Update on the Key Initiatives Recommended by NTT Data regarding the Agency Cyber Security Framework

60x30TX

Texas Higher Education Coordinating Board

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Implementation Strategy and Approach

- The assessment report produced by NTT Data described the agency's current cybersecurity posture.

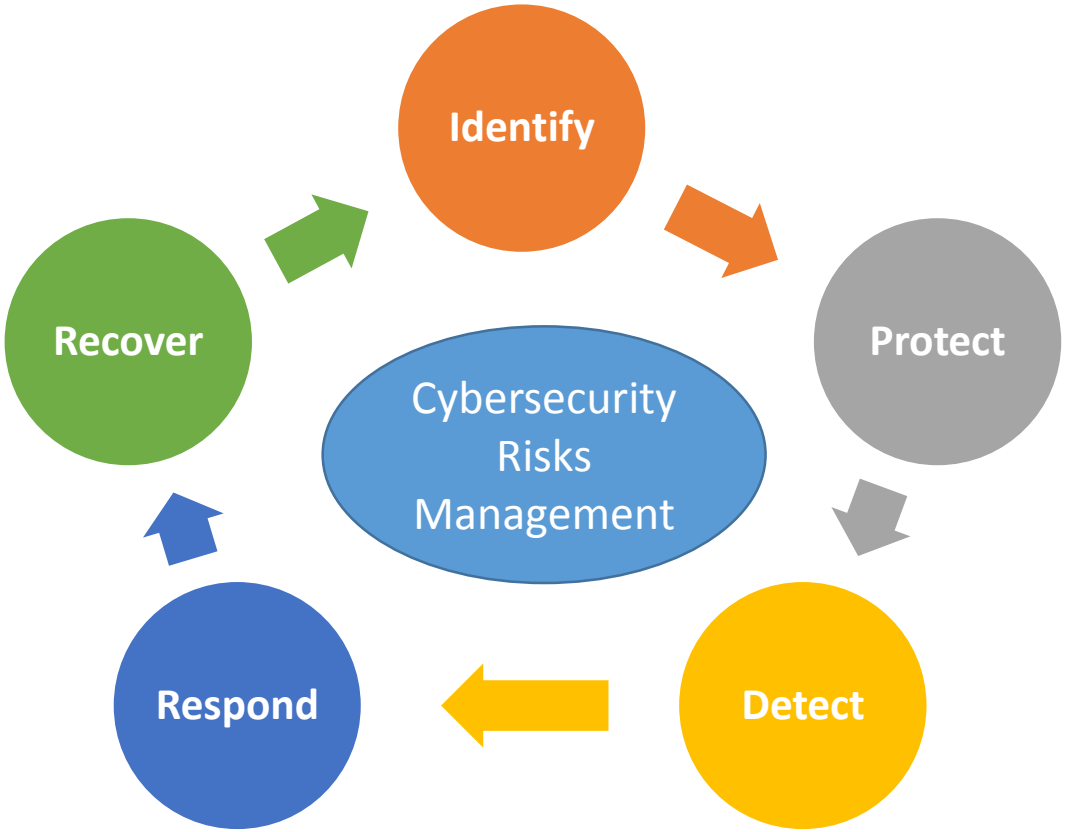
- The recommendations provided by the vendor laid out a "Target State" vision for our cybersecurity infrastructure.

- Our implementation strategy was established by focusing on the five key functions in cybersecurity risks management as outlined in the TX Cybersecurity Framework:
  - Identify
  - Protect
  - Detect
  - Respond
  - Recover

- We assess progress toward the "Target State" on a quarterly basis and make adjustments when necessary.

