



# Building IT Audit

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# The Roadmap

- ◆ Assess Audit Needs
- ◆ Assess IT Audit Skills
  - Non-IT auditors
  - IT Auditors
- ◆ Building for the Future
  - Training
  - Hiring
  - Contract

# Assess Your Current IT Environment

- ◆ Mature – Focus on Quality
- ◆ Immature – Focus on Survival
- ◆ Single Large Vendor System
- ◆ Many Custom Built Systems
- ◆ Central IT Control and Robust Standards
- ◆ Decentralized IT – Little Central Coordination
- ◆ Extensive Use of New Technology
- ◆ Established Strategy

# Assess Your Future Audit Environment

- ◆ The Future Emphasis of Your Program
  - Advisory Services
    - Financial
  - Audit
    - Compliance
  - Investigations
    - Efficiency/  
Effectiveness
- ◆ Legislative & Regulatory Requirements
- ◆ Contractual Requirements (Credit Cards)
- ◆ Changing Role of Audit – SOX
  - Audit changes (IIA's IT Audit Principles)

# Auditor Expectations

## ◆ Computer Tools

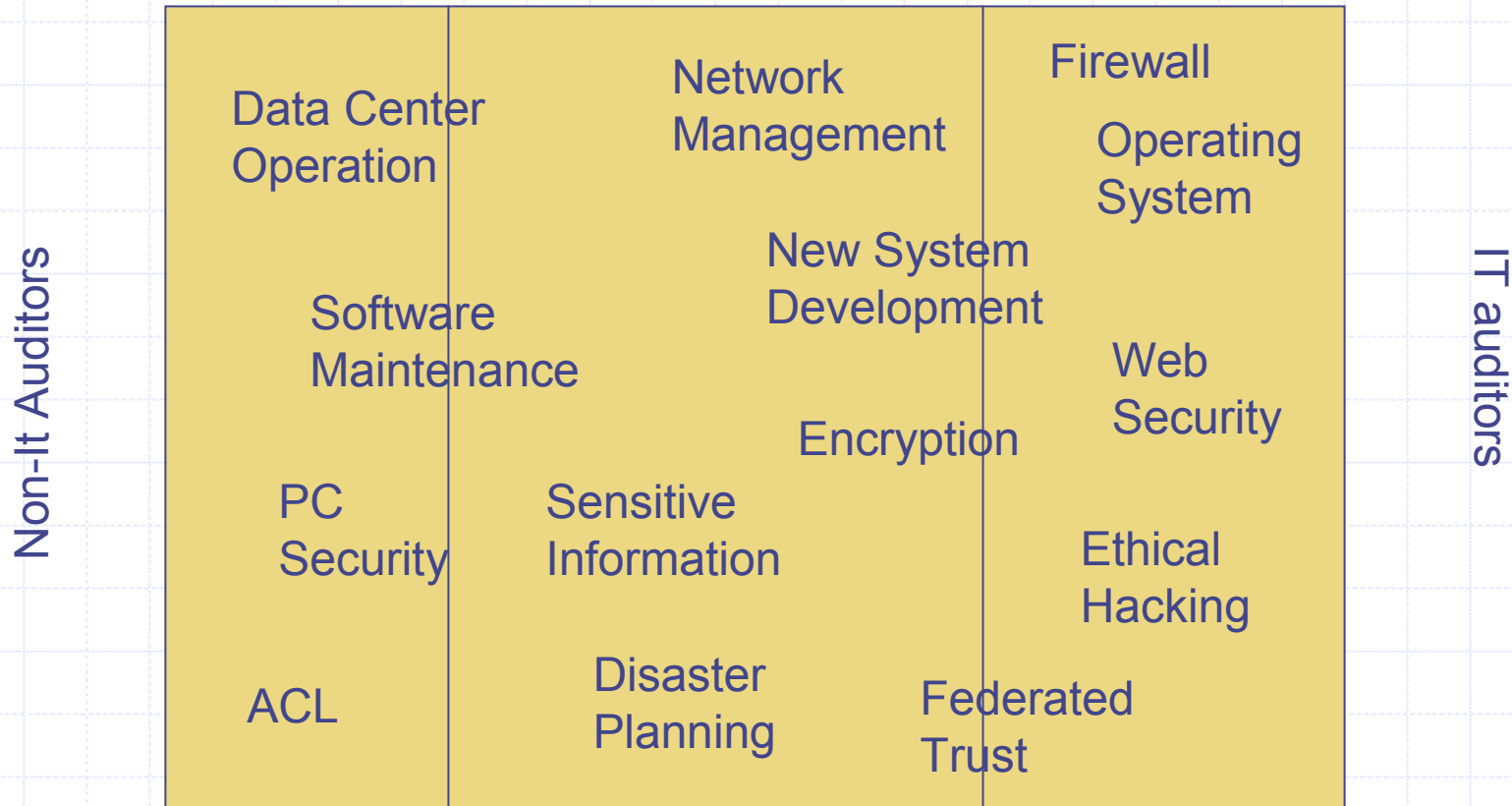
- Personal Computer with Office Software
- E-mail
- Web Access
- Audit Work-Paper Software
- Audit Software for Extraction
- Other?

# Assess Auditor IT Skills

- ◆ Security – Physical and “Logical”
- ◆ Software Development/Maintenance
- ◆ Operations, “Tech Support”
- ◆ Network Management (Firewalls, IDS)
- ◆ Backup and Recovery (Disaster Recovery)
- ◆ IT Strategy

High		M		Low
	x			
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x				
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# Audit Strategy - Split the Work



Non-Auditors do most IT audit work?

IT Auditors do most IT audit work?

# Training

- ◆ Training Based on Needs and Skill Shortfalls
- ◆ Train All Staff
  - IT Risks
  - Audit extraction
  - IT Application Controls
- ◆ Train IT Staff
  - Evaluation of General Controls
  - Specific Technologies
  - Audit Processes

# Recruiting IT Auditors

## ◆ From Audit Ranks

- Good Understanding of Audit Process
- Need Training on IT Technology

## ◆ From IT Ranks

- Need Training on Audit Process
- Good Understanding of IT Technology

◆ **Go For the Best** – Poor Auditors Make Poor IT Auditors; Poor Technologist Make Poor IT Auditors

# Contract for IT Audits

- ◆ Where Skill is Needed
- ◆ Specialized areas
  - Hacking (Ethical)
  - Operating Systems
- ◆ Temporary Extra Resources
- ◆ Building IT Audit Staff

# IT Basics

- ◆ Security – Physical and Logical
- ◆ Software Development/Maintenance
- ◆ Operations; Tech Support
- ◆ Network Management (Firewalls, IDS)
- ◆ Backup and Recovery (Disaster Recovery)
- ◆ IT Strategy

# Other Required Skills for IT Audit

- ◆ Written Communication
- ◆ Verbal Communication
- ◆ Laws, Regulations, & Policy
- ◆ Management Practice – Standards
  - COBIT
  - Maturity Models
  - COSO