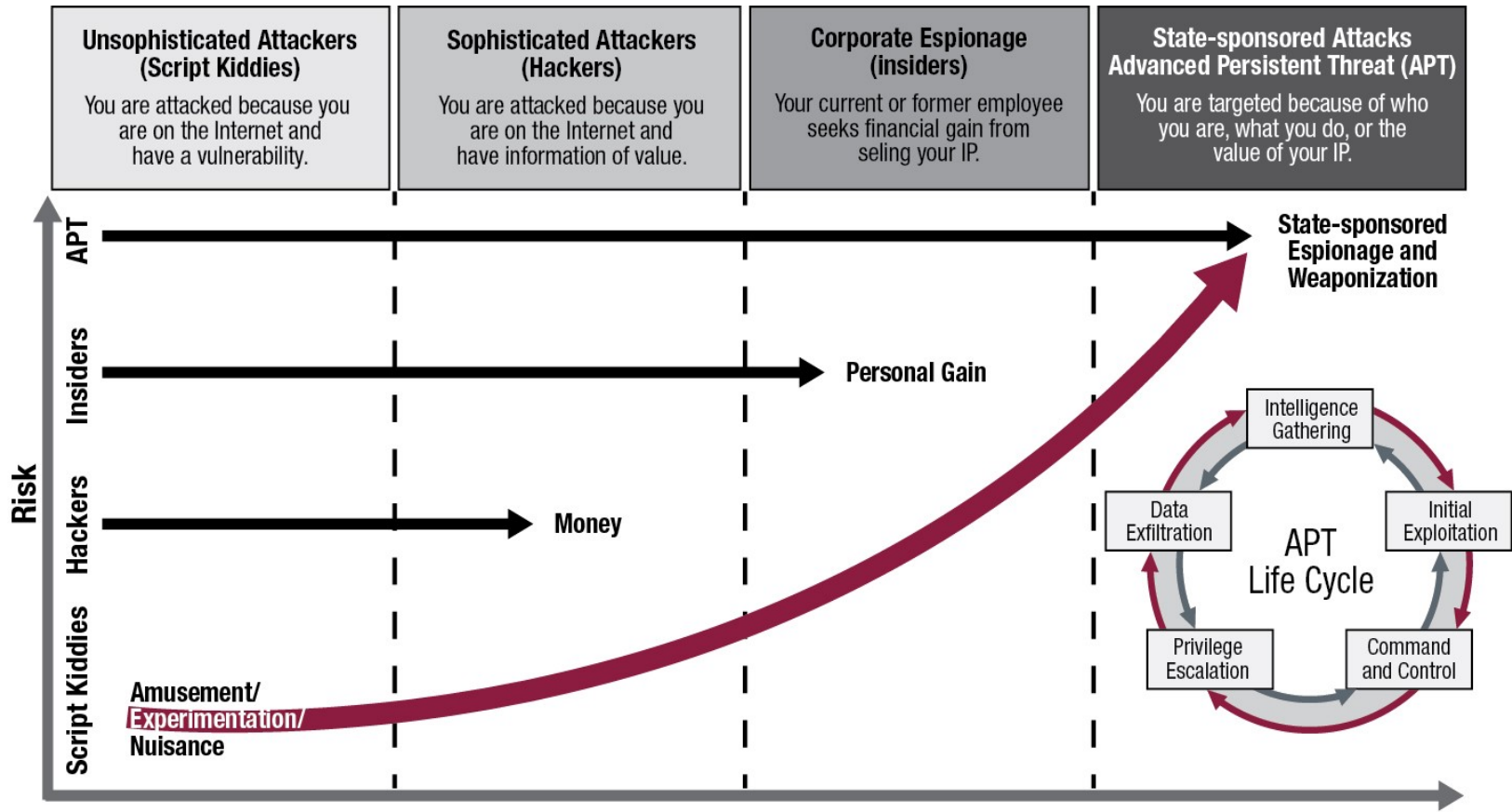




# CYBERSECURITY NEXUS

# Cyber security – ATTACKS



1980s/1990s

- > BrainBot/Morris Worm
- > Polymorphic Viruses
- > Michelangelo

- > Concept Macro Virus
- > Melissa
- > "I Love You"

