Please Note..

This webinar and the engagement tools will be recorded.

An archive will be available on the event website.





Cybersecurity Workforce Outlook for 2024 - Impact of Changing Demographics

January 17, 2024





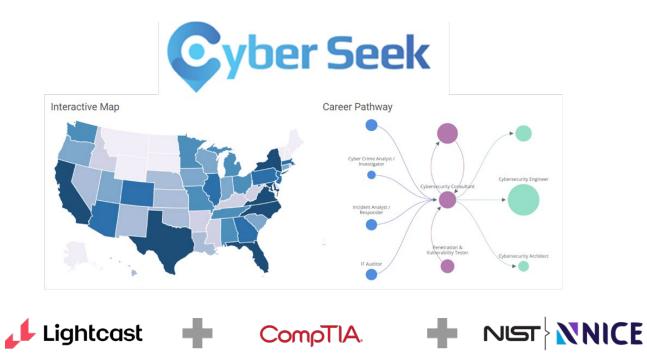


Carolyn Balkin *ManpowerGroup*



Lightcast and CyberSeek Decipher the Cybersecurity Workforce





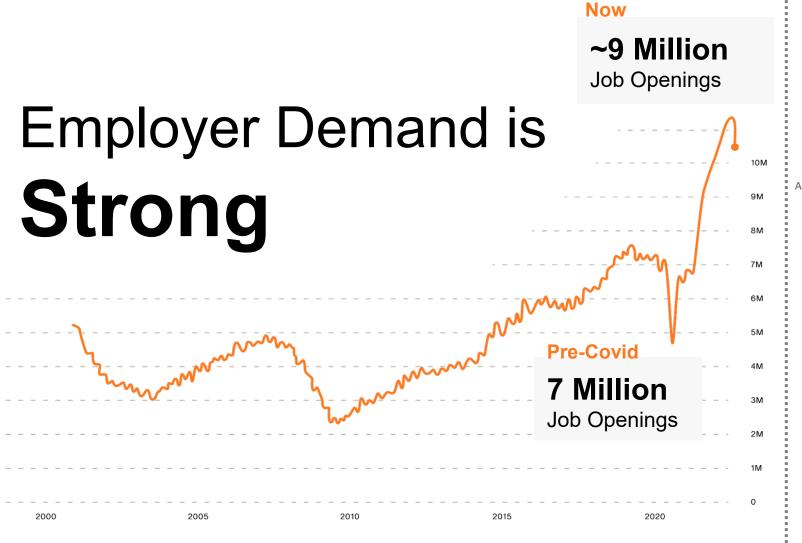


What Demographic Headwinds Are We Facing?





Most Demanded Occupations



Registered Nurse	2,165,679	
Retail Sales Associate	1,119,278	
Retail Manager	780,883	
Customer Service Rep	748,535	
Software Developer	727,636	
Sales Representative	721,828	
Administrative Assistant	678,475	
Truck Driver	655,305	
Physician	609,385	
Warehouse Worker	565,020	
Demand for Emerging Fields		
Cyberse	curity 572,982	
Artificial	Intelligence 482.955	

