

NCDIT 2022 Cybersecurity Summit

Grow Your Own SecOps Team

Presented by

Isabelle Hertanto

About Info-Tech Research Group

Info-Tech Research Group produces unbiased and highly relevant research to help leaders make strategic, timely, and well-informed decisions. We partner closely with your teams to provide everything they need, from actionable tools to analyst guidance, ensuring they deliver measurable results for the organization.



INFO~TECH
RESEARCH GROUP

**Dramatically
Outperform
Your Peers**



Drive Measurable Results

Our world-class leadership team is continually focused on building disruptive research and products that drive measurable results and save money.



Better Research Than Anyone

Our team of experts is composed of the optimal mix of former CIOs, CISOs, PMOs, and other IT leaders and IT and management consultants, as well as academic researchers and statisticians.



Leverage Industry Best Practices

We enable over 30,000 members to share their insights and best practices that you can use by having direct access to over 100 analysts as an extension of your team.



Isabelle Hertanto

Principal Research Director, Security & Privacy

Who am I?

- Background in Software Development
- Former Canadian Spy - turned Corporate Risk Manager - turned Cybersecurity Consultant
- Teacher
- Dog Mom

**What kind of Cybersecurity
professional are you looking for?**

The Job Description

Looking for a Senior Cybersecurity Analyst

- University degree in IT, information security, or related field
- 10-15 years of experience
- CISSP and CISM or equivalent
- MBA an asset
- Must wear multiple hats
- Asking salary must be between \$100-140K

The Job Description

Looking for a ~~Senior~~ ~~Cybersecurity Analyst~~ Cybersecurity Unicorn

- University degree in IT, information security or related field
- 10-15 years of experience
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REMINDER:
Unicorns
aren't real.

A world map is shown in the background, with the top half in dark blue and the bottom half in light gray. The map outlines the continents. In the top right corner, there are several curved blue lines of varying thicknesses.

IT leaders must do more to attract talent

3.5 million
unfilled
cybersecurity
openings in 2021

A world map is shown in the background. The top half of the map, representing Europe, Africa, and Asia, is dark blue. The bottom half, representing North and South America, is light gray. The text is overlaid on these colored regions.

IT leaders must do more to attract talent

US\$185,500

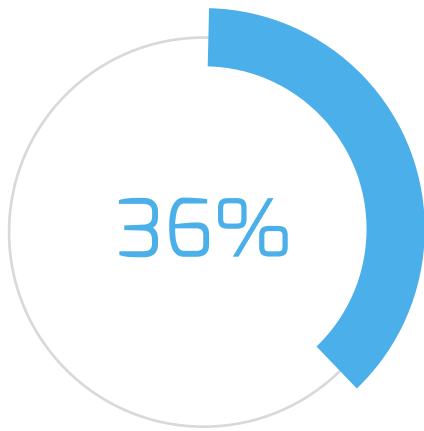
is what top
earners make
annually across
the United States.

30% of the current
cybersecurity workforce
plans to change professions.

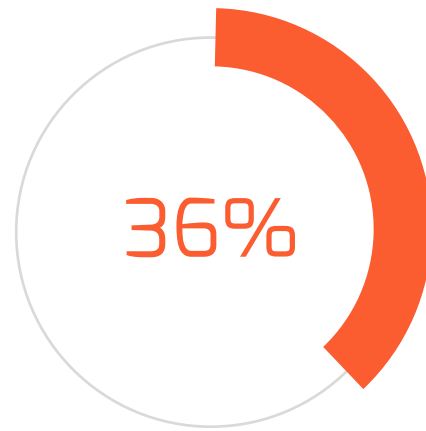
2022 Trellix survey: A Closer Look at the Cyber Talent Gap

