



CERT[©] Insider Threat Incident Corpus Case Study – Parent & Subsidiary Organizations

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DM20-0342

Overview



Project Basis

Summary Statistics

Case Studies

Wrap-Up

Project Basis

Subsidiary 3
(Incident #454)

Subsidiary 1
(Incident #1)

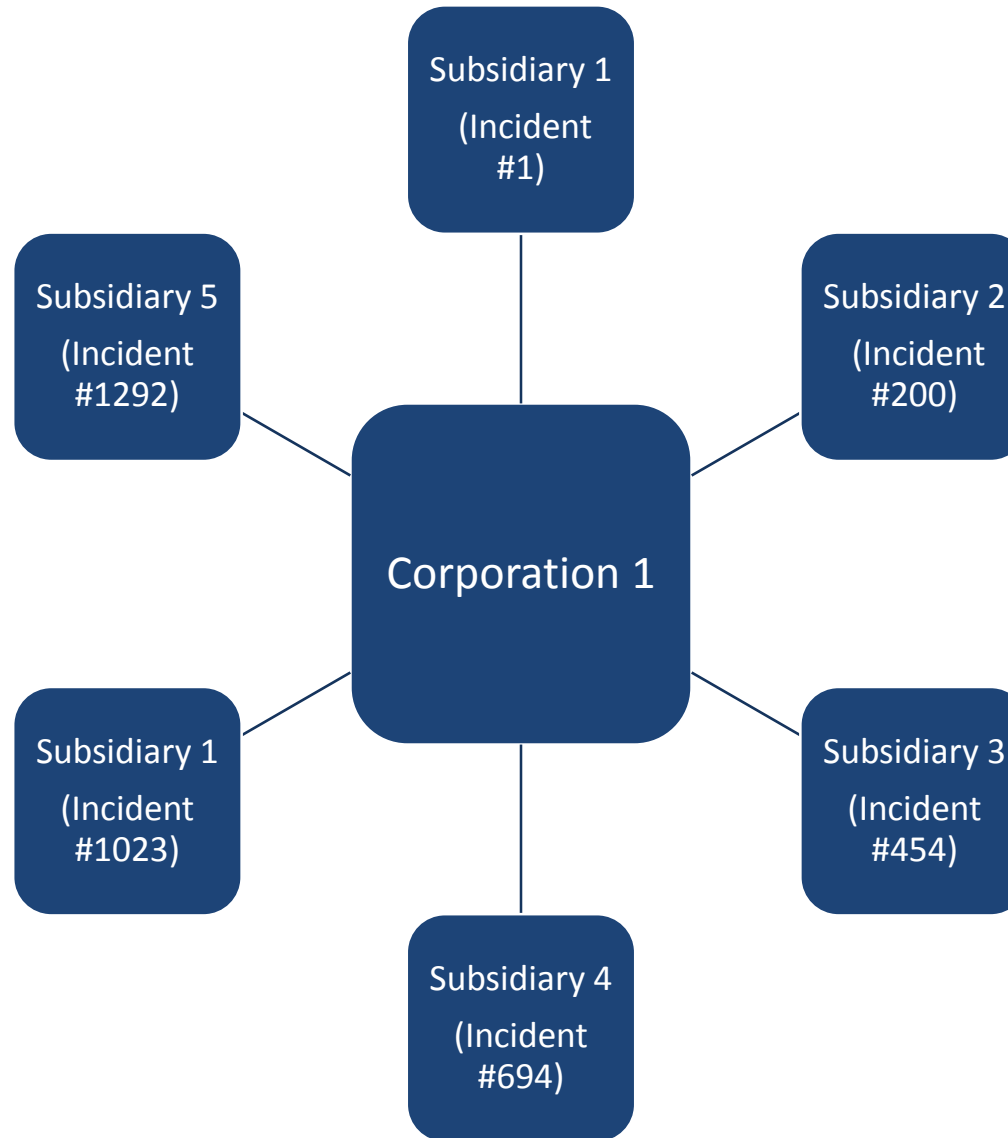
Subsidiary 5
(Incident #1292)

Subsidiary 4
(Incident #694)

Subsidiary 2
(Incident #200)

Subsidiary 1
(Incident #1023)

