The Rise of the Business Security Analyst: A Call for Change in the SDLC

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Business schools have been challenged with low enrollments in Management Information Systems (MIS) courses [3]. Research by [3] suggests that a link between business and technology is a deciding factor when choosing an MIS major. The role of the business analyst is a critical role in organizations with a focus on the people, processes and use of technology [5]. Business analysts provide an important link between the business users and the technology. Information security should be a core part of curriculum for students in information systemsrelated majors and minors[9]. While many aspects associated with information security in an organization are very technical in nature, many of the challenges faced are related to the business and to human elements [6]. More recently, DevSecOps has gained in popularity to involve all business units and expose security flaws early on in the development process when costs are lower [8]. Critical software security issues should be communicated to all IT stakeholders (developers, business analysts/requirements engineers, designers) [7]. Security has frequently been an afterthought in the development process [1]. This is also true of textbooks that are used in college courses to teach Systems Analysis and Design with security discussed towards the end of the book materials, after the SDLC has been covered. It is imperative that security be implemented throughout the SDLC [4]; especially in the early stages [2];[4]. This can be difficult for developers to achieve while balancing the deadlines, demands, and needs of stakeholders. The business security analyst can work with stakeholders and developers to implement secure systems that meet users' needs and system requirements. While several academics have utilized case-based learning for information security practices [7], a more formalized approach of updating Systems Analysis and Design curriculum to include security elements in each phase of the SDLC is needed. Aligning curriculum with the growing security needs of organizations will better prepare MIS graduates for future roles in companies. References 1. Danahy, J. (2008). The 'Phasing-In' of Security Governance in the SDLC. Network Security, December 2008.

- 2. El-Hadary, H. & El-Kassas, S. (2014). Capturing Security Requirements for Software Systems. *Journal of Advanced Research*, 5, 463 472.
- 3. Ferratt, T.W., Hall, S.R., Prasad, J., & Wynn, Sr., D. (2010). Choosing Management Information Systems as a Major: Understanding the smiFactors for MIS. *Communications of the Association for Information Systems*, 27(16), 265 284.
- 4. Hamid, B. & Weber, D. Engineering Secure Systems: Models, Patterns, and Empirical Validation. *Computers & Security*, 77, 315 348.
- 5. Paul, D. & Tan, Y.L. (2015). An Investigation of the Role of Business Analysts in IS Development, *ECIS 2015 Completed Research Papers*. Paper 142.
- 6. Sauls, J. & Gudigantala, N. (2013). Preparing Information Systems (IS) Graduate to Meet the Challenges of Global IT Security: Some Suggestions. *Journal of Information Systems Education*, 24(1), 71-73.
- 7. Spears, J.L. & Parrish, Jr., J.L. (2013). IS Security Requirements Identification from Conceptual Models in Systems Analysis and Design: The Fun & Fitness, Inc. Case. *Journal of Information Systems Education*, 24(1), 17 29.
- 8. Toesland, F. (2019). The Rise of DevSecOps. Computer Weekly, 5-11 March 2019.
- 9. White, G.L., Hewitt, B., & Kruck, S.E. (2013). Incorporating Global Information Security and Assurance in I.S. Education. *Journal of Information Systems Education*, 24(1), 11 16.