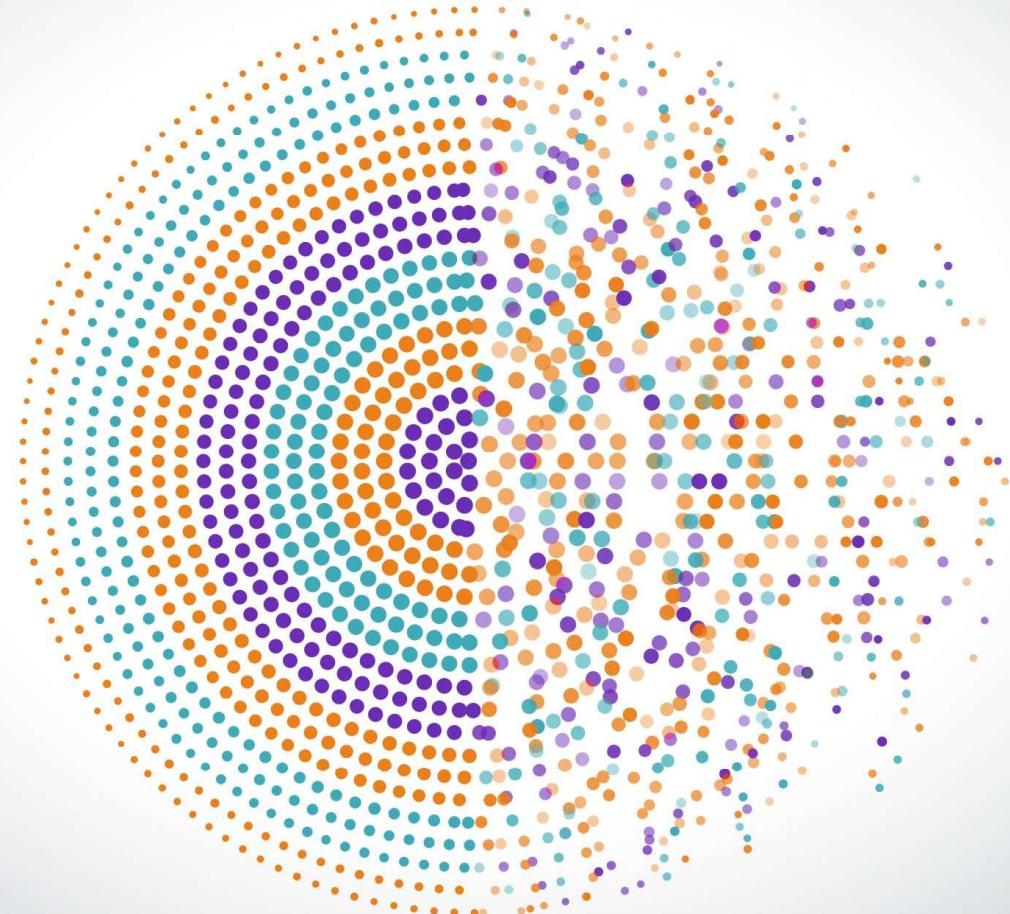


THE IMPACT OF THE
SKILLS GAP ON
EFFECTIVE
INFORMATION
SECURITY

THE SKILLS GAP



INTRODUCTION

“Global cybersecurity job vacancies grew by 350 percent, from one million openings in 2013 to 3.5 million in 2021.”