Project Basis



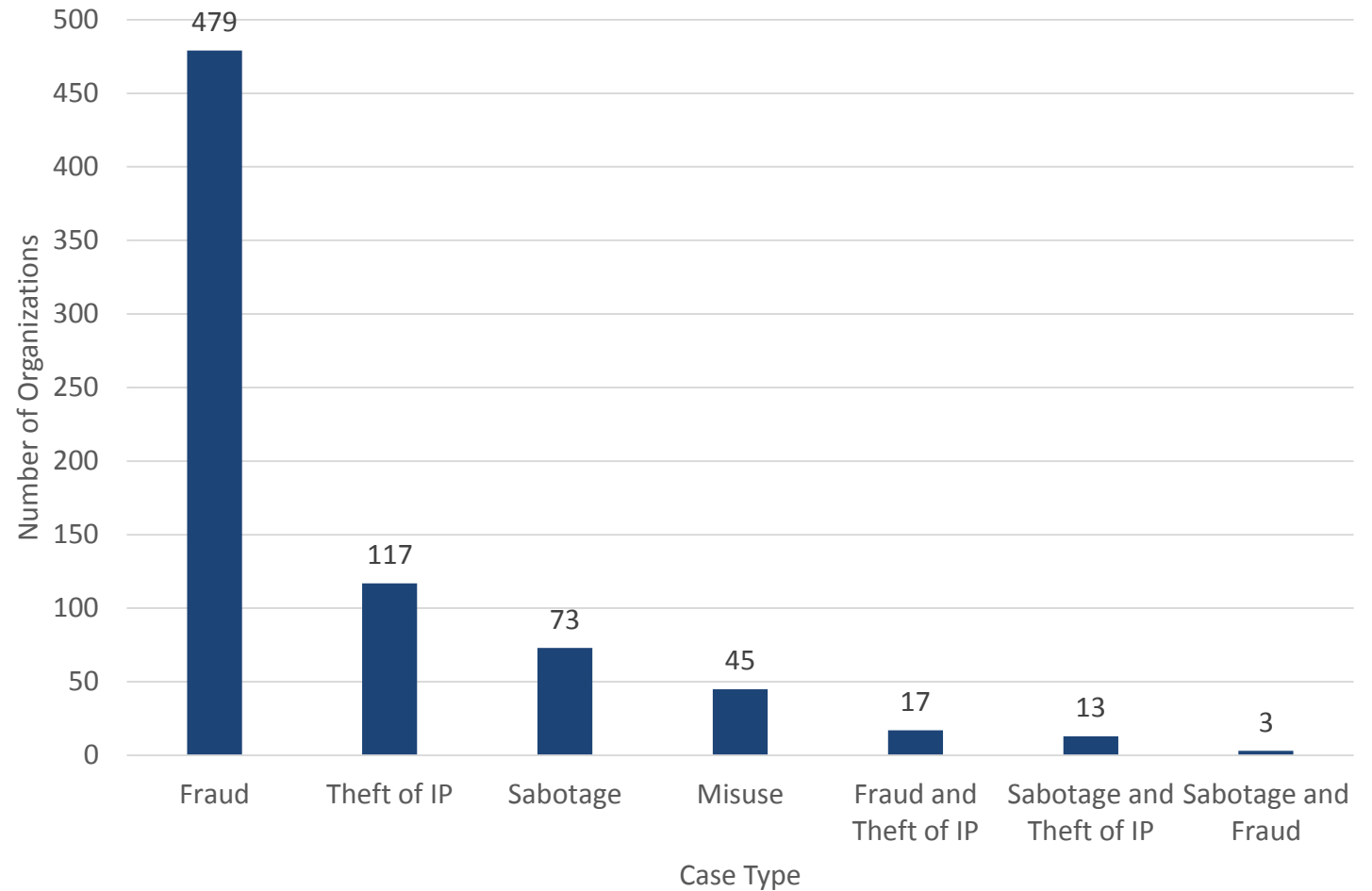


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