PROPERTY OF PT LIFELONG LEARNING MULTIMATICS

Multimatics turn knowledge into performance | EC-Council | CERTNEXUS

BUILDING A CULTURE OF CYBER SECURITY

EC-Council

Present by : Tin Tin Hadijanto
Country Manager

SKILLS OF THE FUTURE

AI and Cybersecurity in the Reskilling and Upskilling Revolution

THE IMPACT OF DIGITAL TRANSFORMATION

DIGITAL FUTURE FOR ALL

50% of population impact, AI for health sector, Distance learning for Education, etc

THE FUTURE OF WORK

800 mil people could lose their job to automation

THE FUTURE OF DATA

Your movement, data, behavior, conversation are capture through AI

THE FUTURE OF SOCIAL MEDIA

Connect half of entire global population

THE FUTURE OF CYBER SPACE

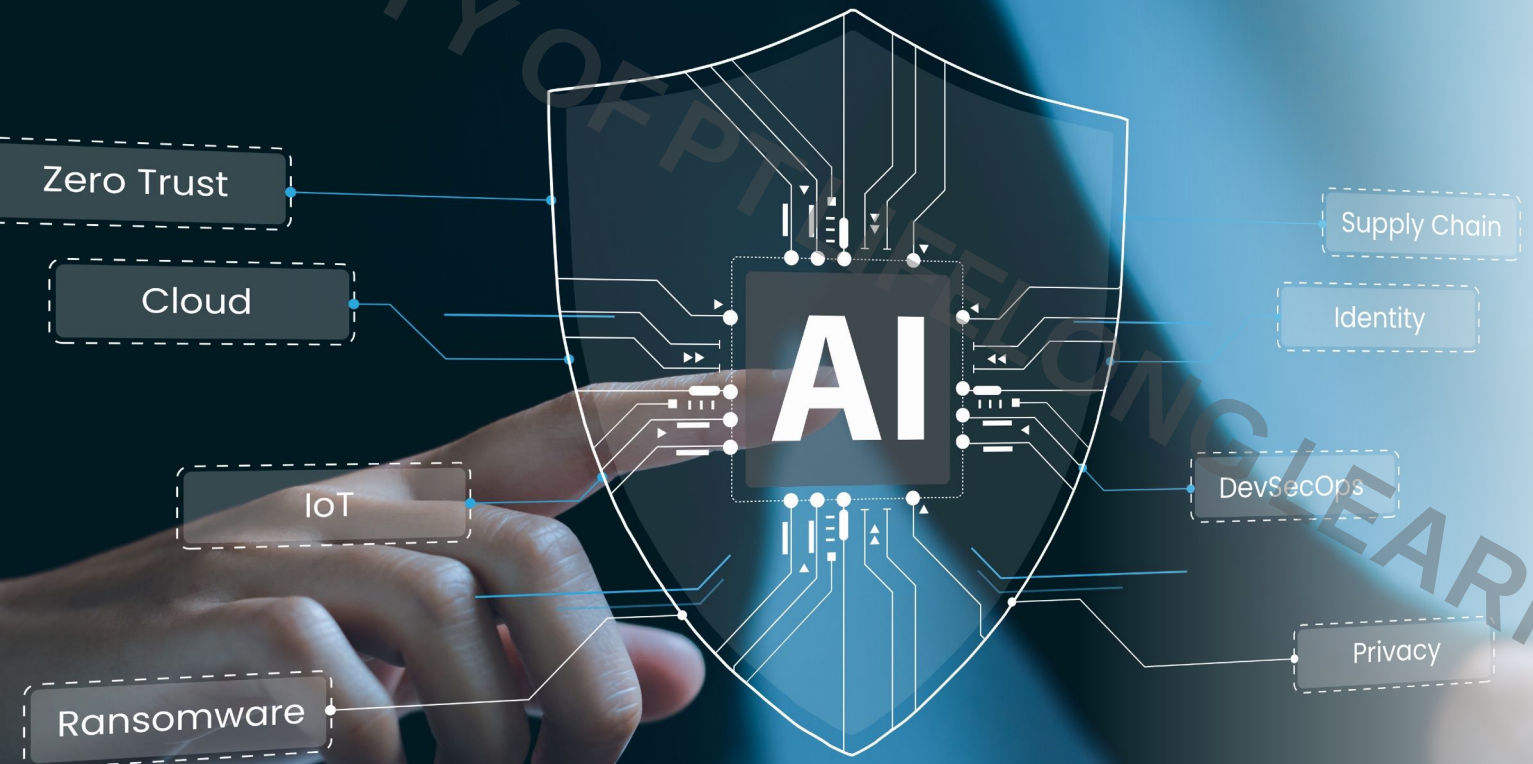
Need a security across to sustain standard of piece, human right & development

Technologies can help make our world fairer, more peaceful, and more just. Digital advances can support and accelerate achievement of each of the 17 Sustainable Development Goals – from ending extreme poverty to reducing maternal and infant mortality, promoting sustainable farming and decent work, and achieving universal literacy.

But technologies can also threaten privacy, erode security and fuel inequality. They have implications for human rights and human agency. Like generations before, we – governments, businesses and individuals – have a choice to make in how we harness and manage new technologies.