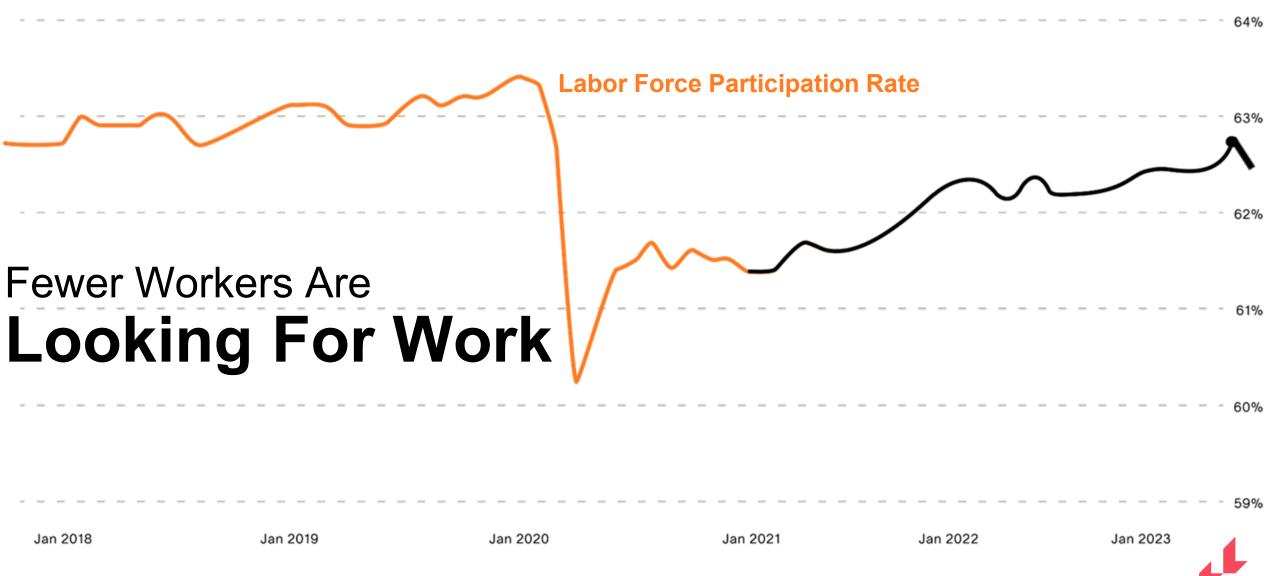
Green Jobs..... 190,549

Current Labor Crisis

The Unemployment Rate is **Historically Low**

Unemployment Rate





Of all people who are out of the labor force, nearly 60% say they are retired

I am retired	57.5%
I am/was sick or disabled	18.7%
I am/was caring for children not in school or daycare*	7.2%
I did not want to be employed at this time	6.0%
I am/was laid off or furloughed	4.1%
I am/was caring for an elderly person	2.7%
My employer closed/went out of business	2.0%
I do/did not have transportation to work	1.8%

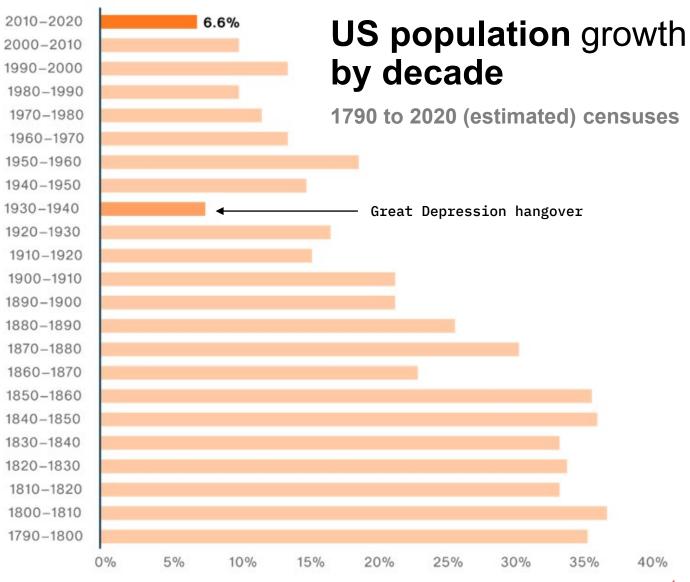
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% of those who gave a reason

* Largest group only has a high school diploma. SOURCE: Census Pulse Survey, Sept 2023, Table 3

