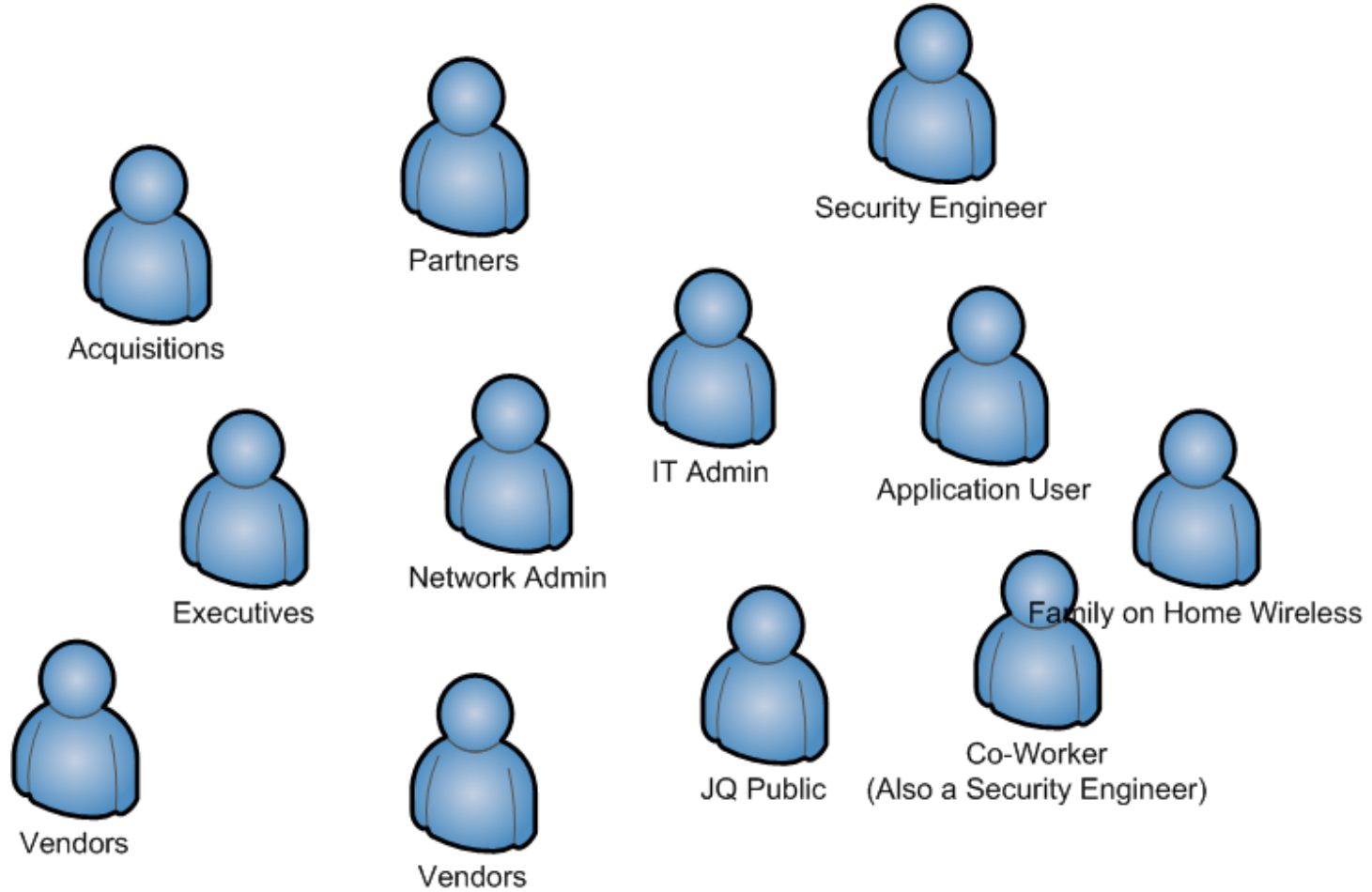


Awareness: National Planning vs. Operations

- Strategic vs. Tactical
- Tactical/Operations:
 - Incident Response
 - Vulnerability Disclosure Management
 - Control Catalogues
 - Technology & IT
 - Defenders and Attackers maintain same relative positions over time
 - Attacks are cheaper than defense
- Strategic/National Planning
 - Business focused
 - Ability to adjust environment outside of IT and technology
 - Improves position relative to attackers over time
 - Reduces Error Rate: (See HBGary Federal)
- Awareness is vulnerability in both areas



Who's Awareness?



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Awareness vulnerabilities can include...