IT leaders must do more to retain talent

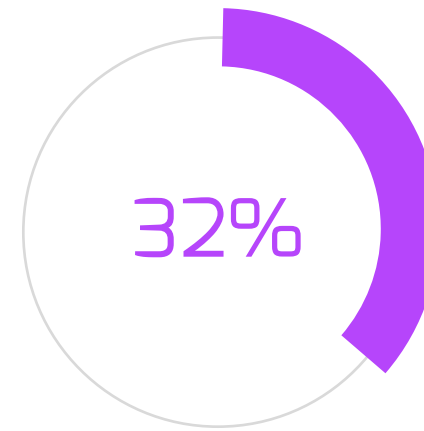
TOP FRUSTRATIONS IN THE FIELD, 2022



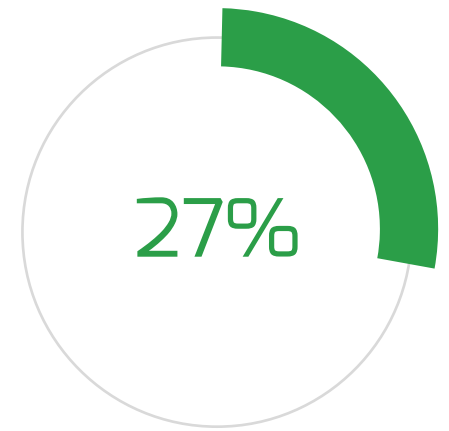
Limited support for
skills development



Lack of recognition



Limited support with
qualifications/
certifications

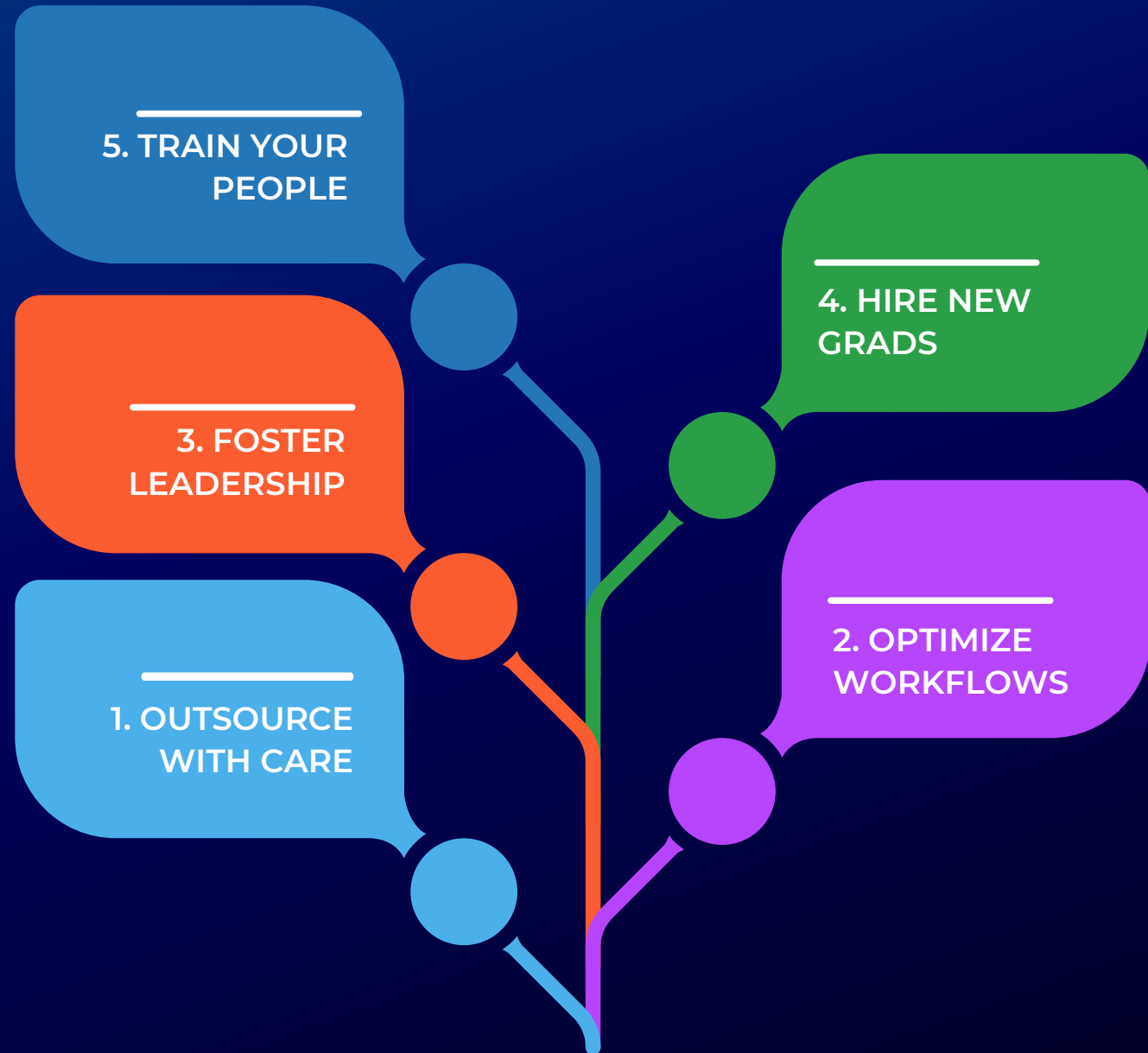


Unclear career
progression routes

2022 Trellix survey: A Closer Look at the Cyber Talent Gap

Growing your own security team

Adopt a people-first approach to resourcing that emphasizes the development and retention of existing staff.