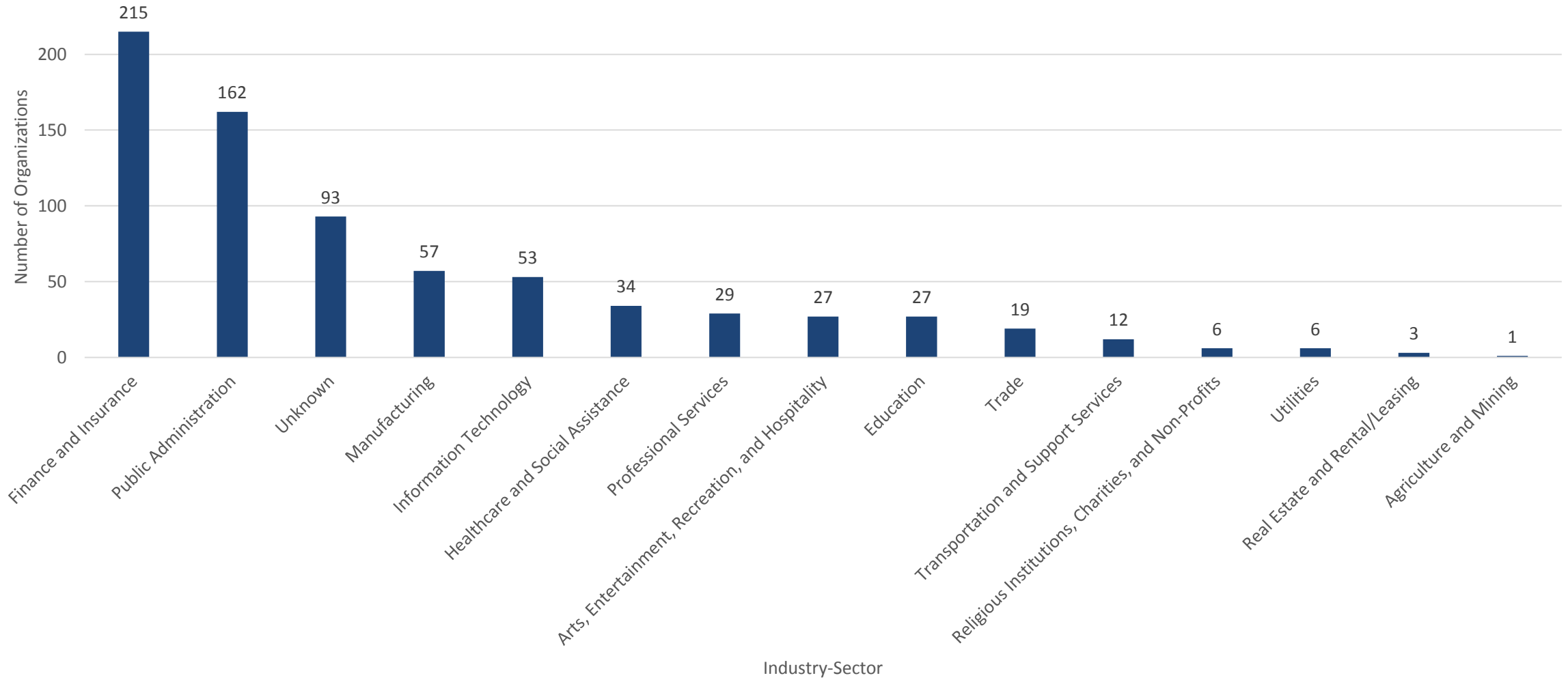
Summary Statistics