EXPERT CERTIFIED LIFELONG LEARNING (MULTIMATICS)

PROPERTY OF PTI TRAINING & MULTIMATICS



PROS of AI

- **Enhanced threat detection**

AI-powered cybersecurity systems can analyse vast amounts of data to identify patterns and anomalies that might indicate a cyberattack. Machine-learning algorithms can learn from past incidents and adapt to new threats, improving the speed and accuracy of threat detection.

- **Improved incident response**

AI can assist in automating incident response processes, allowing for faster and more efficient mitigation of cyber threats. AI algorithms can analyse and prioritize alerts, investigate security incidents, and suggest appropriate response actions to security teams.

CONS of AI

- **Unemployment**
- **Lack of Skill workforce**
- **Misuse of AI Technologies**
- **Privacy Breaches**

Source | https://www.securitymagazine.com/articles/99487-assessing-the-pros-and-cons-of-ai-for-cybersecurityS

CYBER SECURITY ROLE ARE HALF AS LIKELY TO BE IMPACT BY TECH LAYOFF

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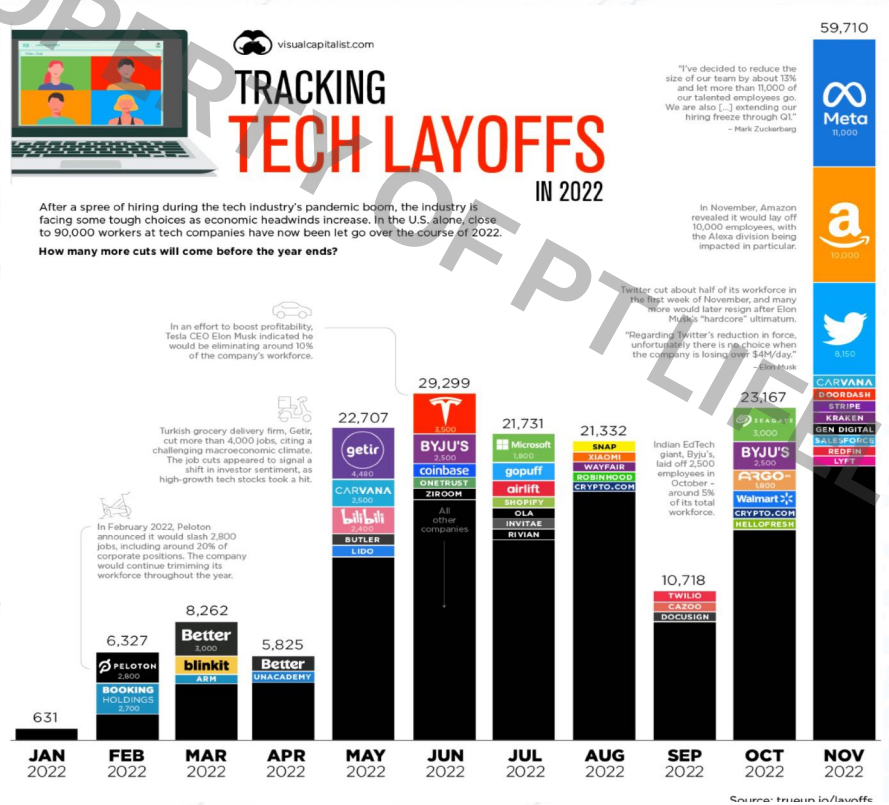

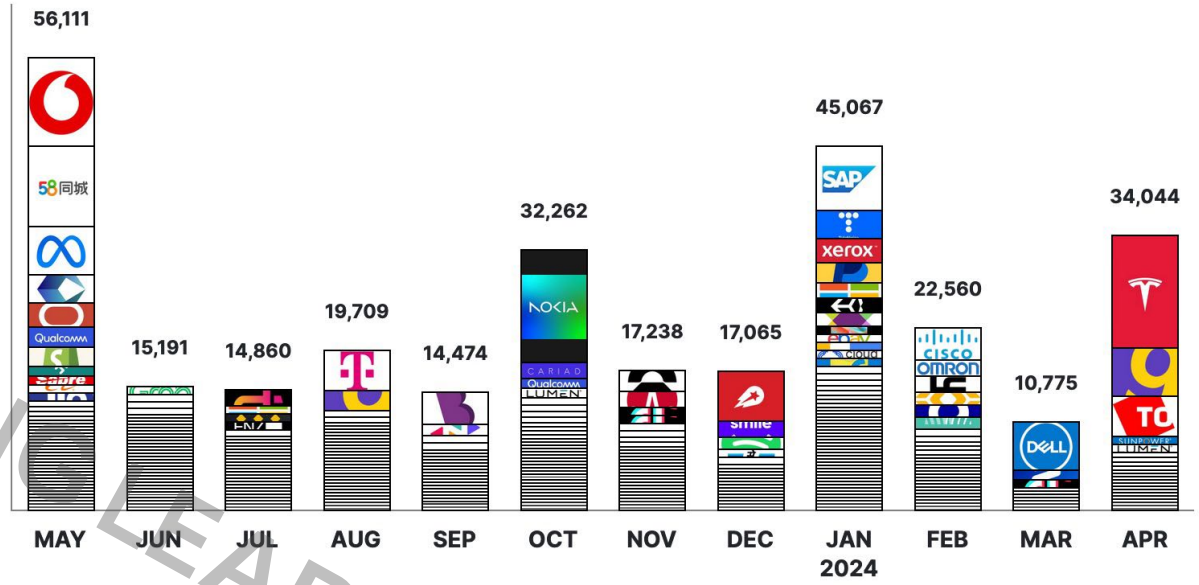

PROBLEM

❖ Downturn in the company?

