



CYBERSECURITY LEADERSHIP

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CENTER FOR APPLIED CYBERSECURITY RESEARCH

INDIANA UNIVERSITY
Pervasive Technology Institute

TOBIAS LEADERSHIP CONFERENCE
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CHARACTERISTICS OF LEADERSHIP

RELATIONAL

ASYMMETRIC

SALIENT

DOMAIN SPECIFIC

INSTRUMENTAL

WITHIN DURABLE ORGANIZATIONS

POWER TO ENFORCE AND PERSUADE



CYBERSECURITY LEADERSHIP TOPICS

Strategy

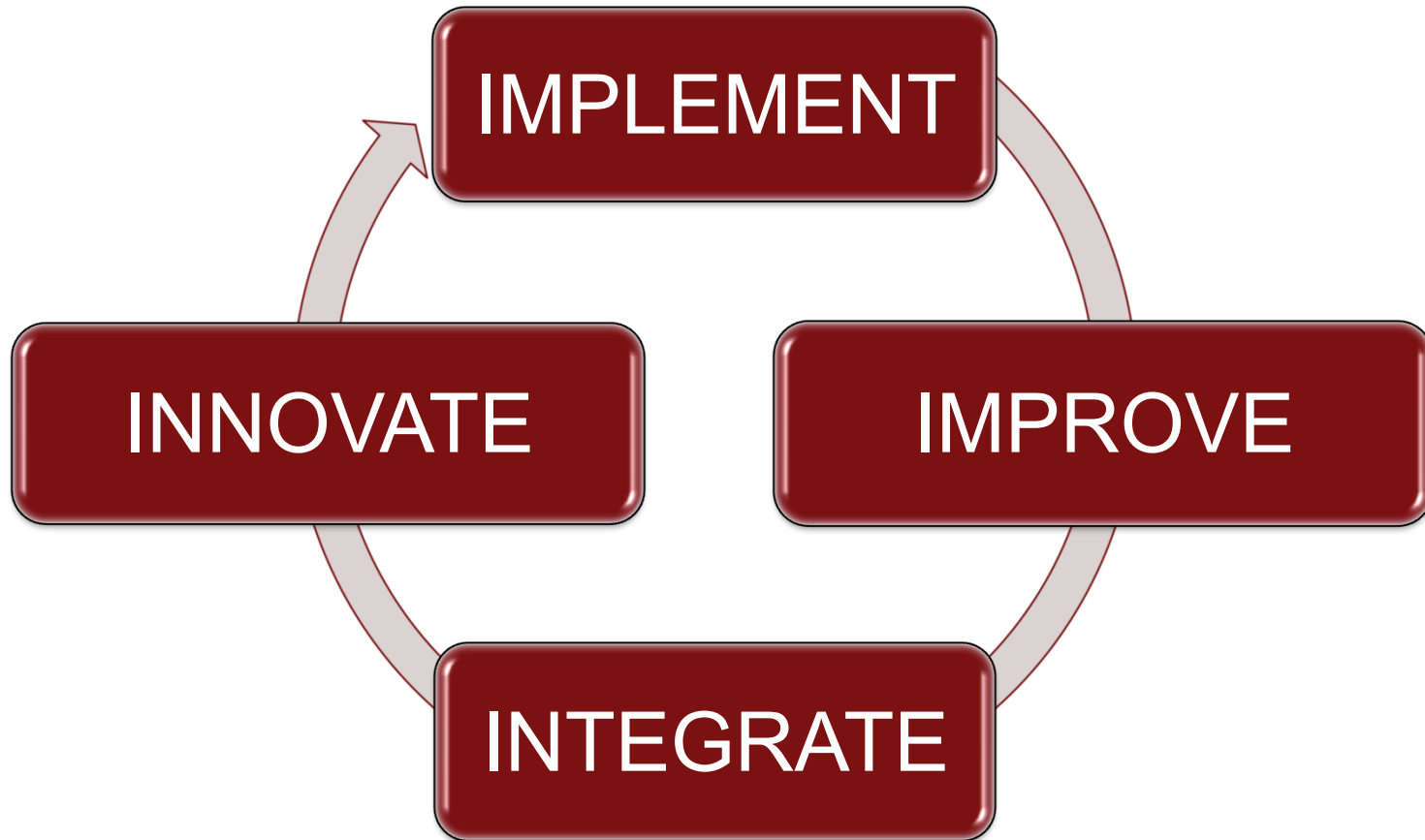
