Abstract:
The Life and Times of Cybersecurity Professionals

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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%
- Director-level position in an information security department, 12%
- IT management, 11%
- VP-level position in an information security department, 4%
- 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

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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%
- 2,500 to 4,999, 9%
- 1,000 to 2,499, 12%
- 500 to 999, 8%
- 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%
- Government (Federal/National, State/Local), 15%
- Business Services (accounting, consulting, legal, etc.), 10%
- Health Care, 10%
- Communications & Media, 6%
- Manufacturing, 5%
- Retail/Wholesale, 2%
- Other, 17%

Source: Enterprise Strategy Group and ISSA, 2017
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