1. Outsource with Care

“The workforce of the future needs to be agile and adaptable, enabled by strong partnerships with third-party providers of managed security services. I believe these hybrid models really are the security workforce of the future.”

– Senior Manager,
Cybersecurity at EY

Why outsource?

Outsourcing provides access to tools and talent that would otherwise be prohibitively expensive. Typical reasons for outsourcing security operations include:

- Difficulty finding or retaining security staff with advanced and often highly specialized skillsets.
- The desire to transfer liability for high-risk operational activities such as 24/7 security monitoring.
- Workforce scalability to accommodate irregular or infrequent events such as incident response and incident-related forensic investigations.

Given the above, three different models have emerged for the operational security organization:



1. Outsourced SecOps

A fully outsourced Security Operations Center, managed and governed by a smaller in-house team



2. Balanced Hybrid

In-house operational security staff with some reliance on managed services



3. In-House SecOps

A predominantly in-house security team, augmented by a small managed services contract

Use Info-Tech's blueprint [*Develop Your Security Outsourcing Strategy*](#) to determine the right approach for your business needs.

2. Optimize Workflows

Top Three CIO Pain Points

- 1 Staff sufficiency, skill, and engagement issues
- 2 Business frustration with IT's failure to deliver value
- 3 IT limitations that affect business innovation and agility

Source: Info-Tech's [CEO-CIO Alignment Program](#), 2021; N=446



The Solution

As industries evolve and adopt more tools and technology, their IT operating models become more complex. Process optimization and automation are needed to simplify complex operations and align processes with organizational goals.

Optimize your Security Operations Workflow

Dashboards: Centralized visibility, threat analytics, and orchestration enables faster threat detection with fewer resources.

Adding more controls to a network never increases resiliency. Identify technological overlaps and eliminate unnecessary costs.

Planning: Narrow the scope of operations to focus on protecting assets of value.

There are no plug and play technological solutions – each is accompanied by a growing pain and an affiliated human capital cost.

SOCs with 900 employees are just as efficient as those with 35-40. There is an evident tipping point in marginal value.

Automation: There is shortfall in human capital in contrast to the required tools and processes. Automate the more trivial processes.

Cross-train employees throughout different silos. Enable them to wear multiple hats.

Define appropriate use cases and explicitly state threat escalation protocol. Focus on automating the tier 1 analyst role.

Practice: None of the processes happen in vacuum. Make the most of tabletop exercises and other training exercises.

Consider the following when adopting new tools...

1. People

- ☐ Will staffing levels change? Will job titles or roles change for certain individuals?
- ☐ How will staff be reorganized?
- ☐ Will staff need to be relocated to one location?
- ☐ Will reporting relationships change? How will this be managed?
- ☐ How will performance measurements be consolidated across teams and departments to focus on the business goals?
- ☐ Will there be a change to career paths?
- ☐ What will consolidation do to morale, job interest, job opportunities?

2. Process

- ☐ How will knowledge sharing be enabled so that all analysts can quickly access known errors and resolve problems?
- ☐ How will procedures be documented so that processes are escalated properly?
- ☐ Will ticket classification and prioritization schemes need to change?
- ☐ Ticket input (i.e. how can tickets be submitted?)
- ☐ Ticket resolution (i.e. how will resolution be defined and how will users be notified?)
- ☐ Communication with end users (i.e. how and how often will stakeholders be notified about the status of tickets or of other incidents/outages?)

3. Technology

- ☐ Is an existing tool extensible?
- ☐ If so, can it integrate with essential non-IT systems?
- ☐ Can the tool support a wider user base?
- ☐ Can the tool support all areas, departments, and technologies it will need to after consolidation?
- ☐ How will data from existing tools be migrated to the new tool?
- ☐ What implementation or configuration needs and costs must be considered?
- ☐ What training will be required for the tool?
- ☐ What other new tools and technologies will be required to support the optimized state of security operations?