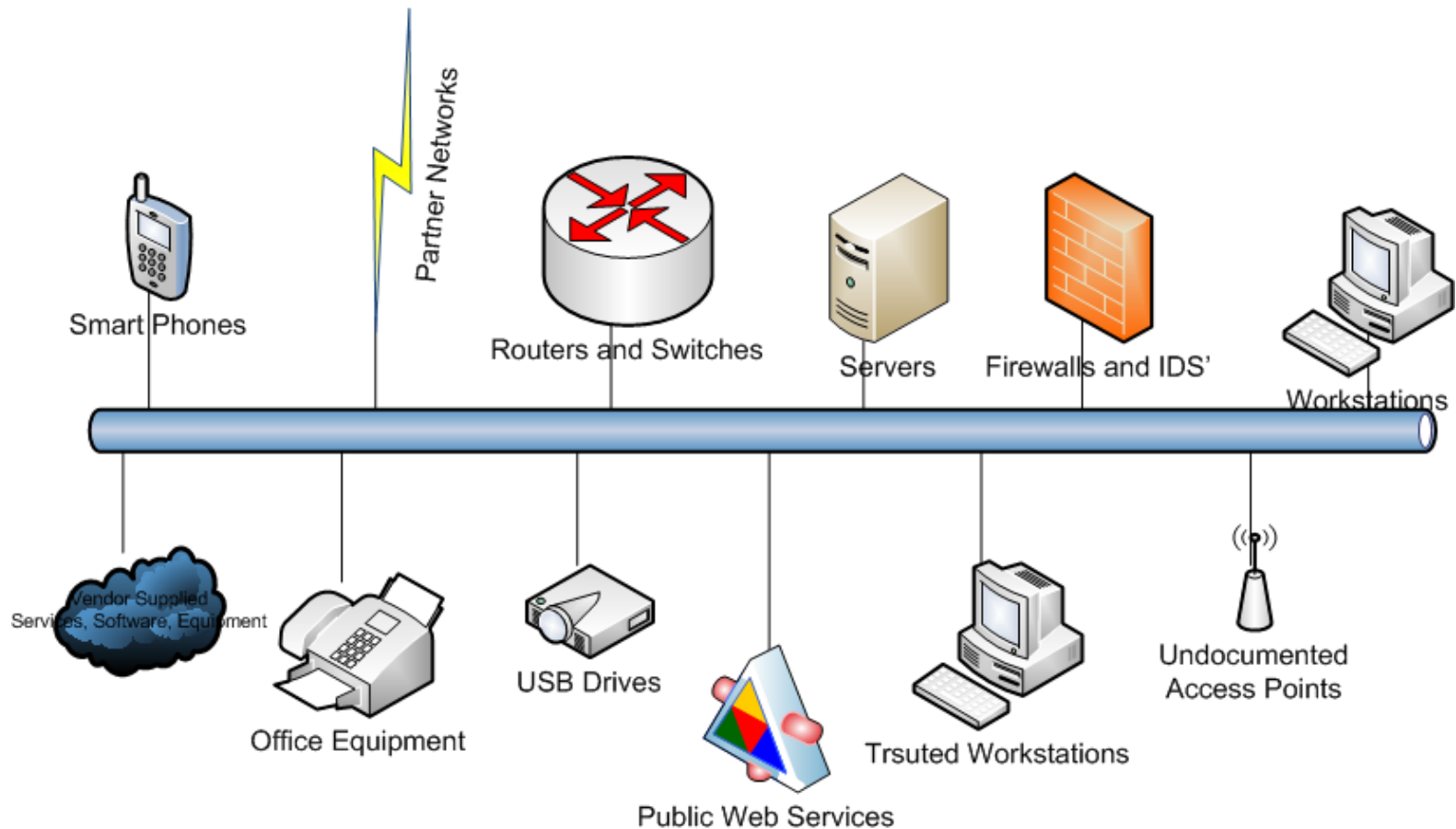
- Misalignment of Available Resources
- Lack of Coordination without Common Understanding and Shared Language
- Poorly Understood Requirements for Cyber Security
- Software Design & Configuration
- Flawed Strategic Decision Making
- Inadequate Threat and Impact Knowledge
- Focus only on Technical Best Practices
- Inflexible Standards
- Inefficient or Inappropriate Information Sharing
- Falling for Phishing or Social Engineering Attempts
- More...