Times are tough, revenues are down. We miscalculated and over-hired. Therefore, the only logical solution is we need to make a bunch of roles redundant and reset back to a more conservative headcount

❖ Trimming the fat?

Some of the more cynical among us have speculated that this is simply convenient timing to let go of underperforming staff

❖ Keeping shareholders happy

Meta, Google and co have enjoy unconstrained growth since inception. Now what we're seeing for the first time in history is that these companies are having to deal with not just a slowdown, but in some cases an actual reduction in revenue

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Market Insights › Technology

Cybersecurity - Indonesia

Indonesia

HIGHLIGHTS | MARKET DEFINITION | IN-SCOPE / OUT-OF-SCOPE | MARKET STRUCTURE | REPORTS | METHODOLOGY

- Revenue in the Cybersecurity market is projected to reach US$2.41bn in 2024.
- Security Services dominates the market with a projected market volume of US$1.46bn in 2024.
- Revenue is expected to show an annual growth rate (CAGR 2024-2028) of 12.79%, resulting in a market volume of US$3.90bn by 2028.
- The average Spend per Employee in the Cybersecurity market is projected to reach US$16.75 in 2024.
- In global comparison, most revenue will be generated in the United States (US$78,310.0m in 2024).

Notes: Data shown is using current exchange rates and reflects market impacts of the Russia-Ukraine war.

Most recent update: Sep 2023

Source: Statista Market Insights

Highlight

- Revenue in the Cybersecurity market is projected to reach $2.41bn in 2024
- Security services dominates the market with a projected market volume of $1.46bn in 2024

In scope :

- Security Solution
- Professional & Managed security services
- Support & deploy

Out-scope:

- Business Continuity & Disaster Recovery plan
- Physical Security
- Company internal cyber security measure

Source| https://www.statista.com/outlook/tmo/cybersecurity/indonesia

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The Cybersecurity Crisis

Not a question of ‘if’ but ‘When’ !

39
Seconds!
Every 39 seconds, a cyberattack or breach occurs.

4.4
USD Millions
Average of Cost of a Cyber attack or Data Breach

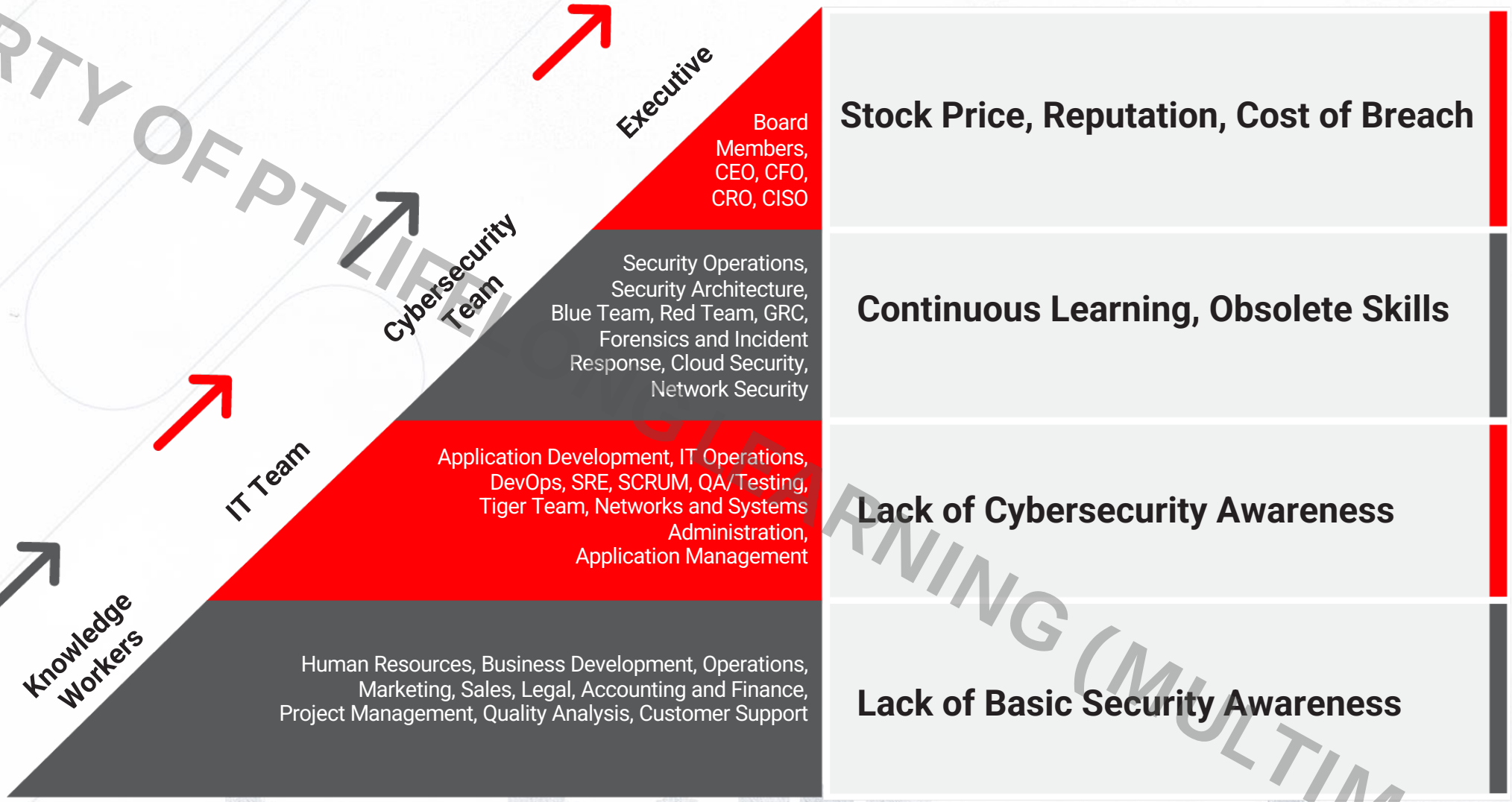
82%
Human Error!
The human element is the most Common threat vector; it was The root cause of 82% of Data breaches.