Steve Morgan, Editor-in-Chief for Cybercrime Magazine

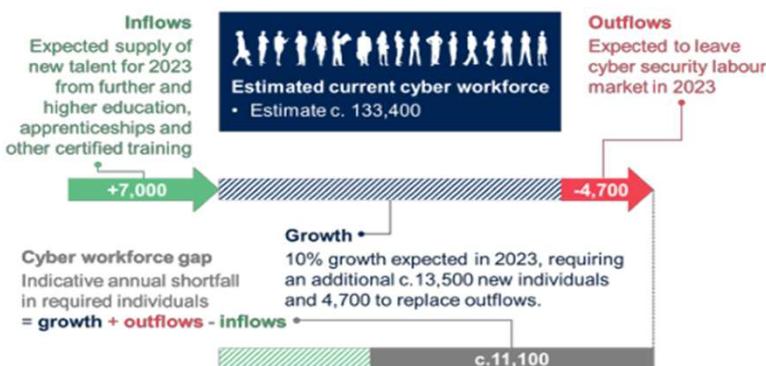
“The threat landscape has gotten significantly more complex Unfortunately, many security leaders are having a difficult time trying to keep up due to a lack of skilled resources.”

eSentire



INDUSTRY TRENDS

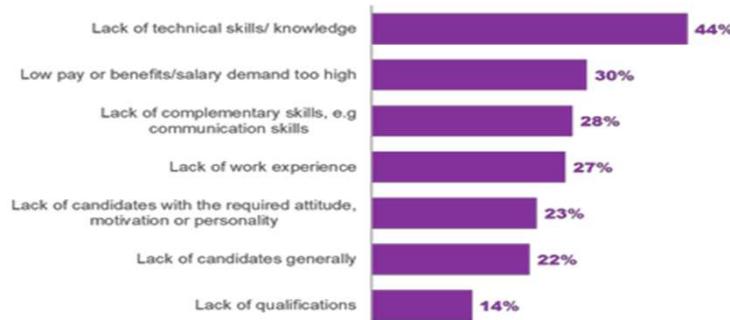
- eSentire – Official Cybersecurity Jobs Report (2013, 2021, 2023)
- Department for Science, Information and Technology - Cyber security skills in the UK labour market (annually)
- BSS - How CISOs can succeed in a challenging landscape – Reimagining information security resilience and recovery in 2023
- Fortinet - 2023 Cybersecurity Skills Gap



Summary Diagram of the Cyber Workforce Gap, DCMS, 2023

WHAT DOES RECRUITMENT LOOK LIKE?

- Flexibility
- Soft/technical skills
- Range of skill levels
- Qualifications
- Experience



Most common reasons offered by cyber sector businesses for having hard-to-fill vacancies

CORPORATE EXPECTATIONS VS. AVAILABILITY AND EFFECTIVE RETENTION

- Knowledge but no skills
- Experience and/or knowledge but no formal qualifications
- Job satisfaction
- Personal note!

Data Security and Protection Technical Compliance Officer

Person Specification

Qualifications

Essential

- GCSE English and Maths (or equivalent)
- Educated to Degree Level or equivalent experience (Substantial practical Data Protection and/or technical Cyber Security Support).
- Advanced Computer and IT skills to include: word, PowerPoint, excel.
- Project management tools / methodology.
- Evidence of continuing professional development

Salary

£28,407 to £34,581 a year per annum pro rata

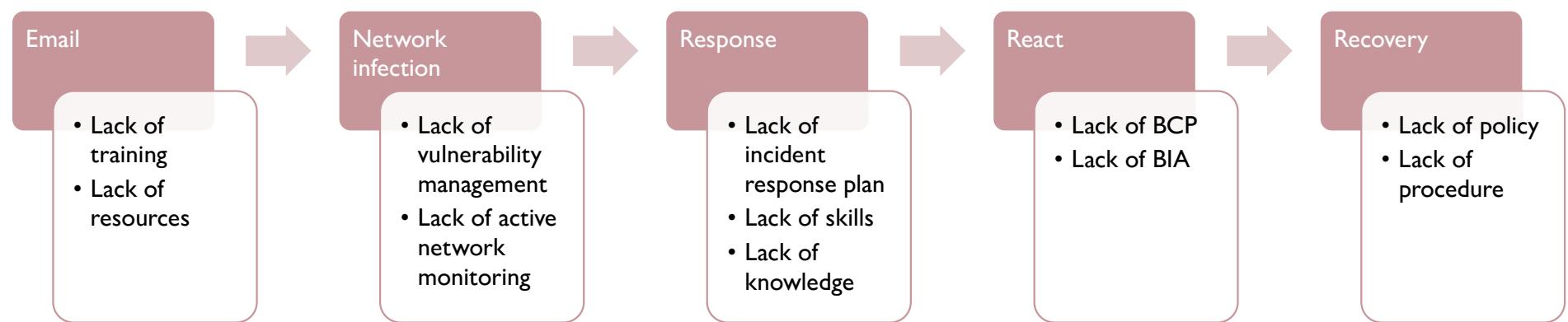
Institute of Student Employers (ISE) research indicates that the average graduate salary in the UK sits at £33,229.