Parent Organizations – Quick Facts & Case Type

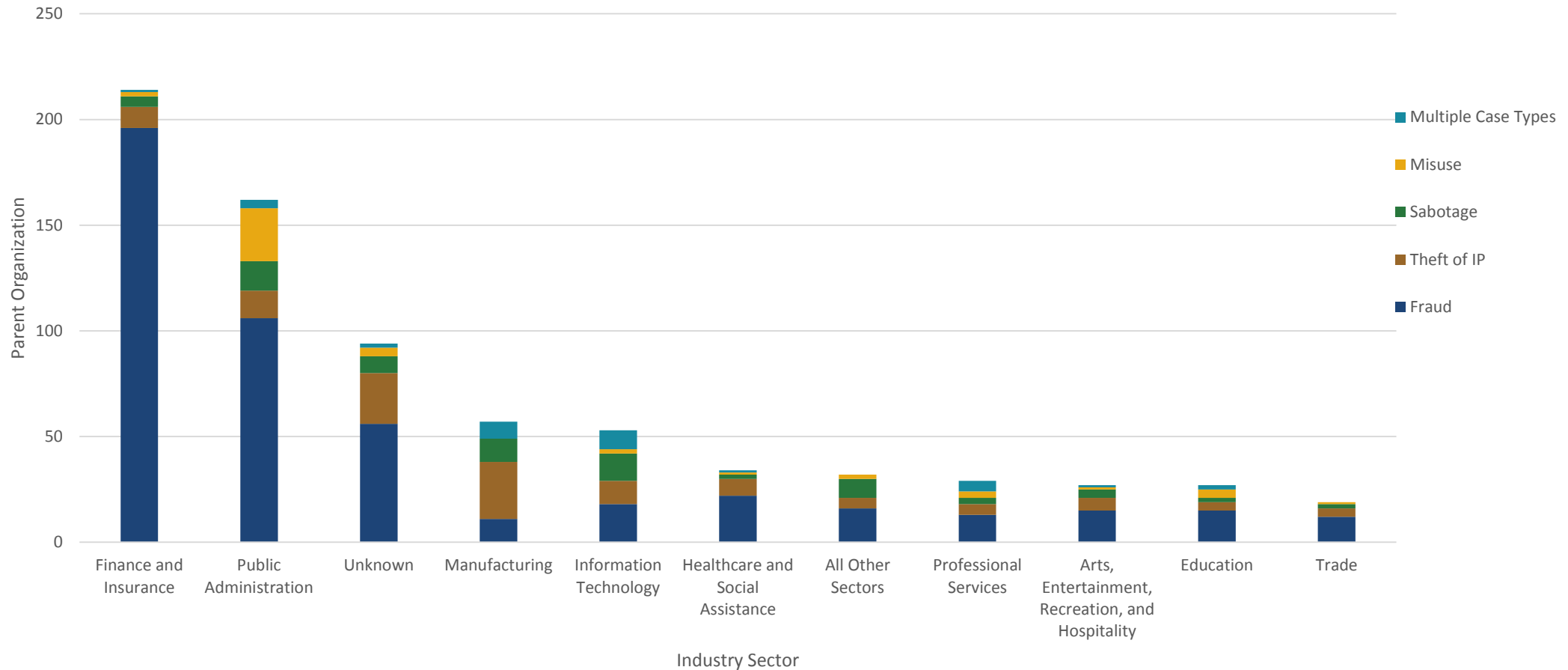
- 748 total organizations with parent organization
- 518 incidents with parent organization/agency
- 119 incidents with more than one organization with a parent



Parent Organizations by Industry-Sector



Parent Organizations by Industry-Sector and Case Type





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Case Studies

Corporation B Case Study – Five Subsidiaries and Five Incidents

- **Subsidiary 1 (California)**
 - A full time software programmer, without authorization, accessed source code, and copied it, which deleted files.
- **Subsidiary 2 (Florida)**
 - An IT worker, working in the network support department, stole backup tapes of important voice recordings.
- **Subsidiary 3 (Georgia)**
 - A network engineer submitted hundred of fraudulent service requests on behalf of the victim organization, allowing the insider to sell all of the non-used parts delivered by the service requests.
- **Subsidiary 4 (Alabama)**
 - Insider worked as a network technician, who sold multiple customer records to an undercover private investigator.
- **Subsidiary 5 (Virginia)**
 - An HR administrator changed job roles within the organization, and was able to exploit this access to modify records of recently terminated employees to indicate that they had been re-hired at a higher rate.

State Council of the People's Republic of China (Beneficiary)