UPSKILL YOUR FIRST LINE OF DEFENSE

The probability of a cyber-attack comes down by 20% if real-world learning & training is imparted!

~26%
Websites Compromised Every month

Cyber Threats across the Value Chain



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Virtually every business leader has used the popular People Process Technology framework to help manage change in their organization.

PEOPLE

TECHNOLOGY

PROCESS

Driven by Compliance

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Every Region Need Cyber Talent

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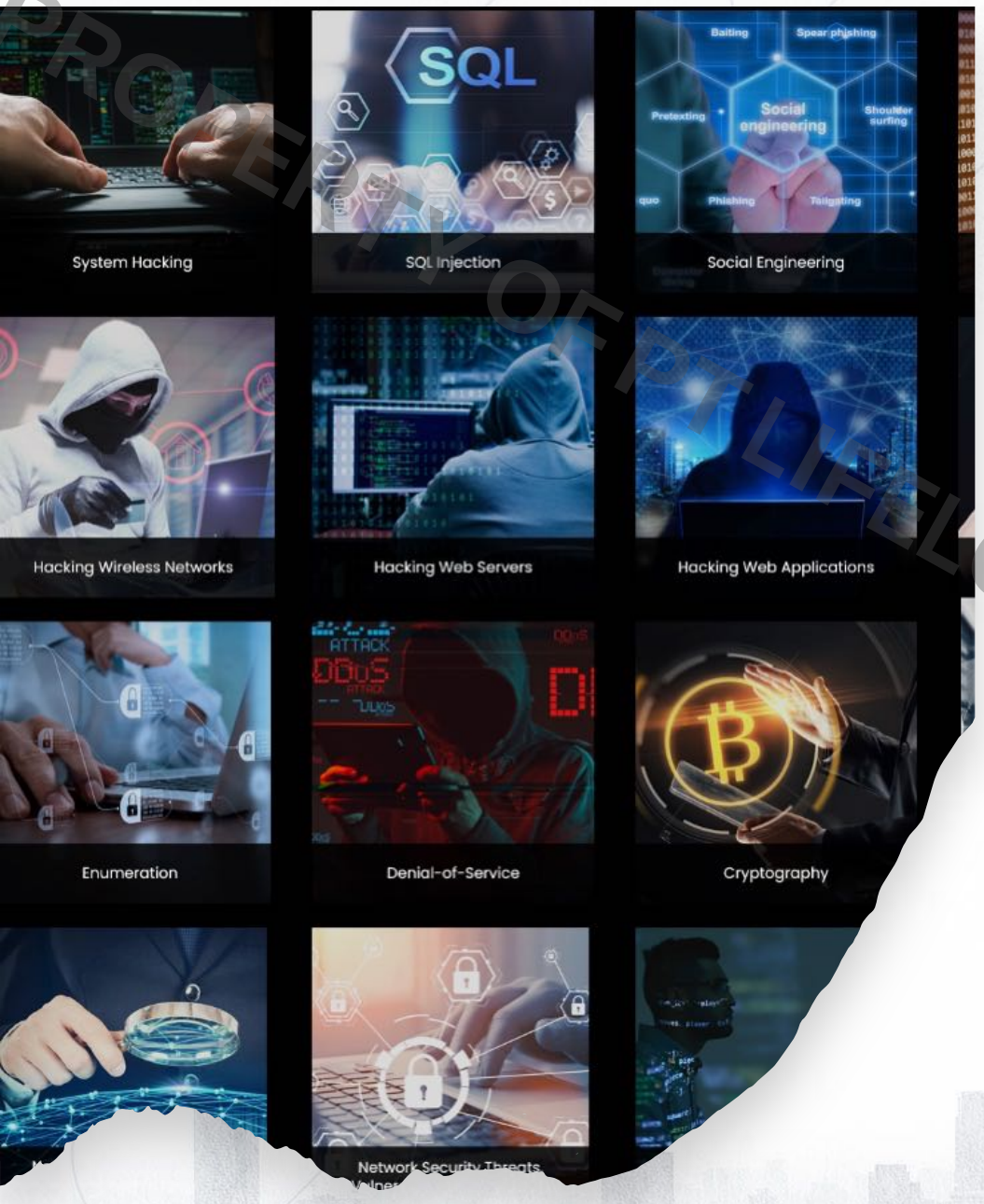

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PROBLEM

Not even readiness across industries

- Cyber Security is now one of the most in-demand industries for professionals.
- This has led many companies to post unrealistic positions, with low budgets and small or non-existent teams.
- Companies that do this often can't afford market leading salaries and their HR departments have little experience recruiting talent into these roles.

