Abstract:
The Life and Times of Cybersecurity Professionals

By Jon Oltsik, ESG Senior Principal Analyst
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A Cooperative Research Project by ESG and ISSA
Introduction

Research Objectives

In order to assess the experiences, careers, and opinions of cybersecurity professionals, ESG/ISSA surveyed 343 cybersecurity professionals representing organizations of all sizes, across all industries and geographic locations. Survey respondents were also ISSA members.

The survey and overall research project were designed to answer the following questions about:

• Cybersecurity careers
  1. How long had survey respondents worked as cybersecurity professionals?
  2. Why did they become cybersecurity professionals?
  3. How were they developing and advancing their careers?
  4. Were they happy at their jobs and with their career choices?
  5. What is necessary for cybersecurity job satisfaction? Alternatively, what alienates cybersecurity professionals and causes them to look for another job?
  6. Are cybersecurity professionals being actively recruited to change jobs?
  7. Are cybersecurity professionals experiencing burnout?

• Skills development
  1. How important is continuing skills development in the minds of cybersecurity professionals?
  2. How do cybersecurity professionals actually develop their skills? What works and what doesn’t work?
  3. Do the responsibilities and workload associated with cybersecurity jobs get in the way of skills development?
  4. Do the organizations cybersecurity professionals work at provide adequate training, skills development programs, or services for career advancement?

• Cybersecurity organizational considerations
  1. Do organizations have CISOs or similar positions in place?
  2. What makes CISOs successful?
  3. Why do CISOs change jobs so often?

• Security incidents and vulnerabilities
  1. Have organizations suffered security incidents? If so, which types of security incidents?
  2. What factors contributed to these incidents?
  3. Do cybersecurity professionals believe that organizations are vulnerable to cyber-attacks?
4. Do cybersecurity professionals believe that their employers are vulnerable to cyber-attacks?

- **The cybersecurity skills shortage**
  1. Do cybersecurity professionals believe that their organization has been impacted by the global cybersecurity skills shortage?
  2. If so, in what way?
  3. In which areas do their organizations have the biggest cybersecurity skills deficits?

- **Cybersecurity activities**
  1. What types of cybersecurity actions have their organizations taken over the past few years?
  2. What additional actions should their organizations take to help improve cybersecurity overall?

Survey participants represented a wide range of industries including health care, IT, financial services, manufacturing, business services, communications and media, and government. For more details, please see the Research Methodology and Respondent Demographics sections of this report.
Research Methodology

To gather data for this report, ESG conducted an online survey of security and IT professionals from the ISSA member list (and beyond) in North America, Europe, Central/South America, Africa, and Asia, and Australia between August 7, 2017 and September 13, 2017.

After filtering out unqualified respondents, removing duplicate responses, and screening the remaining completed responses (on a number of criteria) for data integrity, we were left with a final total sample of 343 security and IT professionals.

Please see the Respondent Demographics section of this report for more information on these respondents.

Note: Totals in figures and tables throughout this report may not add up to 100% due to rounding.
Respondent Demographics

The data presented in this report is based on a survey of 343 qualified respondents and cybersecurity professionals. The following figures detail the demographics of the respondent base at an individual and organizational level.

Respondents by Current Position

Respondents’ current role is shown in Figure 1.

Figure 1. Respondents by Current Position

Which of the following best describes your current position within your organization?
(Percent of respondents, N=343)

- CISO, CSO or similar senior cybersecurity position, 18%
- Security administrator, 15%
- IT staff, 15%
- VP-level position in an information security department, 4%
- Director-level position in an information security department, 12%
- IT management, 11%
- Other, 24%

Source: Enterprise Strategy Group and ISSA, 2017

Respondents by Region

The regional breakdown of respondents is shown in Figure 2.

Figure 2. Respondents by Region

Please indicate where you are based (i.e., where you live and work). (Percent of respondents, N=343)

- North America, 85%
- Europe, 7%
- Central/South America, 3%
- Asia, 3%
- Africa, 1%

Source: Enterprise Strategy Group and ISSA, 2017
Respondents by Number of Employees

The number of employees in respondents’ organizations is shown in Figure 3.

Figure 3. Respondents by Number of Employees

How many total employees does your organization have worldwide? (Percent of respondents, N=343)

- Less than 500, 33%
- 1,000 to 2,499, 12%
- 2,500 to 4,999, 9%
- 5,000 to 9,999, 9%
- 10,000 to 19,999, 8%
- 20,000 or more, 21%

Source: Enterprise Strategy Group and ISSA, 2017

Respondents by Industry

Respondents were asked to identify their organization’s primary industry. In total, ESG received completed, qualified respondents from individuals in 19 distinct vertical industries, plus an “Other” category. Respondents were then grouped into the broader categories shown in Figure 4.