Reason out of labor force

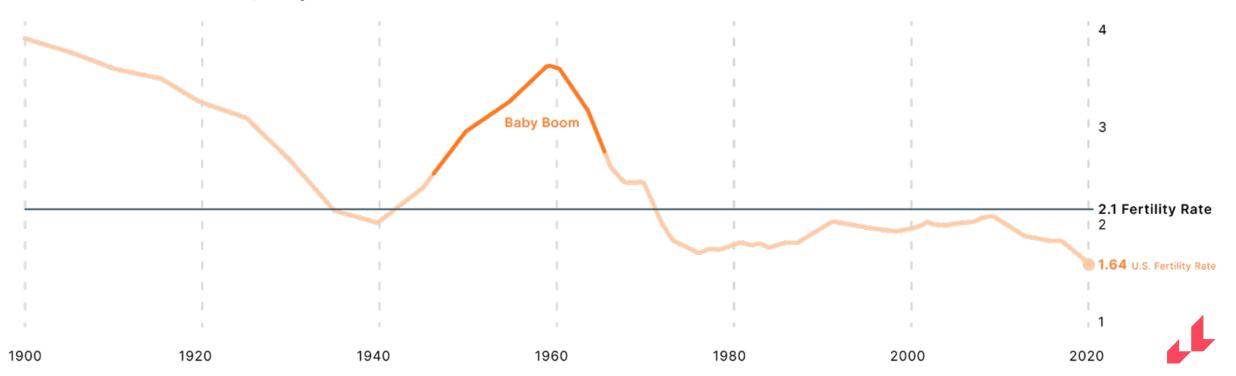
Population Growth is Historically Low



1

We're **living below** the 2.1 birth replacement rate

We can't employ what we don't have



What Other Demographic Challenges Do We Face?

Declining college enrollments

Increasing death rates



What is **Unique About the Cyber Workforce?**





Despite Economic Uncertainty, **Cybersecurity Job Demand Remains Strong**

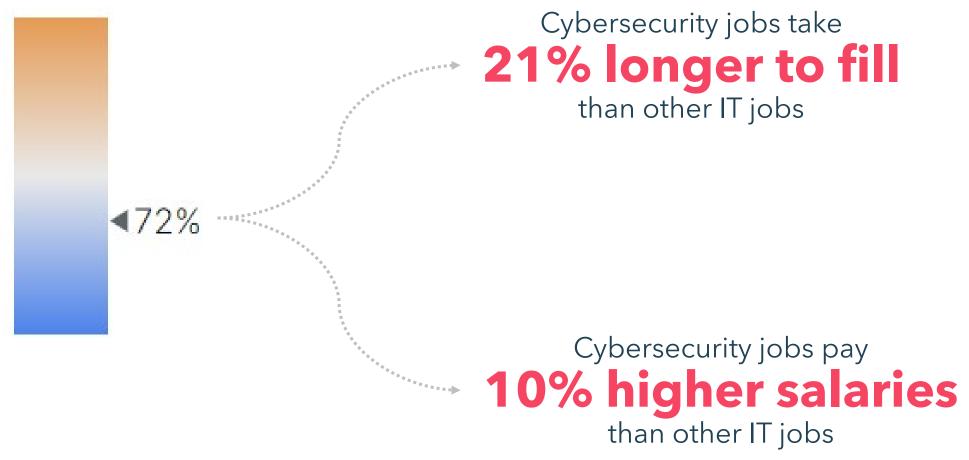


Nearly 1.2 million existing cybersecurity workers in the U.S.



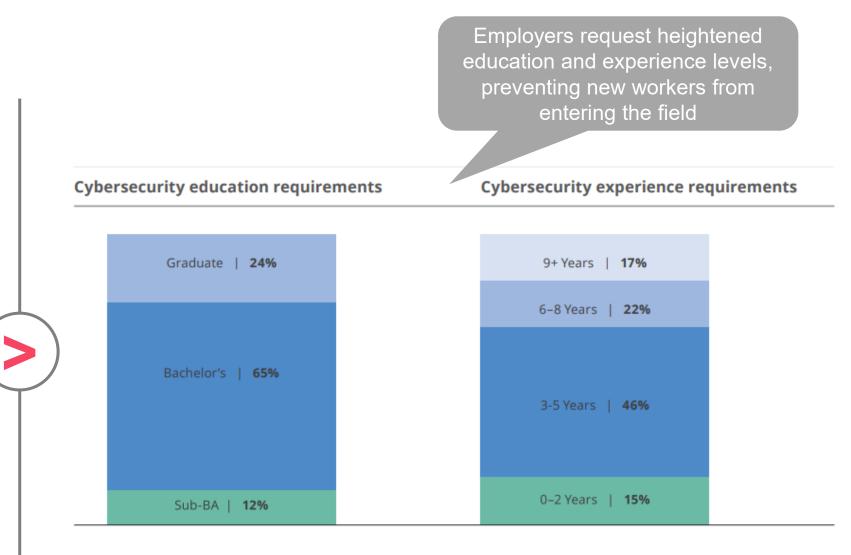
Cybersecurity Supply Can't Keep Up with Demand