3. Foster Leadership

“ *The days are gone when the security leader can stay at a desk and watch the perimeter. The rapidly increasing sophistication of technology, and of attackers, has changed the landscape so that a successful information security program must be elastic and nimble, and must be tailored to the organization’s specific needs.*

The CISO is tasked with leading this modern security program, and this individual must truly be a Chief Officer, who has a finger on the pulses of the business and security processes at the same time. The modern, strategic CISO must be a master-of-all-trades.

A world-class CISO is a business enabler who finds creative ways for the business to take on innovative processes that provide a competitive advantage, and most importantly: to do so securely.”

Cameron Smith
Research Lead, Security & Risk Practice
Info-Tech Research Group

Three key behaviors of a world-class CISO

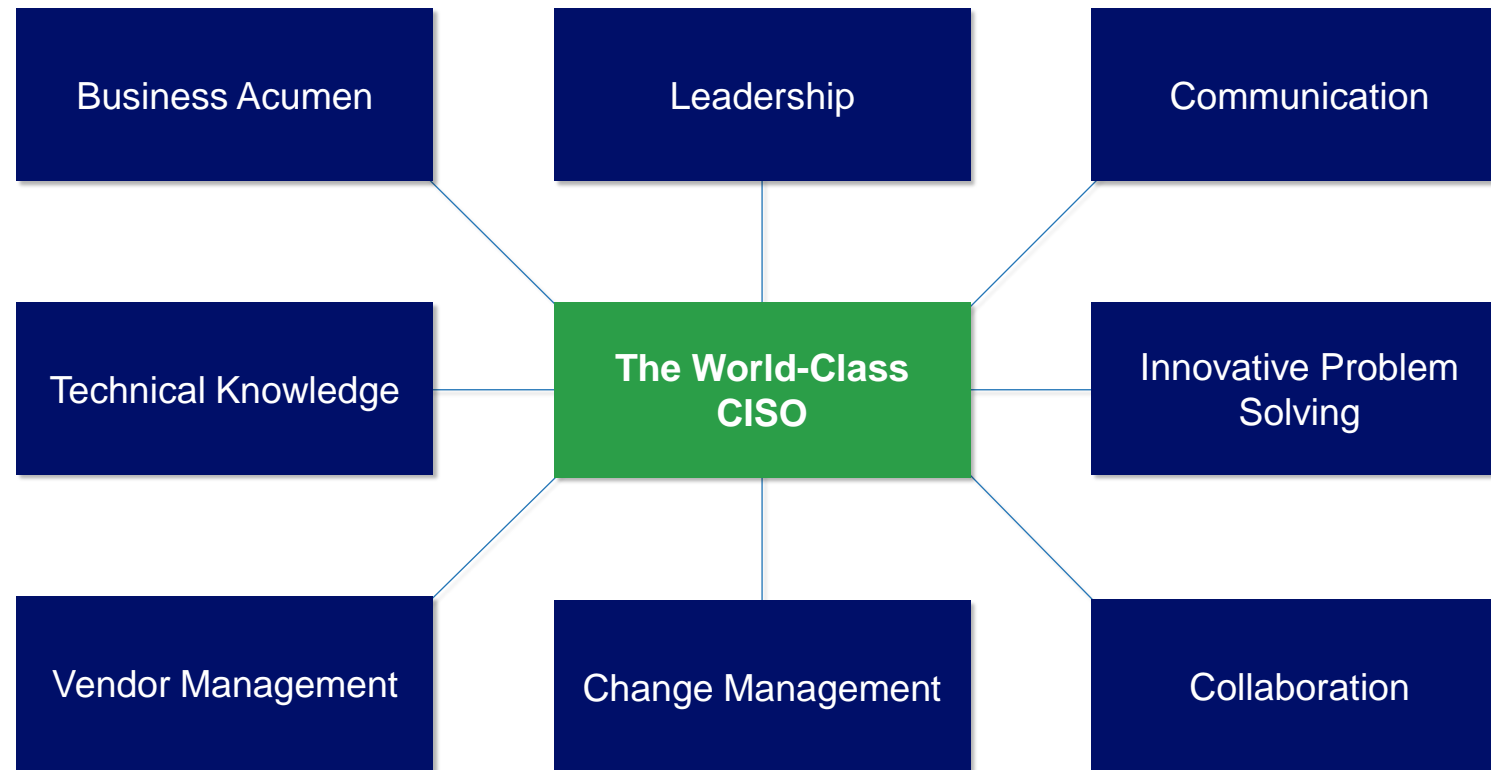
Through these three over-arching behaviors, the CISO can enable a security culture and program that is **elastic**, **flexible**, and **nimble** enough to maintain business process alignment.