Policy and Governance

Security Practice

Developing Cybersecurity Leaders

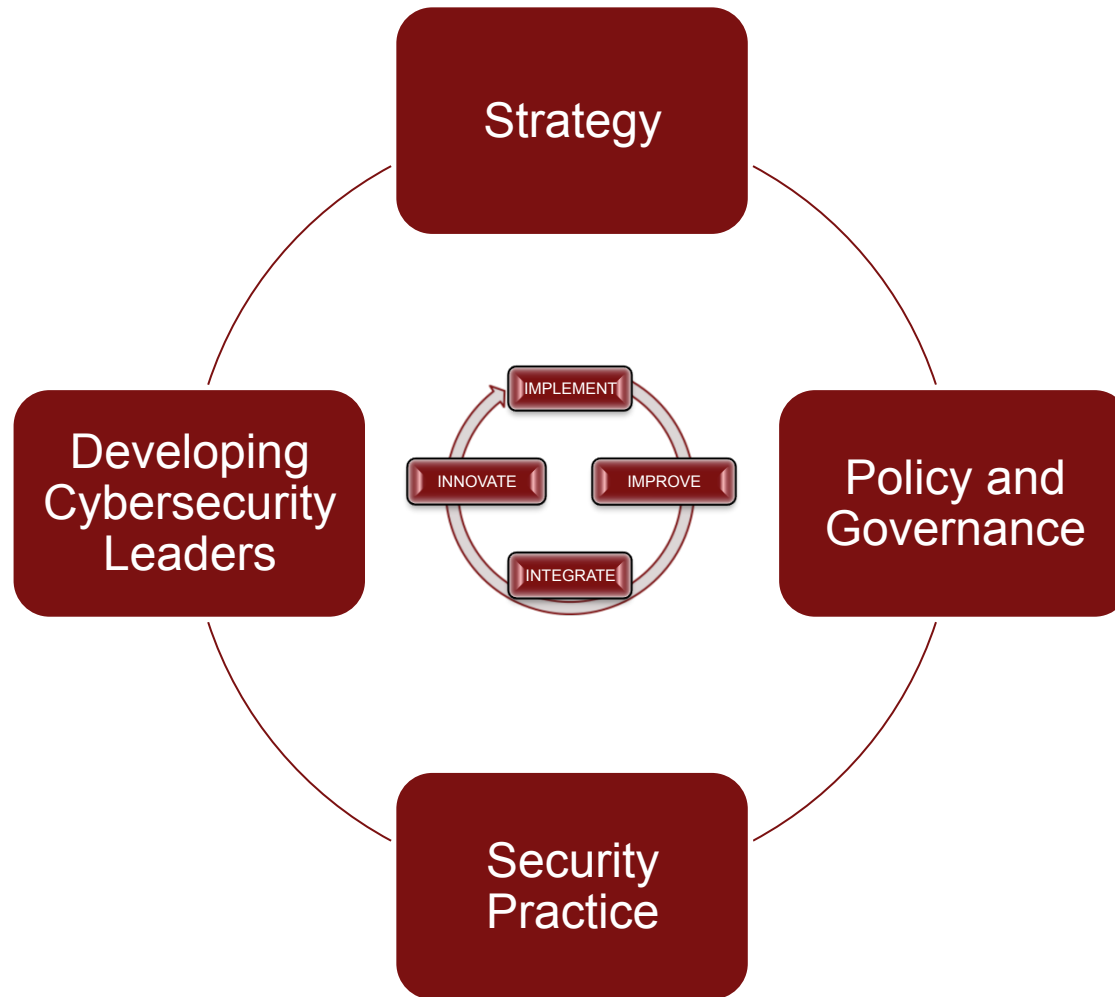


THE FOUR-I CYCLE





NESTED PROCESSES





IDENTIFY YOUR STARTING POINT

- What is your organizational **culture**?
- How sensitive are your **data**?
- How exposed are your **systems**?
- Who are your business **partners** and how do you work with them?
- What are your **relationships** with federal and regulatory entities?
- What are your **goals**?