National Cybersecurity Worker Supply and Demand Ratio



The Cybersecurity Career Ladder is

Missing A Rung















Cybersecurity & IT Workforce Trends

January 2024

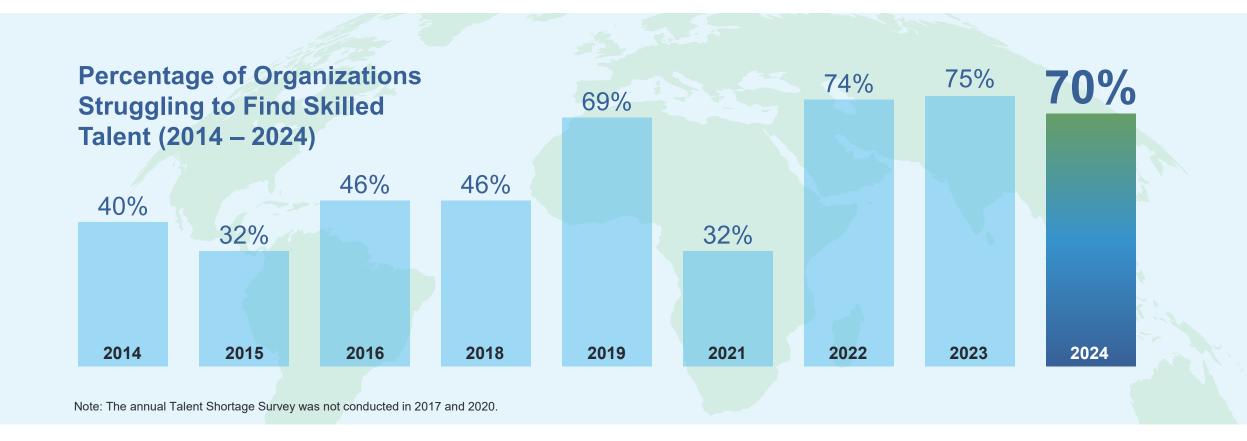
Carolyn Balkin Vice President & Global IT Vertical Leader, ManpowerGroup