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"Employment in computer and information technology occupations is projected to grow 13 percent from 2020 to 2030, faster than the average for all occupations.

These occupations are projected to add about 667,600 new jobs.

Source: U.S. Bureau of Labor Statistics

The need of entry level are increase

- Help desk technician
- Technical Support Specialist
- Desktop support technician
- Cyber Crime Analyst
- Cyber Security Specialist
- Cyber Security Technician
- Incident Intrusion Analyst
- SOC Analyst
- Cyber Forensic Analyst

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How are cybersecurity technicians critical front-line professionals for every business?

Protect Sensitive Information

- Financial Data
- Trade Secrets
- PII

Maintain Network Security

- Firewalls
- IDS & IPS Systems
- Antivirus
- Monitor Network Traffic
- Triage
- First Response

Preventing Cyber Attacks

- Conduct security assessments
- Vulnerability Testing
- Threat Intelligence (Staying up to date)

Ensure Compliance

- Comply with relevant laws & Regulations
- Develop and Implement Policies & Procedures on handling sensitive information

Reputation Management

- Active defense of critical assets
- Avoidance of Cyber Breach
- Protection of Sensitive information
- Reducing the attack surface

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Differentiation

✓Technical Multi-domain Skills

Ethical Hacking	**Network Security**	**Digital Forensics**	**SOC**	**Threat Intelligence & hunting**
Incident Handling	Risk Management	Governance & Compliance	BC & DR	Application Security
Configuration & Asset Management	OT Security	Network Troubleshooting	Network log Monitoring & Analysis	

- ✓ Gaining and Validating Hands-on **Technical Skills**
- ✓ Hands-On Labs with Capture the Flag style Live Range experiences - The C|CT includes 85 hand-on labs (three times more than any entry level certification), ensuring hands-on skill development in the course.
- ✓ A Performance-Based Exam

CYBER SECURITY IS A SKILL. IT'S NOT A BINARY PASS/FAIL

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"I FEAR NOT THE MAN WHO HAS PRACTICED 10,000 KICKS ONCE, BUT I FEAR THE MAN WHO HAS PRACTICED ONE KICK 10,000 TIMES "- BRUCE LEE

CYBER SECURITY

Individuals

- Independent research
- Watch Videos
- Read books
- Compete in cyber competitions
- Attend Conferences
- get training & certifications

Professionals

- Use company platforms
- Attend Training
- Get Certifications
- Subscription Video Platforms (eLearning)

Educators

- Custom Built Programs
- Licensed Programs from Vendors
- Subject to faculty/instructor capabilities
- Constrained by time and money

Clubs & Teams

- Cyber drills
- local competitions
- hackathons
- peer to peer learning

YOUR CYBER SECURITY ROADMAP

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1. Identify your interest
Technical/Managerial/Domain Specific

2. Set Vision
Set goal, plan , direction moving forward

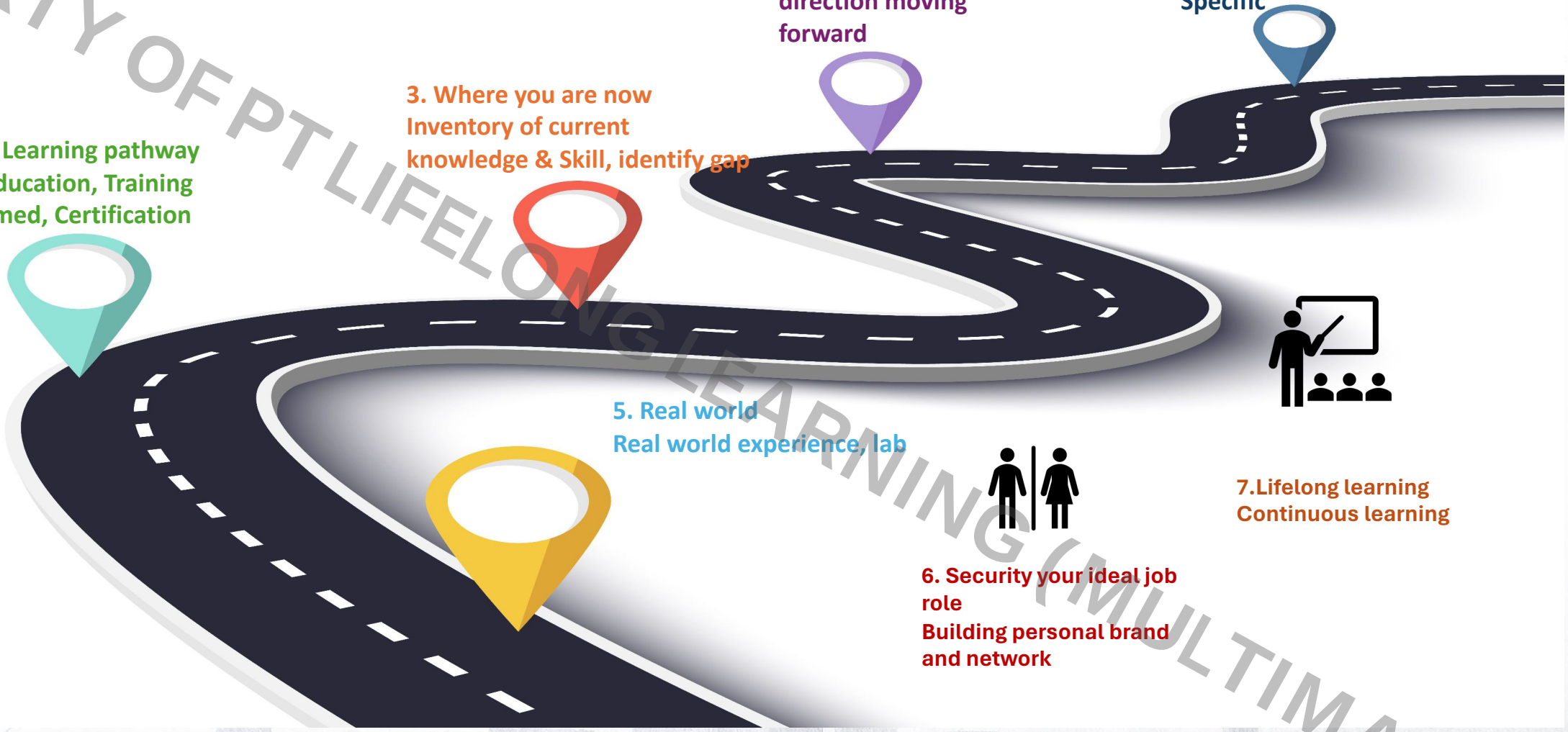
3. Where you are now
Inventory of current knowledge & Skill, identify gap

