

NIST Cyber Security Professional: Awareness

Chapter 2 - Digital Transformation: Becoming Digital

Digital Transformation

Introduction

Learning Outcomes

Lesson: Basics of Digital Transformation

What is Digital Transformation?

Transformation – Industrial to Digital Era

Digital Transformation & Critical Infrastructure

Digital Transformation: Attributes of the Digital Enterprise

Lesson: Becoming Digital

Digital Transformation from the Corner Office

Becoming “Digital”

Optimized Rate of Change

Outside-in, Putting Customers First

Transforming the Enterprise

Lesson: Cybersecurity & Digital Transformation

Role of Cybersecurity in Digital Transformation

Cybersecurity & Critical Infrastructure

Digital Transformation: Basic Principles (THRIVE)

Digital Transformation Impacts Many Areas

Cybersecurity: Key DX Challenges

Lesson: DX & the Framework

Digital Transformation & NIST Cybersecurity Framework (CSF)

Basic Review of Cybersecurity Practices

Establish or Improve Cybersecurity Program

Communicate CS Requirements with Stakeholders

Buying Decisions

Identify Opportunities for New or Revised Informative References

Methodology to Protect Privacy & Civil Liberties

Summary: Digital Transformation

Knowledge Check – Things you should know

Checkpoint

Chapter 3 - Understanding Cyber Risks

Understanding Cyber Risks

Introduction

Learning Outcomes

Lesson: Cyber Risk Equation

The Problem

Profile of an Attack
Phases of the Kill Chain
MITRE Attack Framework
MITRE Enterprise ATT&CK Framework
The Cyber Risk Equation
Evaluating the Results – What does it all mean?
Lesson: Cyber Risk Components
Cyber Risk Components: Threats
Threats
Cyber Risk Components: Business & Technical Vulnerabilities
Vulnerabilities
Cyber Risk Components: Assets & Information
Asset Value
Cyber Risk Components: Controls
Controls
Cyber Risk: Fighting Back
Risk
Lesson: Basics of Cyber Risk Assessment
Risk Assessments
Risk Management Process
Frame the Risk
Assess the Risk
Respond to the Risk
Monitor the Risk
Key Risk Concepts
Risk Framing Components & Relationships
Organizational Risk Frame
Summary: Understanding Cyber Risks
Knowledge Check – Things you should know
Checkpoint

Chapter 4 - NIST Cybersecurity Framework Fundamentals

NIST Cybersecurity Framework Fundamentals

Introduction
Learning Outcomes
Lesson: NIST-CSF Overview
Cybersecurity Framework: Origins
Key Attributes of NIST-CSF
The Framework is for Organizations ...
The Framework Components
NIST Cybersecurity Framework Components
NIST Cybersecurity Framework as a Guide
The Key Areas of Focus
Why Adopt the NIST CSF?
Benefits of Adopting NIST-CSF
Evolution of NIST-CSF
Lesson: Framework Core, Tiers & Profiles

NIST-CSF Core Functions
Core Function: Goals and Objectives
Framework Core Approach
NIST-CSF Tier
NIST-CSF Implementation Tiers
Key Properties of Cyber Risk Management
Implementation Tiers Approach
Implementation Tiers Example
NIST CSF Framework Profiles
Thinking about a Profile
Profile Information Input
Seven-Step Process
Core, Tiers, Profiles Example
Summary: NCSF Fundamentals
Knowledge Check – Things you should know
Checkpoint