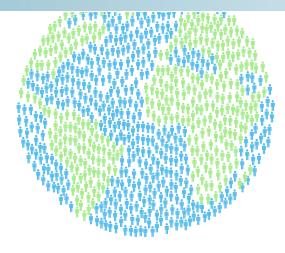
Data Classification Level

Brief ManpowerGroup Introduction



U.S. employers still struggling with talent scarcity



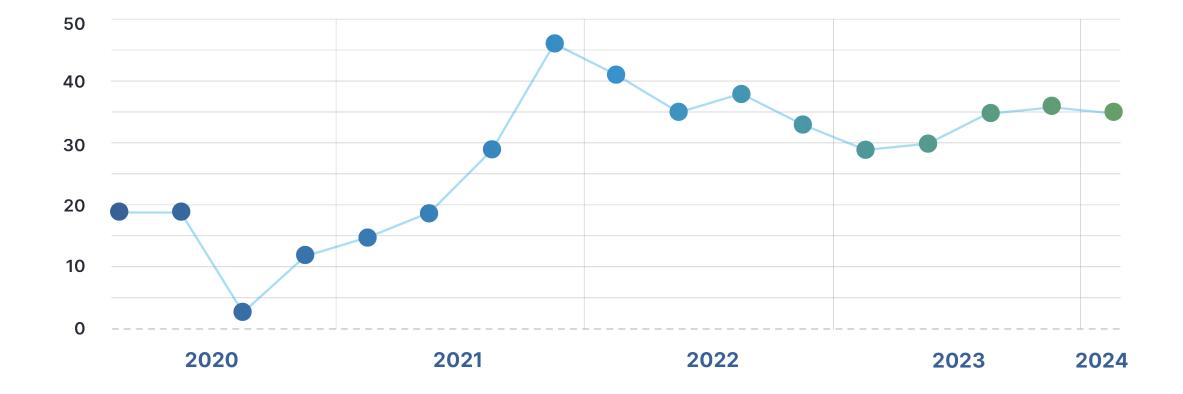


U.S. hiring outlook remains strong in Q1

Used internationally as a bellwether of labor market trends, the Net Employment Outlook – calculated by subtracting the percentage of employers who anticipate reductions to staffing levels from those who plan to hire – **now stands at +35%** in the United States.

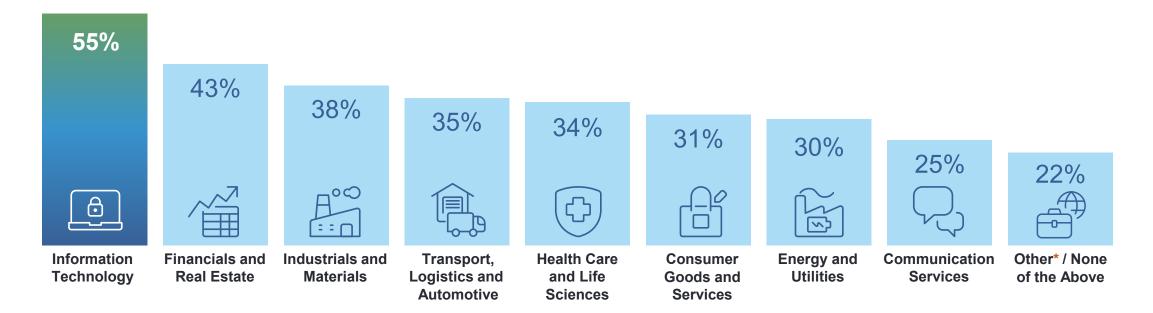


U.S. net employment outlook changes over time



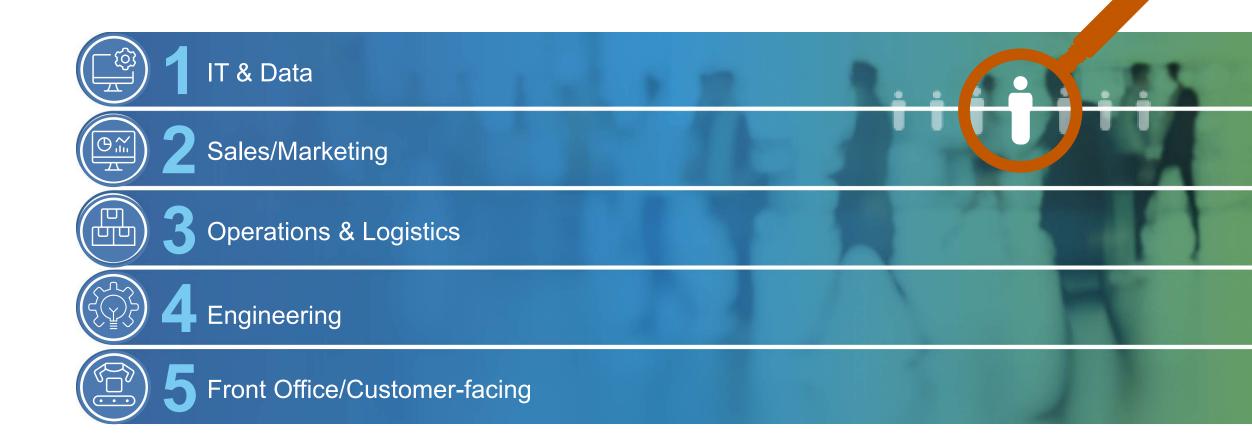
IT remains the #1 sector for U.S. hiring demand

Businesses in the IT industry reported the brightest outlook for the fifth consecutive quarter but weakening by -1% compared with Q4 2023.