4. Create Learning pathway
Formal Education, Training programmed, Certification

5. Real world
Real world experience, lab

6. Security your ideal job role
Building personal brand and network

7.Lifelong learning
Continuous learning



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SKILLS OF THE FUTURE | AI and Cybersecurity in the Reskilling and Upskilling Revolution

NICE Framework x ANSI

THE EC-COUNCIL WORKFORCE DEVELOPMENT CAPABILITY

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EC-Council Proprietary Cyber Development Approach

PROPERTY OF EC-COUNCIL LEARNING (MULTIMATICS)

People-Process-Technology

EC-Council's unique Cybersecurity Ecosystem providing comprehensive defence capabilities

Pre-Certification	Formal Training	Persistent Learning
CyberQ	EC-Council University	codered
codered	C|EH, C|HFI, C|CISO, ECSA	Global Cyberlympics, CyberQ
EC-Council aware	CyberQ	Hacker Halted

ATC | Academia | Consulting | Enterprise | Government

Augmented with strong Cybersecurity Consulting expertise and Technology

EC-Council Global Services | EC-Council Cyber Defense | EC-Council aware

Process & Technology Expertise

Established cybersecurity ecosystem rooted in the world's leading technical credentialing and training business with a globally trusted and endorsed brand.

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B2B

Channel/Academia
- Delivery of cybersecurity training and certification programs.

ECCU
- Undergraduate and graduate certificates delivered through ECC's online university.

