
Joseph H Schuessler

Assistant Professor

College of Business

Assistant Professor - MIS & CIS

Date of Hire: 2009

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Professional Interests

Research: Information Systems Security Assessment, Information Systems Security Trends, Information Systems Security in Small Businesses, Computer/Network Forensics

Teaching: Basic MIS Classes, Networking/Telecommunications, Security, Systems Analysis and Design

Academic Background

Ph.D. University of North Texas, Denton, Texas, Business Computer Information Systems, 2009

M.S. University of North Texas, Denton, Texas, Information Technology, 2003

M.B.A. University of North Texas, Denton, Texas, Business Computer Information Systems, 2001

B.B.A. University of North Texas, Denton, Texas, Strategic Management, 1994

Certifications

A+ Certified Computer Technician, 1999

Network+ Certified, 2004

Security+, 2008

Memberships

Decision Sciences Institute, 2006-2009, National

Association for Information Systems, 2004-2009, National

Work Experience

Academic Experience

Adjunct, University of North Texas (June, 2009 - August, 2009). Taught DSCI 3710, second of two required statistics courses required of all business majors. Included means comparisons, regressions analysis, as well as other basic statistical techniques.

Instructor, University of North Texas (August, 2007 - May, 2008). Taught three classes (one of BCSI 2610 and two of BCIS 3610) which were introductory required courses for university students at large and business majors respectively. Topics included database use, application of spreadsheets, web site design, and so on.

Lab Supervisor, University of North Texas (August, 2006 - August, 2007). Hired and managed computer lab employees whose responsibilities included tutoring information systems students as well as serving as graders and assistant to professors.

Chief Technician, University of North Texas (August, 2005 - August, 2006). Redesigned the web site for the Information Systems Research Center, created interactive cd-roms for distribution to membership, maintained LISTServ list, and helped conduct the center's periodic seminars.

Non-Academic Experience

Service Manager, Schuessler Sounds (June, 1986 - August, 2009). Performed various duties required to run a small business.

In addition to these functions, designed and developed company network, web site, and e-commerce site. Ran and maintained web server, email server, and various hardware devices required to support the needs of ownership and other employees.

Technical Support, University of North Texas (January, 2002 - August, 2005). Provided technical support services to the faculty and staff of the college of business. Monitored daily backups, imaged/reimaged machines as needed, worked in a team when necessary to push out patches to various labs runs by the college of business. Also helped address any questions that arose from students, faculty, or staff with regards to hardware use, installation, or general advice.

Courses Taught

Basic Information Systems

Business Statistics II

Introduction to Computers in Business

Introduction to Information Technology

Systems Development

Other Teaching Activities

Other Teaching Activities

2006 - Mapped Committee on National Security Systems (CNSS) National Information Assurance Training Standard for Senior System Managers (4012) certification to three existing courses taught within the Information Technology and Decision Sciences Department (ITDS) at the University of North Texas

Intellectual Contributions:

Refereed Proceedings

Full Paper

Schuessler, J. H. & Ibragimova, B. (2009). Hacking Framework Extended: The Role of Vulnerabilities. The Security Conference.

Schuessler, J. H. & Ibragimova, B. (2009). Portable Privacy: Mobile Device Adoption. The Security Conference.

Schuessler, J. H. (2007). An Information Systems Security Framework. Americas Conference on Information Systems (AMCIS).

Presentation of Refereed Papers

International

Schuessler, J. H. (2007). General Deterrence Theory: Assessing Information Systems Security Effectiveness in Large Versus Small Businesses. Presented at International Conference on Information Systems Doctoral Consortium, Montreal, Canada.

National

Schuessler, J. H. & Ibragimova, B. (2009). Hacking Framework Extended: The Role of Vulnerabilities. Presented at The Security Conference, Las Vegas, Nevada.

Schuessler, J. H. & Ibragimova, B. (2009). Portable Privacy: Mobile Device Adoption. Presented at The Security Conference, Las Vegas, Nevada.

Schuessler, J. H. (2007). An Information Systems Security Framework. Presented at Americas Conference on Information Systems (AMCIS), Keystone, Colorado.

Presentation of Non-Refereed Papers

Local

Schuessler, J. H. (2007). General Deterrence Theory: Assessing Information Systems Security Effectiveness in Large Versus Small Businesses. Invited presentation at Information Systems Research Center, Denton, Texas.

Dissertation

General Deterrence Theory: Assessing Information Systems Security in Large Versus Small Businesses

Other Research Activities

Research-in-Progress

2010 - Currently preparing dissertation to send to MISQ.

2010 - An Information Systems Security Framework - A continuation of previous research presented at AMCIS, this paper is geared at categorizing and identifying research gaps in the mainstream IS literature as it relates to information systems security. The paper is currently being prepared for journal submission to IRMJ.

2010 - I am currently performing a literature review in order to more thoroughly understand stage theory in order to apply it to how organizations evolve through various stages of information systems security.

Service:

Service to the University

Department assignments:

Other Institutional Service Activities:

2009-2010: Departmental Brochure: Created departmental brochure describing the departmental mission statement, departmental and alumni profiles, and descriptions of various job opportunities and job outlook information.

Service to the Profession

Reviewer: Conference Paper

2008: Southwest DSI, Reviewed three papers for the security and privacy track., Oklahoma City, Oklahoma (Regional).