Cybersecurity Risks Management Framework

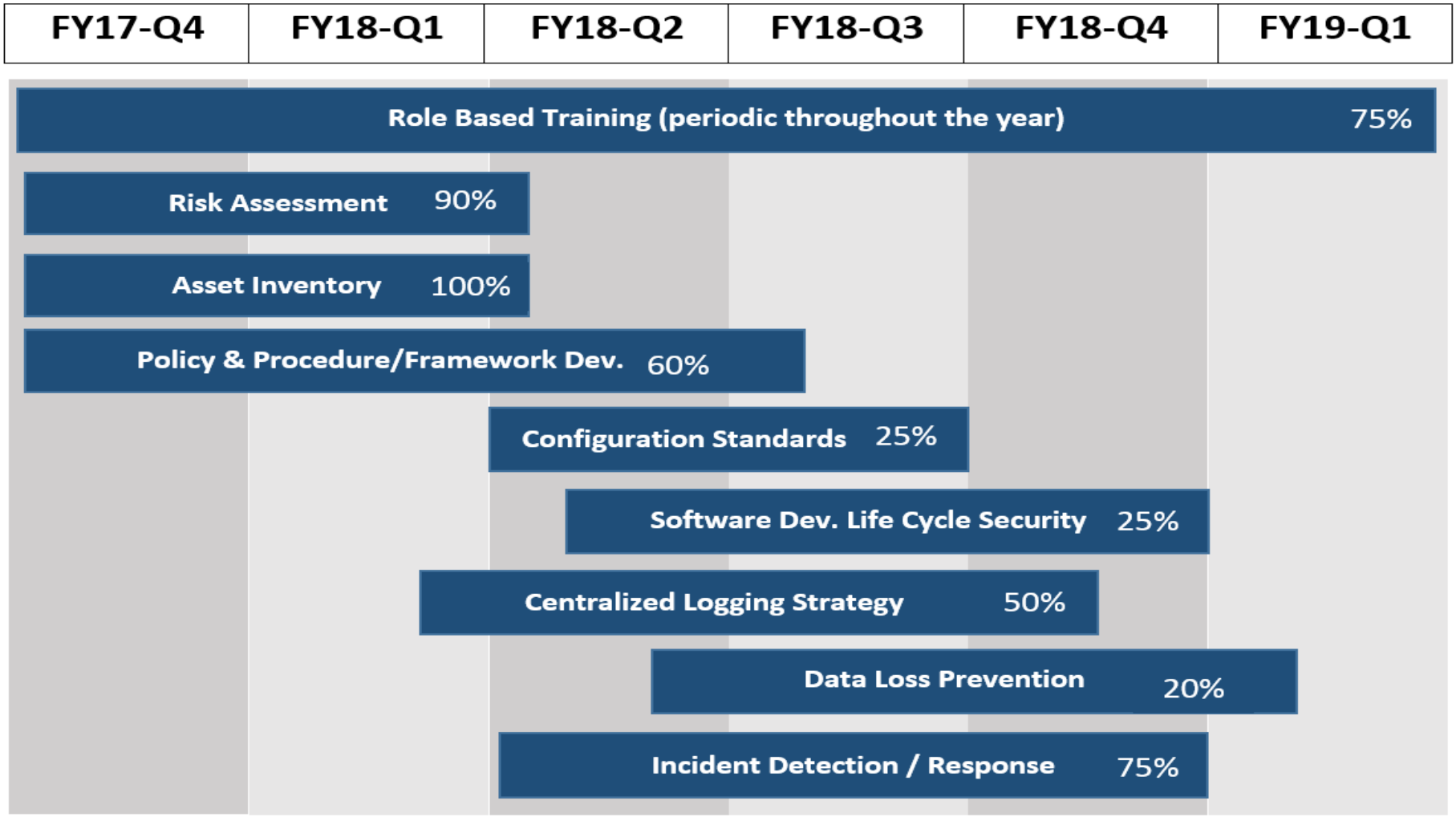
People



Process

Technology

Security Key Initiatives Implementation Roadmap



Progress Report – FY18 Q2

Initiative		Completed	Planned
Protect Role Based Training	75%	FERPA Sensitive PII Training CJIS Training Data Owner Responsibilities Computer Incident First Responder	Application Security Training USB Encryption Training Information Security Training Library
Identify Risk Assessment	90%	Application & Data Inventory Department Review sessions Data Owner Training	Formal presentation to management
Identify Asset Inventory	100%	Risk Assessment Data Inventory USB Survey	Additional USB Inventory Removable Media technical controls
Protect Policy & Procedure / Framework Development	60%	Procedures Updated ITSC Charter Updated IT Policy Review	Additional Security and Application Development Procedure Updates
Protect Configuration Hardening Standards	25%	System Security Plan Template	Complete System Security Plans based on Risk Assessment priorities

Progress Report – FY18 Q2

Initiative		Completed	Planned
Respond Incident Detection & Response	75%	Established Incident Response Team Response Plan updates Quarterly meetings Incident response training	Privacy incident policy and procedures Response Plan exercises
Protect Software Development Lifecycle Security	25%	Web Application Firewall implementation	Updated testing tools Updated coding standards & frameworks Security training for developers
Detect Centralized Logging Strategy (SIEM)	50%	Installed Open Source Security Incident & Event Monitoring (SIEM)	Commercial SIEM / Managed Security Services
Detect Data Loss Prevention	20%	Removable device survey USB Inventory	Additional technical survey and controls for removable devices

Progress Report – FY18 Q2

Identify

- Established a formal Information Security Program
  - ❑ Security Governance Structure
  - ❑ Information Security Charter
- Established a formal agency Security Risk Assessment Tool
  - ❑ Risk assessment results documented and reviewed with management
  - ❑ Agency Application and Data Owners reviewed and verified the risk profile and identified data relationships
  - ❑ Collected an *agency-wide data and systems inventory*
- Currently developing additional removable media device controls and inventory process
- Draft 2017 Agency Risk Assessment and Management Plan pending for review and approval

Progress Report – FY18 Q2

Protect

- Completed updates to 9 security-related policies and procedures
- Using results gathered from the risk assessment to prioritize documenting and the implementation of configuration hardening for agency critical assets
- Currently reviewing and completing system security plans for critical systems identified by the risk assessment
- Provided training to agency staff pertaining to protection of Personally Identifiable Information
- Provided training to Application and Data Owners on owner roles and responsibilities according to the Texas Administrative Code (TAC) 202
- Staff completed Criminal Justice Information Services (CJIS) training
- Updating Application Security Framework documentation
- Currently developing training for the application developers
- Conducted annual review of the agency IT policies and made sure policies and procedures are kept up to date

Progress Report – FY18 Q2

Detect

- Formally established the ISS Computer Incident Response Team
  - ❑ The team completed first responder training in order to strengthen our agency's ability in response to security events and incidents
- Implemented a leading open source Security Incident & Event Management product to provide event monitoring prior to managed services offerings
- Evaluating application security scanning tools offered under DIR Managed Security Service Contract
- DIR Managed Security Services offerings will be evaluated for Security Incident & Event Monitoring offerings

Progress Report – FY18 Q2

Respond and Recover

- Formally established the ISS Computer Incident Response Team
- Implemented the THECB Security Incident Response Plan
- The Incident Response Team will have quarterly meetings and conduct tabletop exercises starting January, 2018
- Working with General Counsel on drafting the Agency Data Breach Policy
  - ❑ Assess, contain and recover data
  - ❑ Assess risk and incident scope
  - ❑ Notification and incident communications
  - ❑ Post mortem evaluation and response

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