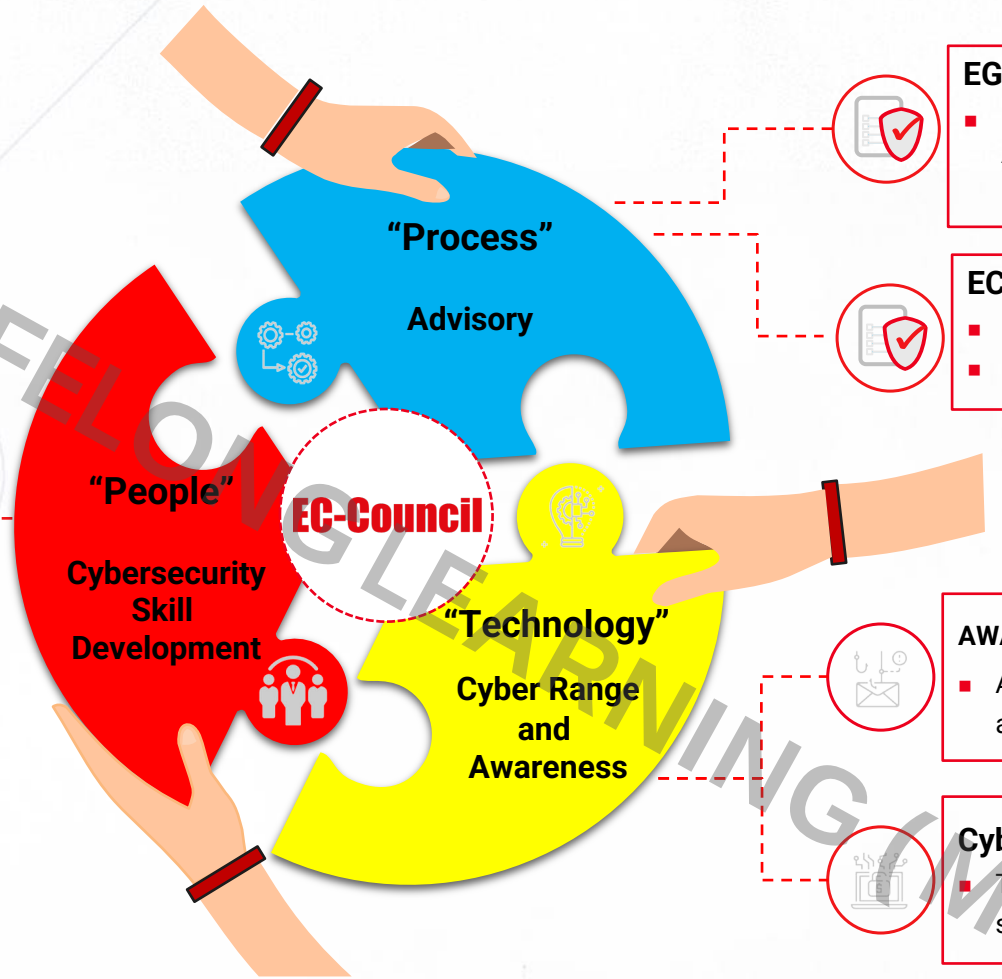
B2C

iClass
- ECC's direct training division, delivering events and cert. courses online/in person.

MasterClass
- Instructor-led training programs.

Subscription

EC-Council Learning
- Subscription-based enterprise products



EGS (ECC Global Services)
- Cyber Security Consulting & Advisory

ECCD (EC Cyber Defense)
- Security Operations Center
- Managed Security Services

AWARE
- Automated Phishing, SMShing and Vishing tool

CyberQ
- True-to-life cyber attack simulation for Red / Blue team

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EC-Council Group

EC-Council Group is a multidisciplinary institution of global Information Security professional services. EC-Council aims at creating knowledge, facilitating innovation, executing research, implementing development, and nurturing subject matter experts in order to provide their unique skills and niche expertise in cybersecurity. The world's leading organizations, including the **Pentagon, White House, US Army, US Navy, DoD, FBI**, Microsoft, IBM, and the United Nations, have trusted EC-Council to develop and advance their security infrastructure.

400,000+
CERTIFIED MEMBERS

3,000+
TRAINING PARTNERS & EDUCATION PARTNERS

2,000+
CERTIFIED INSTRUCTORS

3,000+
TOOLS & TECHNOLOGIES

1,000+
SUBJECT MATTER EXPERTS

150+
COUNTRIES

ECC — EC-Council Training & Certification Division of Professional Workforce Development

ECCU — EC-Council University Division of Academic Education

EGE — EC-Council Global Events Division of Conferences, Forums, Summits, Workshops & Industry Awards

EGS — EC-Council Global Services Division of Corporate Consulting & Advisory Services

ECF — EC-Council Foundation Non-Profit Organization for Cyber Security Awareness Increase.

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GLOBALLY RECOGNISED AND ENDORSED

Meeting the international standards in professional training and certification

CNSS

Committee on National Security Systems

NSA

National Security Agency USA

NICE

National Initiative for Cybersecurity Education

NCSC

National Cybersecurity Center, UK (part of GCHQ)

ANSI 17024

American National Standards Institute

DoD

Department of Defense Directive 8140

CREST

Pentesting & SOC Accreditation

.....ACE Accreditation USA , Hong Kong Monetary Association, Singapore CET, Malaysia KOMLEK, Philippines Cyber Battalion.....

PROPERTY OF PT LIFELONG LEARNING (M) TIMATICS

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EC-Council
Building A Culture Of Security

CHIEF INFORMATION OFFICER
U.S. DEPARTMENT OF DEFENSE

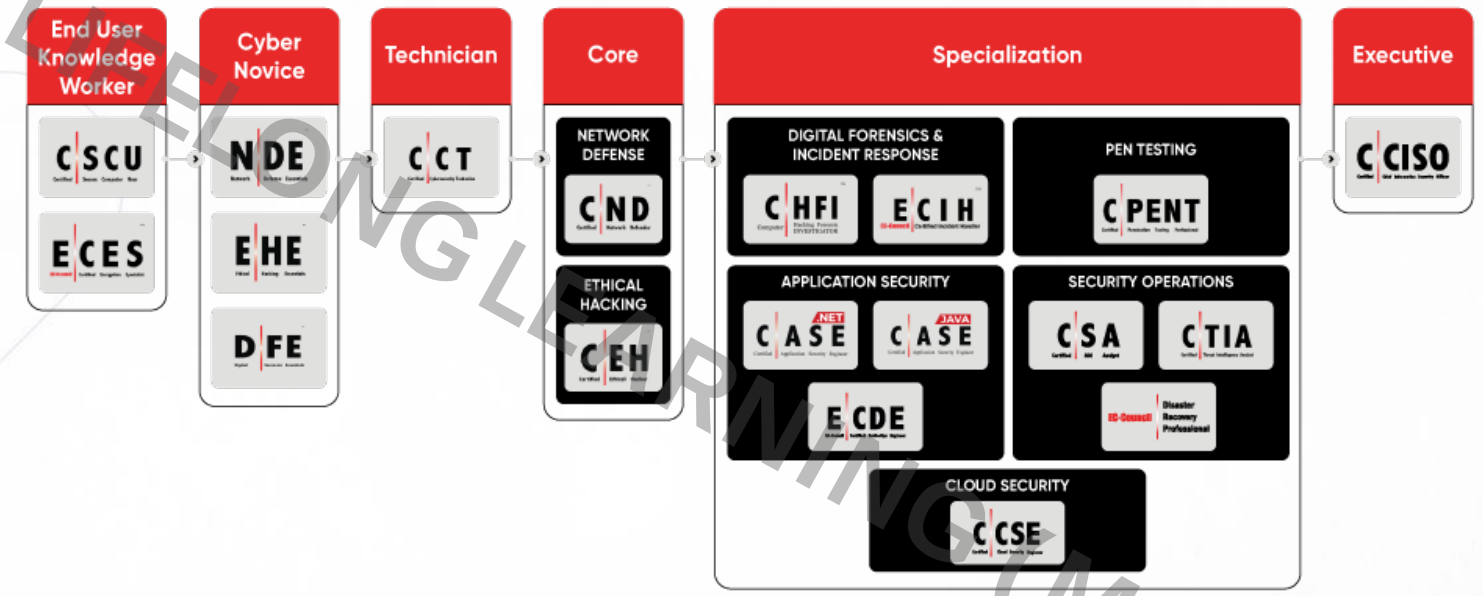
DCWF Roles and EC-Council Certifications:

Role	Basic	Intermediate	Advanced
(211) Forensic Analyst		C|HFI	
(212) Cyber Defense Forensics Analyst		C|HFI	
(221) Cyber Crime Investigator		C|HFI	
(411) Technical Support Specialist		C|ND	
(422) Data Analyst			C|CISO
(441) Network Operations Specialist	C|ND	C|EH	
(451) System Administrator	C|ND		
(461) Systems Security Analyst	C|ND		
(511) Cyber Defense Analyst	C|EH		
(521) Cyber Defense Infrastructure Support Specialist	C|ND	C|EH	
(541) Vulnerability Assessment Analyst	C|EH		
(611) Authorizing Official/Designating Representative			C|CISO
(612) Security Control Assessor			C|CISO
(631) Information Systems Security Developer	C|ND		
(632) Systems Developer	C|ND		
(641) Systems Requirements Planner	C|ND		
(651) Enterprise Architect	C|ND		
(661) R&D Specialist			C|EH
(671) System Testing & Evaluation Specialist	C|ND	C|EH	
(722) Information Systems Security Manager		C|CISO	
(751) Cyber Workforce Developer and Manager			C|CISO
(752) Cyber Policy and Strategy Planner			C|CISO
(801) Program Manager			C|CISO
(802) IT Project Manager			C|CISO
(803) Product Support Manager			C|CISO
(804) IT Investment/Portfolio Manager			C|CISO
(805) IT Program Auditor			C|CISO
(901) Executive Cyber Leadership			C|CISO

https://www.eccouncil.org/ec-council-in-news/us-dod-directive-8140-broadens-approval-of-ec-council-certifications-to-encompass-31-critical-job-roles-within-the-dod-cyberspace-workforce-framework-dcwf/

TRAINING & CERTIFICATION

Professional Workforce Development thru Certifications



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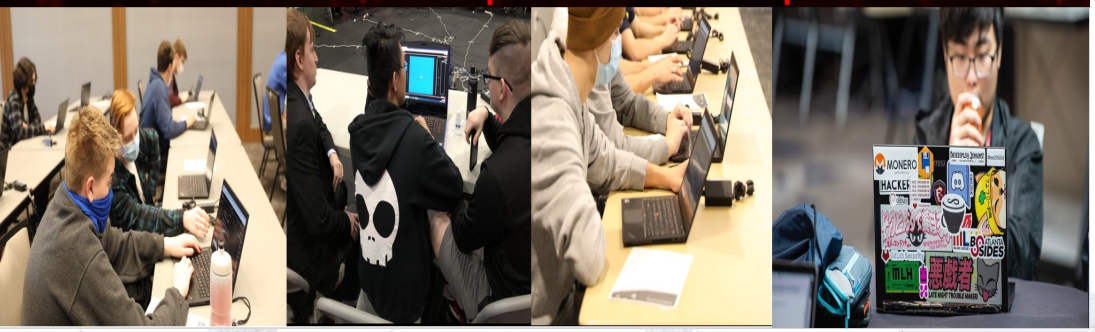
SKILLS OF THE FUTURE | AI and Cybersecurity in the Reskilling and Upskilling Revolution

CAPTURE THE FLAG COMPETITION USA

Be an Influencer and Help More Students Compete in CTFs!



ultimatics EC-Council CERTNEXUS

CyberQ

Autonomous, Advanced True-to-life Cyber Range Platform

- User & Team Management
- Single Target Experiences
- Multi-Target Experiences
- 100% Cloud Native
- Cyber Competitions
- Exercise Library
- Skill Based Flag Management
- Course & Exercise Management
- Marketplace for cyber exercises

Build Cybersecurity Skills Mastery with the Industry's Most Advanced Cyber Range Platform-as-a-service

SKILLS OF THE FUTURE | AI and Cybersecurity in the Reskilling and Upskilling Revolution

PROTECTED LONG LEARNING (MULTIMATICS)

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DEMAND BY EMPLOYER, RESPECTED BY PEERS

EC-Council

SKILLS OF THE FUTURE | AI and Cybersecurity in the Reskilling and Upskilling Revolution

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ultimatics turn knowledge into performance EC-Council CERTNEXUS

Thank You