*Government or Public Service; Not for Profit/NGO/Charity/Religious organization; Other Industry; Other Transport, Logistics & Automobiles Sub-Industry; Educational Institutions; Agriculture & Fishing

Top 5 skills U.S. employers report most difficulty finding



Scarcity will require changes to the way we find tech talent

Data Science Candidate Search Example TOTAL 139,992 OF THE CANDIDATE POOL IS **ELIMINATED WITH JUST FOUR TECHNICAL REQUIREMENTS AND THREE YEARS OF EXPERIENCE*** WITH THREE YEARS 78,352 **OF EXPERIENCE THREE YEARS +** 48.716 **PYTHON** THREE YEARS. 27,329 **PYTHON + SQL** THREE YEARS, PYTHON, 4.004 SQL + CLOUD COMPUTING THREE YEARS, PYTHON, SQL, CLOUD 3.078 COMPUTING + ML

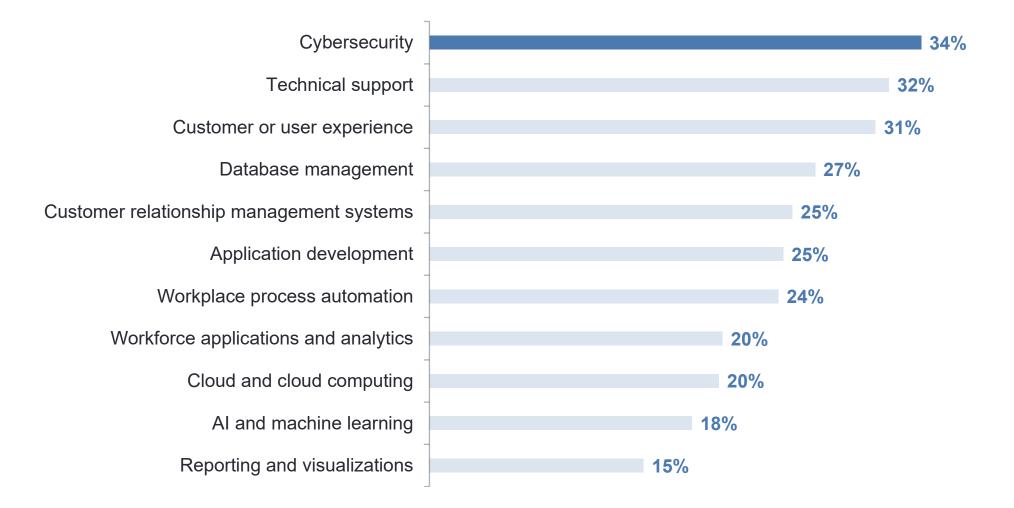
98%

The real global talent shortage is just beginning



- 1. Pew research
- 2. IDC analysis
- 3. Korn Ferry research, proportional impact expected across industries and in other developed markets

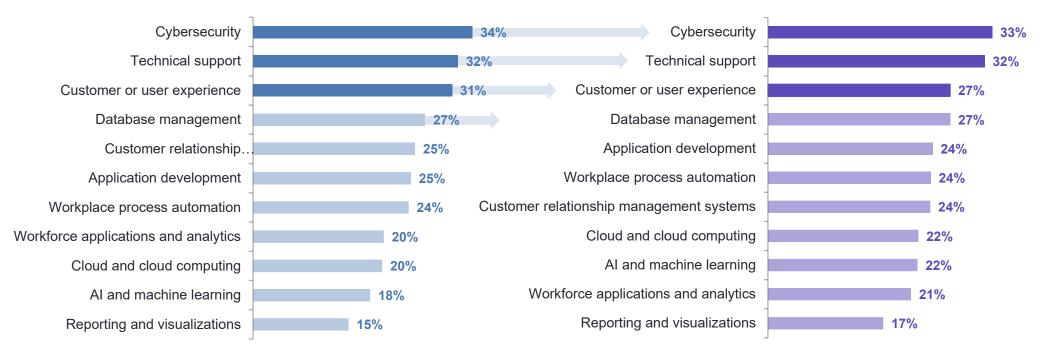
Cybersecurity was the #1 global IT hiring priority in 2023