Cybersecurity Strategy

IMPLEMENT

A risk management approach

IMPROVE

Ask questions, get feedback

INTEGRATE

Recruit diverse stakeholders

INNOVATE

Leverage information sharing organizations



Policy and Governance

IMPLEMENT

Common language and understanding

IMPROVE

A learning organization

INTEGRATE

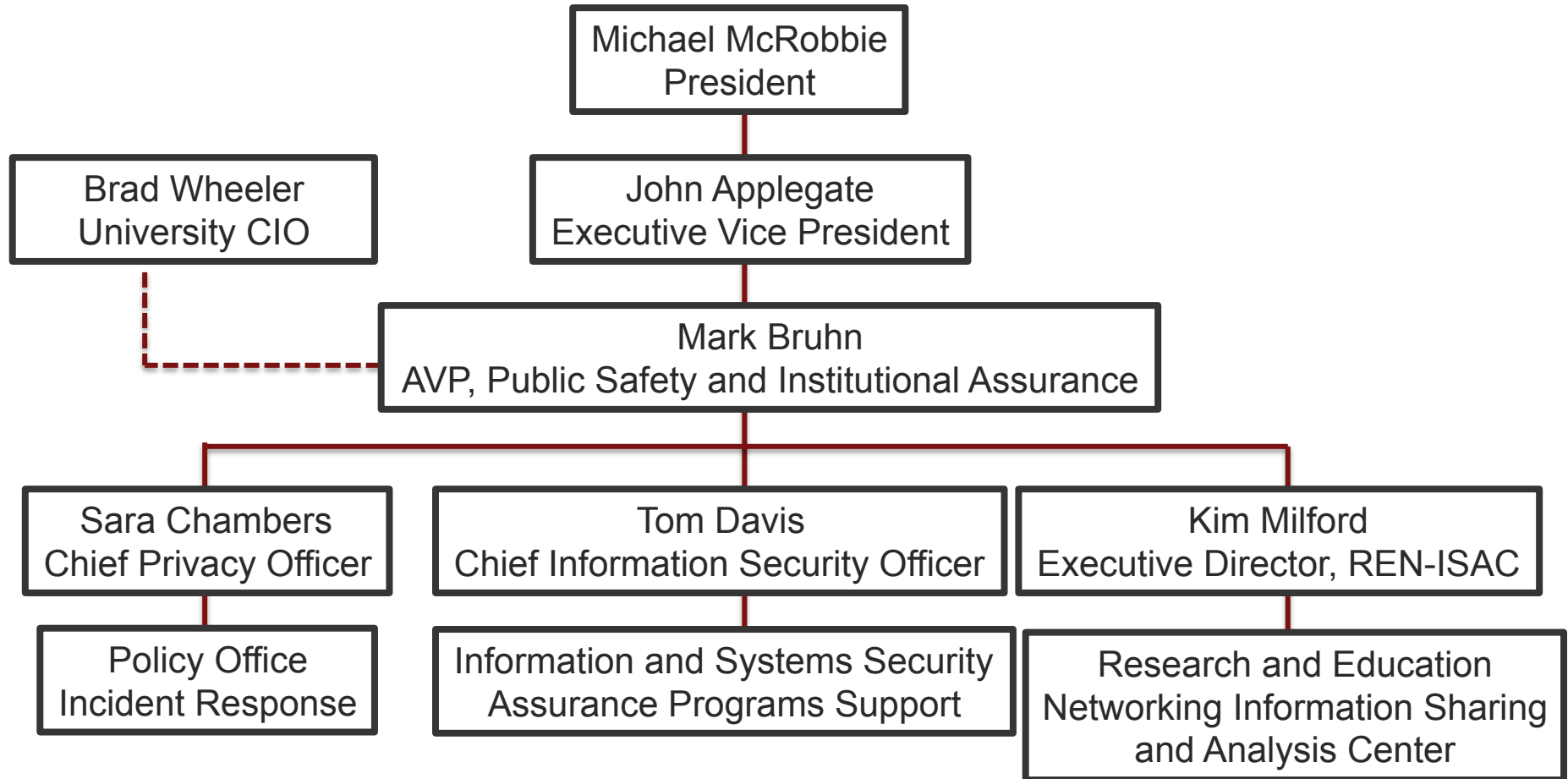
A collaborative organization

INNOVATE

Monitor and respond to changing conditions



Indiana University IT Security Governance





Indiana University Information Policies

- IT-01 Appropriate Use of IT Resources
- IT-02 Misuse and Abuse of IT Resources
- IT-03 Eligibility to Use IT Resources
- IT-07 Privacy of Electronic Information and Information Technology Resources
- IT-07 Frequently Asked Questions
- IT-11 Excessive Use of IT Resources
- IT-12 Security of IT Resources
- IT-12.1 Mobile Device Security Standard
- IT-18 Network and Computer Accounts Administration
- IT-19 Extending the University Data Network
- IT-20 Wireless Networking
- IT-21 Use of Electronic Mail
- IT-28 Cyber Risk Mitigation Responsibilities



Security Practice

IMPLEMENT

Balance practice, business, governance

IMPROVE

Internal and external reviews

INTEGRATE

Be relevant to all facets of the organization

INNOVATE

Promote change that lowers risk



Developing Cybersecurity Leaders

IMPLEMENT

A leader development program

IMPROVE

Incorporate and contribute to research

INTEGRATE

Develop a common organizational culture

INNOVATE

Promote creativity and issue leadership



Resources—Cybersecurity Strategy

NIST 800.53 Standard for Risk Management and IT Security:
http://csrc.nist.gov/publications/nistpubs/800-53-rev4/sp800-53r4_summary.pdf

DHS Cyber Insurance Workshop:
<https://www.dhs.gov/publication/cybersecurity-insurance>