Aligning security with business requirements

Enabling a culture of risk management

Managing talent and change

8 Core Competencies to support the CISO



Use Info-Tech's blueprint [*Hire or Develop a World-Class CISO*](#) to find a strategic and security-focused champion for your organization.

4. Hire New Grads

“

People may not be aware of the breadth of apprenticeship programs in the Federal government... We think apprenticeships could be a very exciting way to bring in talent."

**Marian Merritt, deputy director of the National Initiative
for Cybersecurity Education (NICE)-NIST**

State Apprenticeship Data FY 21

Active Apprentices

North Carolina

Active Apprentices: **8,775**

New Apprentices: **608**

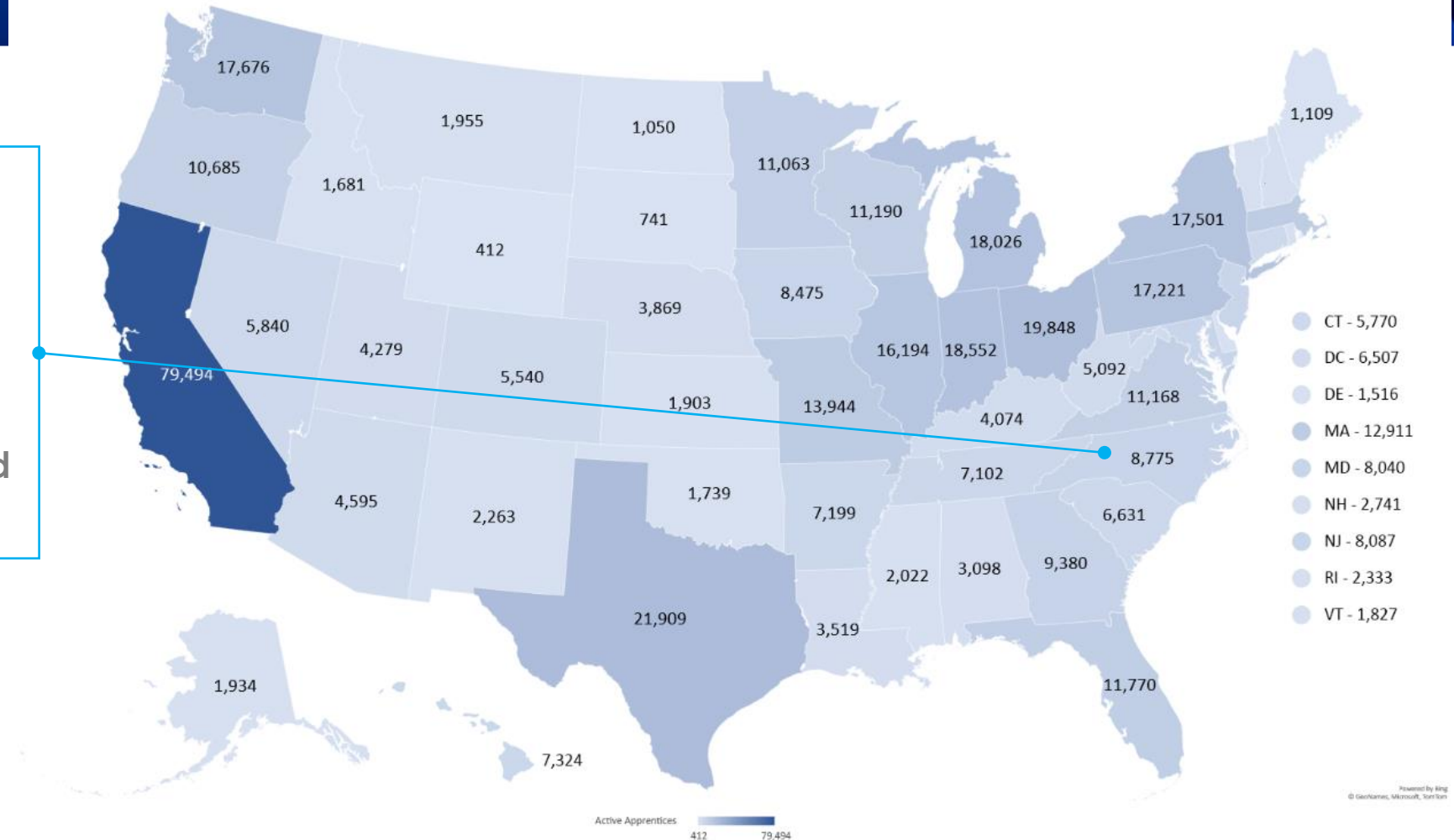
Completers: **520**

Active Programs: **1,055**

New Programs: **128**

Professional, Scientific, and
Technical Services: **1,897**

Source: [U.S. Department of Labor](#)