Cybersecurity also #1 globally for staffing and upskilling

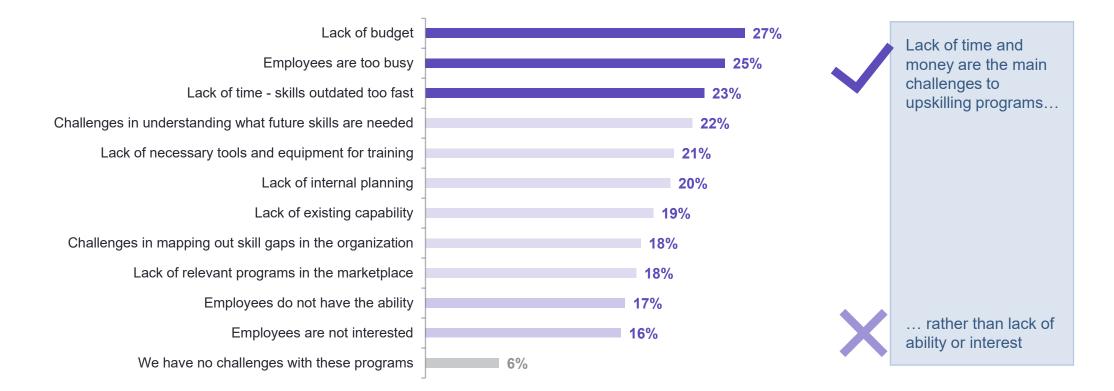
When you think of your **staffing priorities** for the next 12 months, how would you prioritize the following IT areas?

When you think about closing **IT skills gaps**, where does your organization see the greatest need for training?



Employers can't close IT skills gaps alone

What are your greatest challenges with your reskilling / upskilling programs?







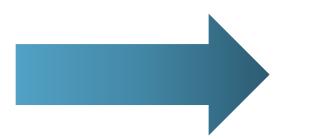
How Do We Solve These Workforce Challenges?





Shift Hiring and Training Focus to Skills - NOT Credentials

The Old Approach: Hire and Train for Degrees and Certifications



The New Approach: Hire and Train for <u>Skills</u>

Right-Size Job Requirements

Focus on Need-To-Haves Versus Nice-To-Haves

Sample Cybersecurity Job Requirements

IT Security Analyst

Qualifications

2+ years of progressively increasing responsibility in the areas of information security, cloud security, or cybersecurity Bachelor's degree in IT, cybersecurity or related area of study,

- Prior cloud (AWS) experience
- Strong understanding of testful API development, SDLC processes, and security automation desired
- Experience with multiple environments and operating systems, devices and databases including Windows Server, Active Directory, VMWare, Azure, AWS
- Strong analytical and problem solving skills
 Strong Ingident Personal healthrough in professional
- Strong Incident Response background is preferred
 Fundamental understanding of security related technologies such as SIEM and SOAR
- Must have/obtain and maintain one or more Cloud or Security certifications such as AWS, Azure, CISSP, CISA, CISM, CIPT, SSCP, CCSP
- Strong understanding of information security standards, concepts, controls, testing techniques and technical risk accessment.

Removing a BA requirement Saves \$16,000 and grows entry-level candidate pool by 61%

Building, not buying, emerging cybersecurity skills Saves \$10,000+ for each emerging skill

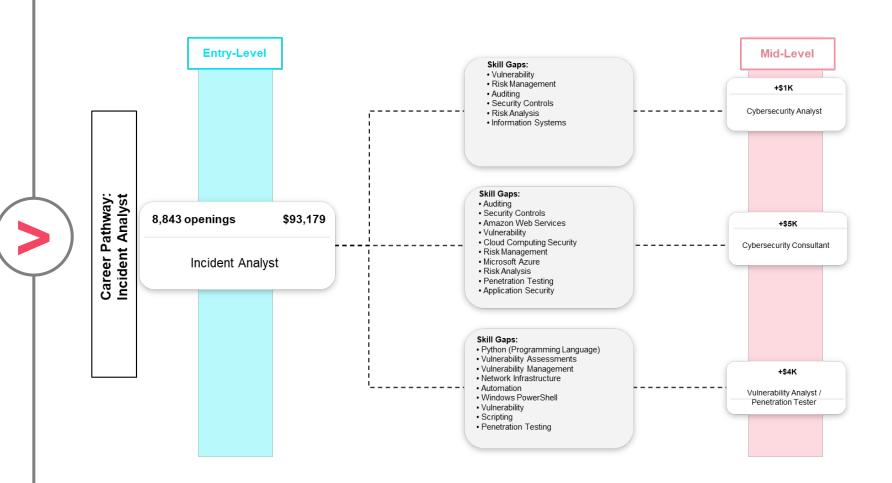
Eliminating specific certification requirements Drops average salary costs by \$9,000