The Comprehensive National Cybersecurity Initiative:
<https://www.whitehouse.gov/issues/foreign-policy/cybersecurity/national-initiative>

Homeland Security, Cybersecurity Strategy:
<http://www.dhs.gov/topic/cybersecurity>

National Council of Information Sharing and Analysis Centers:
<http://www.isaccouncil.org/>



Resources—Policy and Governance

General Employee Training

NIST Special Publication 800-16 (Revision 1/2nd Draft Version 2), “A Role-Based Model for Federal Information Technology/Cyber Security Training,” (October 2013)

SANS Institute Security Awareness Training

Sector-specific Training

Health/Medical information: HIPAA and HITECH Act

Financial Information

National Conference of State Legislatures for state-specific privacy laws:

<http://www.ncsl.org/>



Resources—Security Practice

NIST 800.53 standard for risk management and IT security:
http://csrc.nist.gov/publications/nistpubs/800-53-rev4/sp800-53r4_summary.pdf

(ISC)² – CISSP 8 Domains of Security Practice:
<https://isc2.org/cissp-domains/default.aspx>

REN-ISAC: <http://www.ren-isac.net/>

SANS Institute system security best practices:
<http://www.sans.org/reading-room/whitepapers/bestprac>

Open Web Application Security Project for software security:
<https://www.owasp.org>



Resources—Developing Cybersecurity Leaders

Leader Development

Journal of Values-Based Leadership: <http://scholar.valpo.edu/jvbl/>

Susan A. Wheelan, “Creating Effective Teams: A Guide for Members and Leaders”

Examples of Innovative Leadership

Department of Homeland Security Continuous Diagnostics and Mitigation: <http://www.dhs.gov/cdm> and <http://www.gsa.gov/portal/content/176671>

Reform Government Surveillance Coalition: <https://www.reformgovernmentsurveillance.com/>



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