- **Subsidiary 1 [Telecommunications]**
 - Subsidiary 1 provided over a million dollars in funding for a joint venture with insider, who stole trade secrets from their current employer.
- **Subsidiary 2 [Agriculture and Mining]**
 - While being trained at the victim organization as a software developer, insider stole software and source code for Subsidiary 2.
- **Subsidiary 3 [Aerospace, Auto, Marine, and Machinery]**
 - Insider stole trade secrets from victim organization, and Subsidiary 3 hired insider because of the stolen trade secrets.
- **Subsidiary 4 [Chinese Government Agency]**
 - Insider, as a foreign national, used their access to direct their trade secrets to the Chinese-run government agency.
- **Subsidiary 5 [Electronic Manufacturer]**
 - Send trade secrets from foreign national.
- **Subsidiary 6 [Aerospace, Auto, Marine, and Machinery]**
 - A naturalized citizen, recruited former employees of victim organization to retrieve property related to a coveted chemical process.
- **Subsidiary 7 [Chinese Government Agency]**
 - After being hired as a software developer, insider gained access and used access to benefit Subsidiary 7.
- **Subsidiary 8 [Aerospace, Auto, Marine, and Machinery]**
 - Insider sent Subsidiary 8 a set of trade secrets in order to obtain employment.

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Wrap-Up

Analytic Value

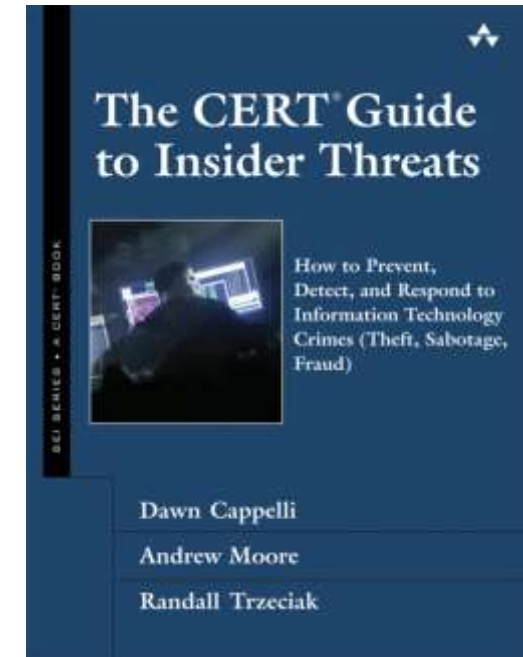
- Potential to see how the organizations spread their subsidiaries across state lines.
- Determine if an organization is represented in the CERT Insider Threat Incident Corpus more frequently because it is a larger organization, more distributed across the US, or a conglomerate
 - Benchmarking value: Help such organizations refine the probability of an incident
- Cross-comparison of specific organizations within a sector
 - Benchmarking value: Help an organization establish insider threat risk management performance compared to peers
 - Actionable intelligence: Determine if there are factors associated with organizations that are more represented in the Corpus within a sector compared to those with more infrequent incidents, albeit with some caveats (i.e., other organizations under-prosecuting or failing to detect incidents)
- Cross-comparison of sectors
 - Benchmarking value: Do some industry sectors have a higher baseline of a particular threat vector?
 - Actionable intelligence: Help an organization determine the potential insider threat risk associated with acquisitions within a sector

NITC Publications and References

Theis, M. C., Trzeciak, R. F., Costa, D. L., Moore, A. P., Miller, S., Cassidy, T., & (2019) Claycomb, W. R. [Common Sense Guide to Mitigating Insider Threats \(6th Ed.\)](#). Pittsburgh: Software Engineering Institute.

Cappelli, D. M., Moore, A. P., & Trzeciak, R. F. (2012). [The CERT® Guide to Insider Threats: How to Prevent, Detect, and Respond to Information Technology Crimes \(Theft, Sabotage, Fraud\)](#). Addison-Wesley Professional.

Moore, Andrew; Savinda, Jeff; Monaco, Elizabeth; Moyes, Jamie; Rousseau, Denise; Perl, Samuel; Cowley, Jennifer; Collins, Matthew; Cassidy, Tracy; VanHoudnos, Nathan; Buttles-Valdez, Palma; Bauer, Daniel; & Parshall, Allison. [The Critical Role of Positive Incentives for Reducing Insider Threats](#). CMU/SEI-2016-TR-014. Software Engineering Institute, Carnegie Mellon University. 2016.



For More Information

Software Engineering Institute (SEI)

National Insider Threat Center

<http://www.cert.org/insider-threat/>

National Insider Threat Center Email

insider-threat-feedback@cert.org

Insider Threat Blog

<http://insights.sei.cmu.edu/insider-threat/>

SEI Digital Library

<https://resources.sei.cmu.edu/library/>

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