Unlock the Power of Pathways

Build Diverse Talent Pipelines with Skill-Based Career Pathways

Building career pathways between skill-adjacent roles helps you:

- ✓ Expand your talent pipeline for emerging skills
- ✓ Increase retention and employee engagement
- ✓ Reduce onboarding time
- ✓ Access more diverse pools of workers



Hire Missionaries, Not Mercenaries

The turnover rate for cyber analysts with at least a bachelor's is

64% higher

than for cyber analysts with an associates

Female cyber workers remain with a company

10% longer

than male cyber workers



Contact Information:

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Learn More:

Lightcast.io

CyberSeek.org

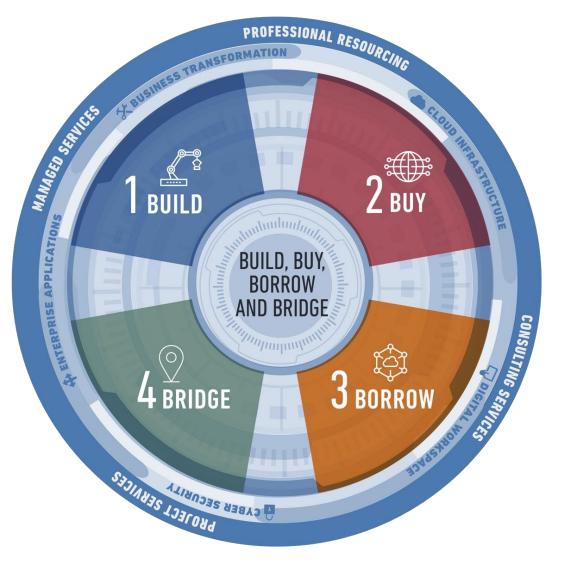
An integrated approach is needed

Build: Invest in learning and development to grow your tech talent pipeline

Buy: Pursue external market to find tech talent with the right skillsets when timeframes prevent upskilling in-house talent

Borrow: Cultivate tech talent outside of the organization, including part-time, freelance, contract and temporary workers to complement existing and emerging skills

Bridge: Connect people to work and training opportunities by allowing them to move on or move up by taking on new tech roles and/or acquiring new technical/soft skills



Case Study: Building the skilled technical talent you need

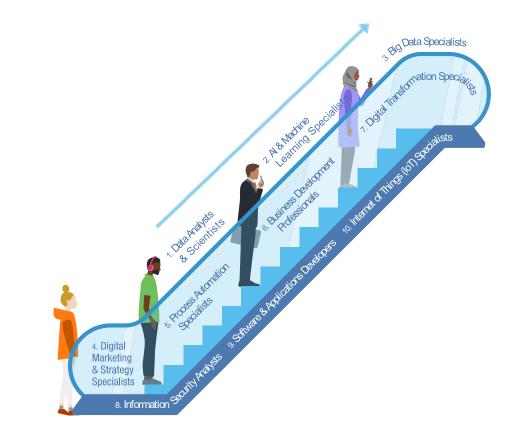




- Accelerated training programs (< 3 months)
- Industry-recognized curriculums & certifications
- More than 230,000+ graduates

Key U.S. Partners

IBM SkillsBuild



Thank You | Q&A



Panel Discussion



NICE Webinar Series

Expanding Cybersecurity Learning and Workforce Opportunities for Rural Americans February 21, 2024, 2:00-3:00PM EST





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