WHAT ARE THE EFFECTS?

- Lack of:
 - Resources;
 - Knowledge;
 - Appropriate skills.
- Absent:
 - Policies;
 - Procedures.
- More vulnerabilities
- More opportunity to realise risks;
- More system interruption.

“Predefining incident responses enables the organization [sic] to react to a detected incident quickly and effectively, without confusion or wasted time and effort” (Mattord and Whitman, 2019)

EFFECTS IN PRACTICE



WHAT CAN BE DONE?

- Nurture the talent!
- Training/education
- Positive work environment
- Equality/diversity
- Industry partnerships



CONCLUSION

- Current skills gap, in the UK and internationally, is huge
- InfoSec is a vast field, requiring professionals with a wide range of skill sets, from strategic to operational levels
- Skills gaps within organisations have the potential to create large amounts of risk, putting InfoSec in danger
- Best way to address gap is to nurture existing talent, continue to encourage future talent and place more importance in InfoSec management within an organisation

QUESTIONS FOR CONSIDERATION

1. What is the number of vacancies according to eSentire?
2. What are the 3 different types of planning?
3. According to research, what percentage of small businesses fail to recover following an incident?

REFERENCES/FURTHER READING

- BSS (2023) *How CISOs can succeed in a challenging landscape – Reimagining information security resilience and recovery in 2023*. Available at <https://www.bss.uk.com/insights/industry-news/new-ciso-research-sets-out-priorities-challenges-and-tips-for-success-in-a-challenging-landscape> (Accessed: 22 October 2023).
- Department for Science, Innovation & Technology (2023) *Cyber security skills in the UK labour market 2023*. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1173325/Cyber_security_skills_in_the_UK_labour_market_2023.pdf (Accessed: 22 October 2023).
- eSentire (2023) *2023 Cybersecurity Jobs Report*. Available at: <https://www.esentire.com/resources/library/2023-official-cybersecurity-jobs-report> (Accessed: 22 October 2023).
- Fortinet Training Institute (2023) *2023 Cybersecurity Skills Gap*. Available at https://www.fortinet.com/content/dam/maindam/PUBLIC/02_MARKETING/08_Report/2023-cybersecurity_skills_gap_report_final.pdf (Accessed: 22 October 2023)
- Help Net Security (2023) *Cybersecurity pros battle discontent amid skills shortage*. Available at <https://www.helpnetsecurity.com/2023/09/07/cybersecurity-pros-discontent-skills-shortage/> (Accessed: 22 October 2023)
- Johnson III, R (2019) *60 Percent Of Small Companies Close Within 6 Months Of Being Hacked*. Available at: <https://cybersecurityventures.com/60-percent-of-small-companies-close-within-6-months-of-being-hacked/> (Accessed: 22 October 2023)
- Mattord, H.J. and Whitman, M.E. (2019) *Management of information security*. 6th edn. Boston, Massachusetts: Cengage.
- Smith, M (2023) *Graduate salaries in the UK*. Available at: <https://luminate.prospects.ac.uk/graduate-salaries-in-the-uk> (Accessed 22 October 2023)
- Zync (2023) *Bridging the Cybersecurity Skills Gap: Nurturing Talent for a Secure Digital Future*. Available at: <https://www.linkedin.com/pulse/bridging-cybersecurity-skills-gap-nurturing-talent-secure-digital/> (Accessed: 22 October 2023)