Faculty Development

Other Professional Development

2009: The Security Conference. Information Systems Security (ISS) has become a major concern in the United States following the rapid commercialization of the Internet, terrorism awareness after 9/11, and changes brought about by Sarbanes-Oxley and similar acts. This study explores the compromise of systems by extending the hacking framework (Bento and Bento, 2004). We apply user system vulnerabilities to the framework to investigate user compromise. The number of broadband connections and vulnerabilities were found to be significantly related to user compromise. Implications for practice are discussed as well as suggestions for future research. Las Vegas, Nevada.

2009: The Security Conference. Mobile devices are becoming ubiquitous in both commercial and personal environments. They come in the form of smart phones, laptops, personal digital assistants (PDAs), among others (Ng-Kruelle et al., 2003). With the proliferation of mobile devices comes the risk associated with securing personal information located on these devices. How one perceives the ability of a mobile device to secure personal information is likely to influence one's perceived utility and ultimately one's adoption of such devices. This study identifies the location where the information is stored, encryption, volume of communication, and the sensitivity of the information stored on the device as important factors for users when they are determining the utility of a portable device. Implications for researchers and practitioners are discussed. Las Vegas, Nevada.

2009: Southwest DSI Doctoral Consortium. Discussed various topics as it relates to joining the academic community including publishing, research, tenure, service, and so on. Oklahoma City, Oklahoma.

2007: Americas Conference on Information Systems (AMCIS). Ever evolving Information Systems Security (ISS) risk requires that we as researchers constantly review our body of work to identify potential gaps. If we can successfully understand the nature of ISS incidents, we can begin to eliminate or mitigate the risks so that damage can be limited or occur in a more controlled fashion. This paper is an attempt to identify relevant research gaps as they relate to ISS by developing an ISS framework and identifying gaps within the existing literature. Keystone, Colorado.

2007: International Conference on Information Systems Doctoral Consortium. Attended the ICIS Doctoral Consortium where we discussed out dissertations, requirements for tenure, publishing, service commitments, and so on. Montreal, Canada.

2007: International Conference on Information Systems Doctoral Consortium. The growing importance of Information Systems Security (ISS) for organizations has occurred for numerous reasons including the mounting requirements for regulatory compliance in the wake of financial scandals, growing dependence on information systems to provide the backbone of organizational structures, and rising organizational dependence on e-commerce to conduct daily activities. However, despite ISS being largely a managerial issue, managerial concern for ISS is still inadequate, evidenced by its consistently low ranking as a key issue in information systems management surveys.

This research seeks to shed light on ISS by conceptualizing an organization's use of countermeasures using General Deterrence Theory, positing a non-recursive relationship between threats and countermeasures, and by extending the ISS construct developed in prior research. Industry affiliation and organizational size are considered in terms of differences in threats that firms face, the different countermeasures in use by various firms, and ultimately, how a firm's ISS effectiveness is affected. Following a thorough review of the literature, six information systems professionals were interviewed in order to develop the appropriate instruments necessary to assess the research model put forth. Following instrument development, the instrument was further refined by pilot testing the instrument with the intent of further clarifying the wording and layout of the instrument. Finally, the Association of Information Technology Professionals was surveyed using an online survey. The model was assessed using SmartPLS and a two-stage least squares analysis. Results indicate that a non-recursive relationship does indeed exist between threats and countermeasures and that countermeasures can be used to effectively frame an organization's use of countermeasures.

Implications for practitioners include the ability to target the use of certain countermeasures to have desired effects on both ISS effectiveness and future threats. Additionally, the model put forth in this research can be used by practitioners to both assess their current ISS effectiveness as well as to prescriptively target desired levels of ISS effectiveness. As it relates to information systems research, this research demonstrates a methodology by which to analyze relationships traditionally assessed using longitudinal studies using structural equation modeling. It also frames an organization's use of countermeasures using General Deterrence Theory providing a framework for future research as it relates to countermeasures. Montreal, Canada.

Research-Related Conference/Seminar

2009: Southwest DSI. Attended various research related seminars. Oklahoma City, Oklahoma.

2009: Americas Conference on Information Systems (AMCIS). Attended various presentations concentrating on those related to security issues as they relate to information systems. San Francisco, California.

2007: International Conference on Information Systems (ICIS). Attended various research related seminars. Montreal, Canada.

Honors-Awards-Grants

Honors:

2009: Business Computer Systems Ph.D. Scholar Soaring Eagle Award, University of North Texas.

Awards:

2008: University of North Texas Graduate School Thesis/Dissertation Award (TDA), University of North Texas.

2007: COBA Dean's Travel Scholarship-University of North Texas-COBA-Dean, University of North Texas.

2007: Best Doctoral Paper Scholarship-University of North Texas-COBA-ITDS, University of North Texas.

2007: Business Computer Information Systems Doctoral Academic Excellence Award-University of North Texas-COBA-ITDS, University of North Texas.

2006: Best Doctoral Paper Scholarship-University of North Texas-COBA-ITDS, University of North Texas.

2006: IS Faculty Scholarship-University of North Texas-COBA-ITDS, University of North Texas.

2005: Texas Public Education Grant-State of Texas, University of North Texas.

2005: IS Faculty Scholarship-University of North Texas-COBA-ITDS, University of North Texas.

2005: UNT Tuition Grant-Robert Toulouse School of Graduate Studies, University of North Texas.

2005: Texas Public Education Grant-University of North Texas, University of North Texas.

2005: Academic Achievement Scholarship-Robert Toulouse School of Graduate Studies, University of North Texas.

2004: UNT Tuition Grant-University of North Texas, University of North Texas.

2004: Texas Public Education Grant-State of Texas, University of North Texas.

2004: Academic Achievement Scholarship-Robert Toulouse School of Graduate Studies, University of North Texas.

References

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