5. Train Your People

According to a recent Microsoft Study, **76%** of employees say they would stay at their company longer if they could benefit more from learning and development support.

Source: [Tech.co](#)

Info-Tech Learning Assurance Framework

Learn Key Concepts and Best Practices

Interactive Classrooms

Collaboration Sessions

Discovery Exercises

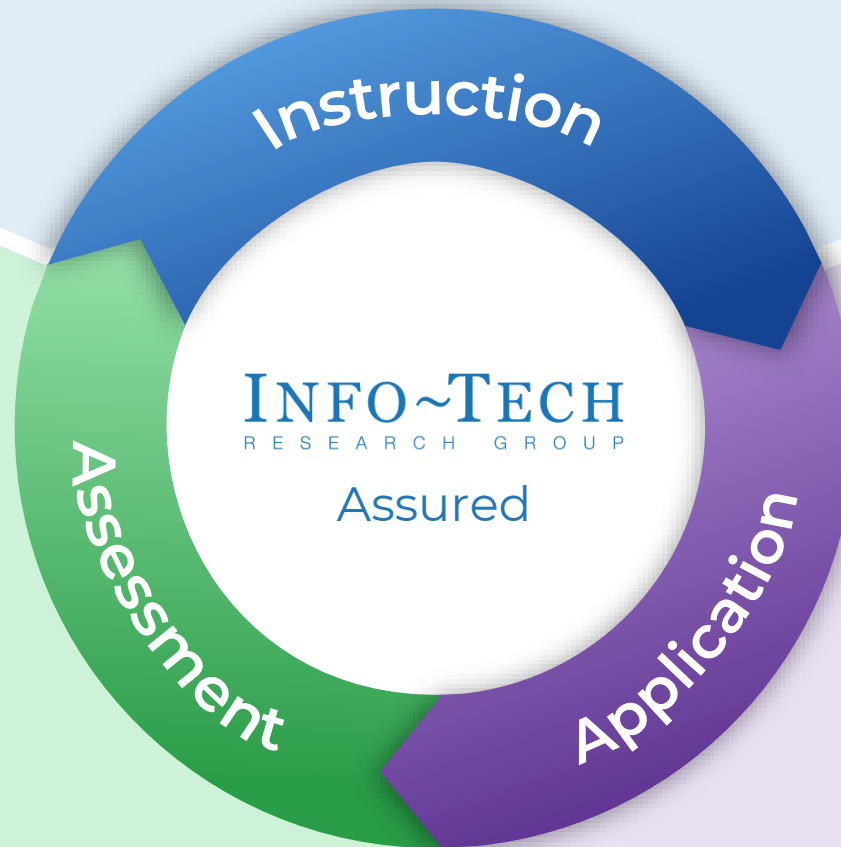
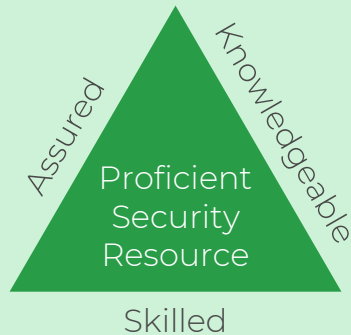
Case Studies

Direct Development Through
Targeted Assessments

Formative
Assessments

Summative
Assessments

Final Assessment



Get Hands-On Experience
While Creating Deliverables
for the Organization

Deploy Cyber
Range

Run
Practical
Exercises

Create
Operational
Deliverables

Info-Tech Cybersecurity Competency Framework



So, where do we start?

Start by upskilling your IT staff!

Turn your IT staff into security professionals by providing them with the necessary security skills to succeed in their area of expertise.

**IT Systems
Administrator**

**IT Systems
Administrator +
Security Skills**

**IT Security
Systems
Administrator**



Discussion and Q & A

Thank You!



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