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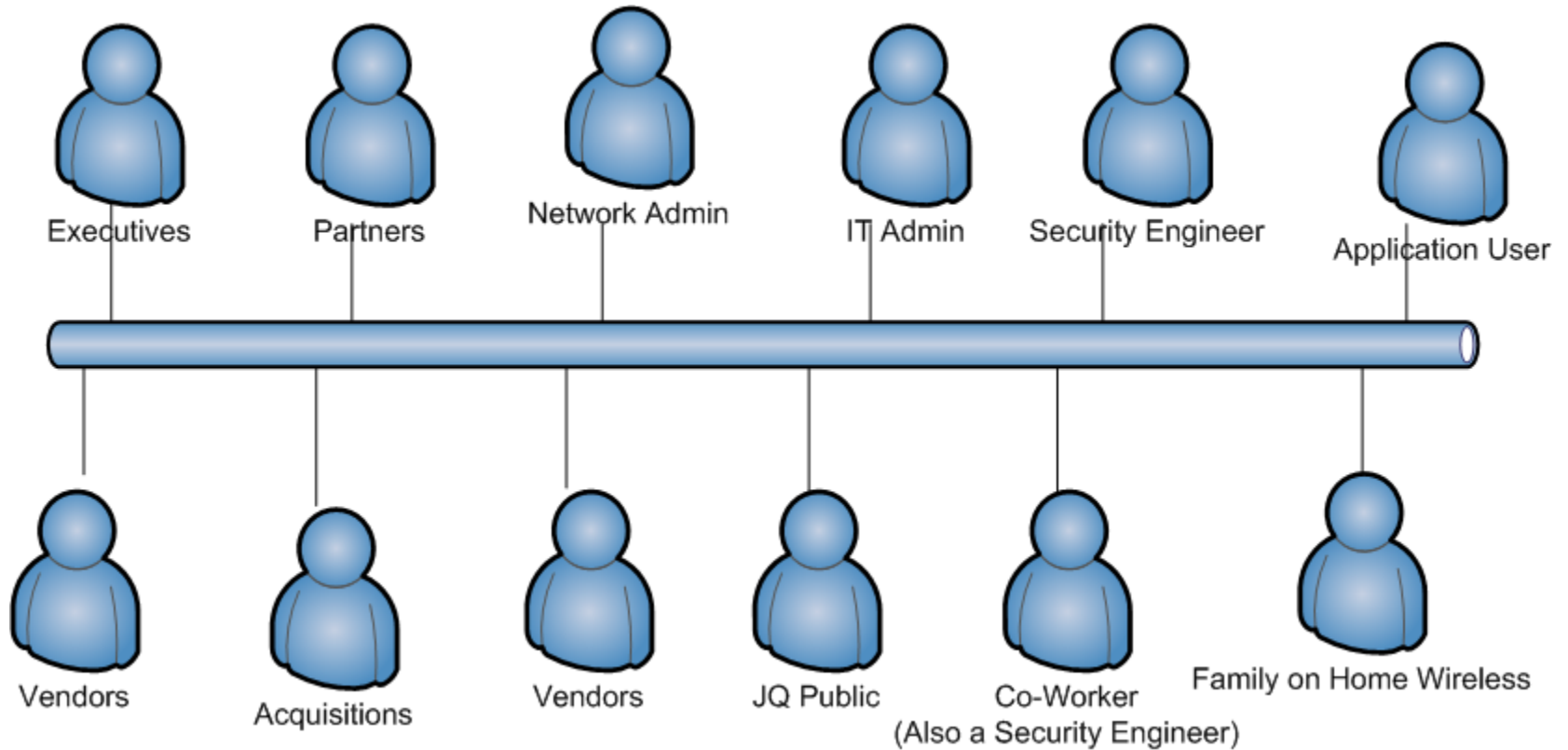
So why are they missing here?



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Users are your network in many ways



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What is TSA doing about it?

2011 Plans, Goals, and Activities:

- Facilitating/Aligning existing Government programs and efforts with Sector Needs
 - Transportation Cyber Security Exercise **(Complete!)**
 - Modal Outreach, Coordination, and Education
 - Weekly Newsletter
 - 2011 Cyber Security in Transportation Summit **(Nov 1&2)**
 - Transportation Cyber Security Strategy Development
 - Information Sharing: Best Practice Facilitation
- All of the above accomplished through the CIPAC chartered TSSCWG



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2011 Transportation Cyber Exercise



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Exercise Outcomes

- CyberSecurity Themes
 - Diversity
 - Cyber Risk and Operational Impacts
 - Physical Cyber Linkage

- Identified CyberSecurity Goals
 - Foster Education
 - Minimize the Spread of an Incident
 - Promote and Further Public-Private Partnerships
 - Enhance Information Sharing Efforts
 - Support Leadership Decision Making

- Future Work
 - Communication and Advocacy of Sector CyberSecurity Activities
 - Situational Awareness of Cybersecurity Activities
 - Future Technology, R&D, and Enterprise Considerations



How can you get involved?

- Transportation Systems Sector Cyber Working Group (TSSCWG)
 - Critical Infrastructure Partnership Advisory Council (CIPAC) Chartered
 - 50+ members (Public and Private) and growing
 - Monthly Meetings – join us!
- Sign up for our weekly newsletter
- Attend out 2011 Cyber Security in Transportation Summit:
 - EMAIL: Cybersecurity@tsa.dhs.gov



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