- > Anna Kournikova
- > Sircam
- > Code Red and Nimda

- > SQL Slammer
- > Blaster
- > Sobig

- > MyDoom
- > Netsky
- > Sasser

- > Storm botnet
- > Koobface
- > Conflicker

- > Aurora
- > Mariposa
- > Stuxnet

- > WikiLeaks
- > Anonymous
- > LutzSec

2012

- > SpyEye/Zeus
- > Duqu
- > Flame

# Cybersecurity Skills Crisis

## Too Many Threats

 **62%**  
INCREASE  
IN BREACHES  
IN 2013<sup>1</sup>

**1 IN 5**   
ORGANIZATIONS  
HAVE EXPERIENCED  
AN APT ATTACK<sup>4</sup>

**US \$3**  
TRILLION  
TOTAL GLOBAL  
IMPACT OF  
CYBERCRIME<sup>3</sup>

 **7½ MONTHS**  
IS THE AVERAGE TIME  
AN ADVANCED THREAT  
GOES UNNOTICED ON  
VICTIM'S NETWORK<sup>2</sup>

**2.5**  
BILLION   
**EXPOSED RECORDS** AS  
A RESULT OF A DATA BREACH  
IN THE PAST 5 YEARS<sup>5</sup>

## Too Few Professionals

 **62%**  
OF ORGANIZATIONS  
HAVE NOT INCREASED  
SECURITY TRAINING  
IN 2014<sup>6</sup>

 **1 OUT OF 3**  
SECURITY PROS ARE  
NOT FAMILIAR WITH  
ADVANCED PERSISTENT  
THREATS<sup>7</sup>

 **<2.4%**  
GRADUATING STUDENTS  
HOLD COMPUTER  
SCIENCE DEGREES<sup>8</sup>

  
**1 MILLION**  
UNFILLED SECURITY  
JOBS WORLDWIDE<sup>9</sup>

**83%**   
**OF ENTERPRISES** CURRENTLY  
LACK THE RIGHT SKILLS AND  
HUMAN RESOURCES TO PROTECT  
THEIR IT ASSETS<sup>10</sup>

Enterprises are under siege from  
**a rising volume of cyberattacks.**

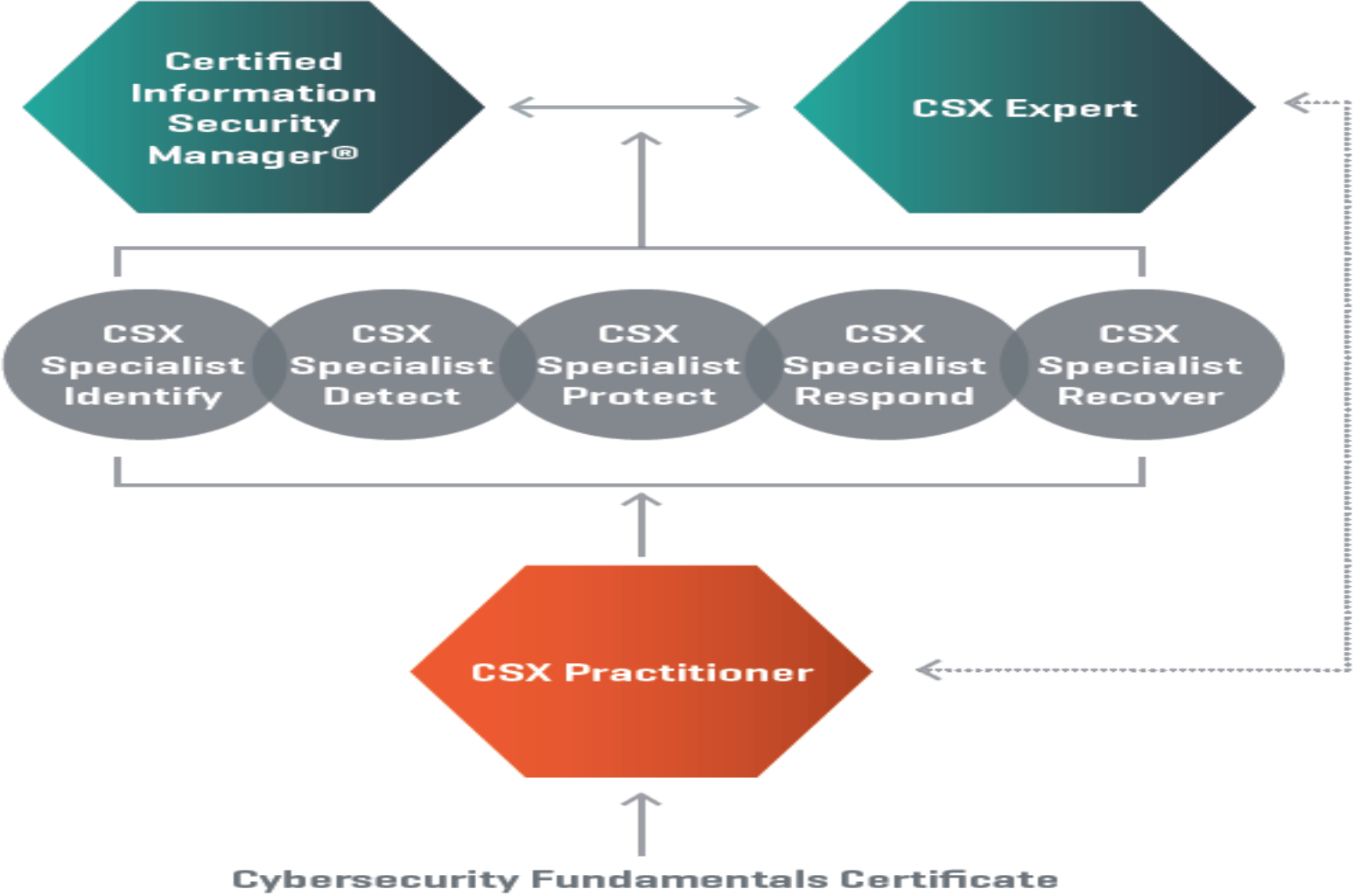
At the same time, the global demand for skilled professionals sharply outpaces supply. Unless this gap is closed, organizations will continue to face major risk. Comprehensive educational and networking resources are required to meet the needs of everyone from entry-level practitioners to seasoned professionals.