Figure 4. Respondents by Industry

What is your organization’s primary industry? (Percent of respondents, N=343)

- Information Technology, 19%
- Financial (banking, securities, insurance), 16%
- Business Services (accounting, consulting, legal, etc.), 10%
- Government (Federal/National, State/Local), 15%
- Communications & Media, 6%
- Manufacturing, 5%
- Retail/Wholesale, 2%
- Other, 17%

Source: Enterprise Strategy Group and ISSA, 2017
## Contents

List of Figures ......................................................................................................................... 3
List of Tables .............................................................................................................................. 3
Executive Summary .................................................................................................................. 4
  Report Conclusions ............................................................................................................... 4
Introduction ............................................................................................................................... 7
  Research Objectives ............................................................................................................. 7
Research Findings .................................................................................................................... 9
  The ISSA Survey Respondents .............................................................................................. 9
  The Cybersecurity Professional ............................................................................................ 11
Cybersecurity Certifications ..................................................................................................... 16
  Cybersecurity Jobs ................................................................................................................ 18
  Cybersecurity Leadership ...................................................................................................... 22
  The State of Cybersecurity ................................................................................................... 26
  The Cybersecurity Skills Shortage ......................................................................................... 32
Cybersecurity Improvement ..................................................................................................... 36
Conclusion ................................................................................................................................. 37
  Implications for Cybersecurity Professionals ...................................................................... 37
  Research Implications for Employers ................................................................................. 38
Research Methodology ........................................................................................................... 39
Respondent Demographics ....................................................................................................... 40
  Respondents by Current Position ......................................................................................... 40
  Respondents by Region .......................................................................................................... 40
  Respondents by Number of Employees ............................................................................... 41
  Respondents by Industry ....................................................................................................... 41
List of Figures

Figure 1. Length of Time Employed as a Cybersecurity Professional and at Current Organization/Job ........................................ 9
Figure 2. Number of Different Organizations Respondents Have Worked for as a Cybersecurity Professional .......................... 10
Figure 3. Phase of ISSA Cybersecurity Career Lifecycle ................................................................................................. 10
Figure 4. Did Respondents Start Career as an IT Professional? ............................................................................................ 11
Figure 5. Factors Most Helpful in Moving to a Cybersecurity Career .................................................................................. 12
Figure 6. Reasons for Becoming a Cybersecurity Professional ............................................................................................ 13
Figure 7. Do Respondents Believe They Have a Well-defined Career Path? ........................................................................ 14
Figure 8. Most Helpful Factors in Getting to the Next Level Career-wise ........................................................................... 14
Figure 9. Most Effective Methods for Increasing KSAs ......................................................................................................... 15
Figure 10. Cybersecurity Certifications Achieved ............................................................................................................... 16
Figure 11. Most Important Certifications to Get a Job ........................................................................................................... 17
Figure 12. Factors Determining Job Satisfaction .................................................................................................................. 18
Figure 13. Level of Satisfaction with Current Job ................................................................................................................ 19
Figure 14. Training Provided to Keep Up with Business and IT Risk .................................................................................... 20
Figure 15. Respondents’ Sentiment on Various Cybersecurity Topics .................................................................................... 21
Figure 16. Do Organizations Have a CISO/CSO? .................................................................................................................. 22
Figure 17. To Whom Does the CISO/CSO Report? .................................................................................................................. 22
Figure 18. Is CISO an Active Participant with Executive Management and Board of Directors? ............................................. 23
Figure 19. Is CISO Level of Participation with Executive Management and Board of Directors Adequate? ............................ 23
Figure 20. Most Important Qualities of a Successful CISO .................................................................................................... 24
Figure 21. Factors Likely to Cause CISOs to Leave an Organization ................................................................................... 25
Figure 22. Actions Taken around Cybersecurity Over the Past Two Years ............................................................................. 26
Figure 23. Frequency of Security Incidents over the Past Two Years ...................................................................................... 27
Figure 24. Biggest Contributors to Security Events Experienced ........................................................................................ 28
Figure 25. Results of Security Incidents ................................................................................................................................ 29
Figure 26. Vulnerability of Most Organizations to a Significant Cyber-attack or Data Breach ................................................... 30
Figure 27. Biggest Cybersecurity Challenges ......................................................................................................................... 31
Figure 28. Level of Impact of Cybersecurity Skills Shortage .................................................................................................. 32
Figure 29. How Cybersecurity Skills Shortage Has Impacted Organizations ....................................................................... 33
Figure 30. Area(s) with Biggest Shortage of Cybersecurity Skills .......................................................................................... 34
Figure 31. Frequency of Solicitation by Job Recruiters ............................................................................................................. 35
Figure 32. Actions That Would Provide the Most Cybersecurity Benefits to Organization ......................................................... 36
Figure 33. Respondents by Current Position .......................................................................................................................... 40
Figure 34. Respondents by Region ............................................................................................................................................ 40
Figure 35. Respondents by Number of Employees ................................................................................................................ 41
Figure 36. Respondents by Industry .......................................................................................................................................... 41

List of Tables

Table 1. Factors Most Helpful in Moving to a Cybersecurity Career, by Year ................................................................. 12
Table 2. Actions Taken around Cybersecurity by Year ........................................................................................................ 27
Table 3. Biggest Contributors to Security Events Experienced by Year ............................................................................. 29
Table 4. How Cybersecurity Skills Shortage Has Impacted Organizations, by Year ......................................................... 34
The Information Systems Security Association (ISSA) is the community of choice for international cybersecurity professionals dedicated to advancing individual growth, managing technology risk, and protecting critical information and infrastructure. ISSA members and award winners include many of the industry's notable luminaries and represents a broad range of industries - from communications, education, healthcare, manufacturing, financial and consulting to IT - as well as federal, state and local government departments and agencies. Through regional chapter meetings, conferences, networking events and content, members tap into a wealth of shared knowledge and expertise. Visit ISSA on the web at www.issa.org and follow us on Twitter at @ISSAINTL.

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