In the area of information security and privacy there exists a need for an edited collection of cases and best practices. Cases in information systems and information security have been sparse (Orlikowski & Baroudi, 1991; Alavi & Carlson, 1992). Complex phenomena and nascent fields are served particularly well by the use of case studies to aid in understanding, and to form research models (Yin, 2003). The value of cases in teaching and research in the complexities of information systems has several benefits including bringing real world examples to the classroom making often difficult to understand information systems, security and privacy issues more relevant and, subsequently, more engaging for students (Hackney, et al., 2003). This special issue aims to provide relevant teaching and research cases in information security and privacy. The cases in this issue discuss a variety of information security and privacy issues in a variety of venues. The issue presents four teaching cases followed by three research cases that are implementable in undergraduate and graduate class settings.

The four research/teaching cases discuss the issues of disaster recovery, security and privacy for health information, email bounce back, and industry-wide security compliance. The actors in the cases represent a wonderful cross-section of small and large corporations, for-profit and non-profit enterprises, along with an industry-wide consortium. All four cases are applicable to introductory information systems and information security classes at both the undergraduate and graduate levels. They all bring the real-world to the class and enhance understanding of potentially complex business processes in different functional areas of IT, marketing, health care, and financial services.

The first case, by Virginia Kleist, Bonnie Morris, and James Denton, titled “Information Systems Security Assurance Management at Municipal Software Solutions, Inc.,” is a teaching case examining a catastrophic disaster (fire) at a small, private, for profit software development company and the subsequent disaster recovery and continuity. The case discusses how the firm, while it had adequate backup procedures, had an opportunistic benefit from a relationship with a business associate even though it had no formal recovery plan. The case is an excellent teaching opportunity when discussing disaster recovery planning and prevention at both the graduate and undergraduate level.

The remaining three cases explore different issues in a common theme of security and privacy. The second case, by Alex Kosachev and Hamid Nemati, titled “Security and Privacy in E-mail Bounce Back Systems,” discusses using bounced mail as a measure of marketing campaign effectiveness. This descriptive case analyzes the bounce-backs for an email campaign conducted by a major ecommerce company. Security and
privacy issues are discussed within the context of the campaign.

The third case, by James Suleiman and Terry Huston, titled “Data Privacy and Security: HIPAA and Small Business Compliance,” is a teaching case examining the security issues around Protected Health Information (PHI) and the need to share this information with other independent doctors that generally have smaller practices and lack full-time IT support. This decision point case would be applicable in any class discussing privacy and security issues in a small business environment.

The fourth case, by Benjamin Ngugi, Gina Vega, and Glenn Dardick, titled “PCI Compliance: Overcoming the Challenges,” discusses security and privacy in the credit card industry. This descriptive case offers a clear definition of Payment Card Industry (PCI) compliance by providing an overview of the data security standards with an explanation of the history and various attempts and PCI compliance. Many of the major challenges are discussed along with a prescriptive set of recommendations to address some of these challenges.

The value of qualitative research in information systems, and more specifically, case research, has long-since been established (Benbasat, et al, 1987). While a majority of the case studies examined security and privacy in different settings, all three research cases solely examine information security in three, very different settings including: security from a socio-technical perspective, policy, and a novel way to determine key actors in criminal hacker networks. These cases include an examination of global and large for-profit companies along with an analysis of a social network. All three cases are largely from the positivist perspective while being prescriptive.

First, in “Information Technology Security Concerns in Global Financial Services Institutions: Do Socio-economic Factors Differentiate Perceptions,” author Princely Ifinedo examines if socio-economic factors can be used to differentiate IT security concerns across Global Service Financial Institutions (GFSIs). Their findings indicate that IT security managers should understand these socio-economic measures and their effects on security concerns.

Next, in “Information Security by Words Alone: The Case for Strong Security Policies,” authors Kirk Arnett, Gary Templeton, and David Vance explore security by examining policy statements and propose a density measure as a metric for security policy strength. Fortune 100 corporate web site privacy policies were examined for security policy elements against an FTC security keyword list. The study finds that there is a great deal of variety in security policies and calls for external verification mechanisms to strengthen security policies.

Finally, “The Social Organization of a Criminal Hacker Network: A Case Study” is a research case by Yong Lu examining security by understanding the social organization of a hacker network. Network analysis helps to determine the key leaders in the hacker group Shadowcrew which was examined by the U.S. Secret Service for engaging in identity theft and credit card fraud. Recommendations are applicable to law enforcement as well as future research.

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REFERENCES


Yin, Robert K. (2003), Case Study Research: Design and Methods, Sage Publications, California.