**SOURCES:** 1. 2014 Internet Security Threat Report, Volume 19, Symantec, April 2014; 2. M-Trends 2014: Attack the Security Gap, Mandiant, April 2014; 3. Increased Cyber Security Can Save Global Economy Trillions, McKinsey/World Economic Forum, January 2014; 4. ISACA's 2014 APT Study, ISACA, April 2014; 5. An Executive's Guide to 2013 Data Breach Trends, Risk Based Security/Open Security Foundation, February 2014; 6. ISACA's 2014 APT Study, ISACA, April 2014; 7. ISACA's 2014 APT Study, ISACA, April 2014; 8. Code.org, February 2014; 9. 2014 Cisco Annual Security Report, Cisco, January 2014; 10. Cybersecurity Skills Haves and Have Nots, ESG, March 2014



MAY 2014

<http://www.isaca.org/cyber/pages/csx-cybersecurity-nexus-certifications.aspx>



# Cybersecurity Fundamentals

The Cybersecurity Fundamentals exam tests for foundational knowledge across five key areas:

- > Cyber security concepts
- > Cyber security architecture principles
- > Cyber security of networks, systems, applications and data
- > The security implications of the adoption of emerging technologies
- > Incident response



# CSX | Practitioner Certification

Practitioner Certification demonstrates its holder's ability to serve in the globally in-demand role of a professional cyber security first responder:

- > Capable of following established procedures
- > Proficient in using defined processes
- > Able to work with known problems on a single system

EXAM PREREQUISITES: Related training courses below are not required to take the exam, but are highly recommended.

A CSX Practitioner certification is required to sit for any of the CSX Specialist exams, as well as the CSX Expert exam (coming soon).



# CSX | Practitioner Certification

## CSX PRACTITIONER SERIES COURSES

The series consists of three unique, week-long courses aligned with existing global frameworks, including the NIST Cybersecurity Framework. Each course is 5 days and combines lecture with hands-on lab time, and includes a 6-month subscription to the labs used in the course.

CSX Practitioner Course 1: Identification and Protection

CSX Practitioner Course 2: Detection

CSX Practitioner Course 3: Respond and Recover

## CSX PRACTITIONER LABS



CSX | Specialist Certifications **COMING SOON**

CSX | Specialist Certifications  
COMING SOON



CSX | Expert Certification **COMING SOON**

CSX | Expert Certification  
COMING SOON



**“AS TECHNOLOGY CHANGES,  
WE CAN COUNT ON  
ISACA TRAINING.**

**IT ENABLES OUR  
ENTERPRISE TO  
STAY AHEAD OF  
THE CURVE.”**

— **KATIE STETZ, CISA, CISM, CRISC**  
ATO COMPLIANCE ANALYST, RISK MANAGEMENT & COMPLIANCE  
CHICAGO, ILLINOIS, USA  
ISACA MEMBER SINCE 2005



**THANK YOU!**

**ISACA Sofia Chapter**