Strengthen of Cybersecurity in the Organizations: Challenges and Solutions

Abstract

The adoption of technological resources in organizational functions reflects the changes in the nature of interactions in society. Business communication involves interactions meant to realize organizational functions such as supply, marketing, logistics, and sales, among others non-business functions. The utilization of technological resources in organizations is inevitable in the current environment. This is made possible by the advancement in technologies such as the Internet and communication devices. The paper examines the challenges and solutions related to cybersecurity. The vice has been prevalent in recent times; with companies making huge losses on finances and data. The proposed holistic solutions will require close cooperation between public, organizations, and government to stimulate the chances of success.

References

1. Mccarthy, D. M. P. 2013. Economic history of organized crime: A national and transnational approach. Place of publication not identified: Routledge.
2. Yar, M. 2013. Cybercrime and society. Sage.
3. Kshetri, N. 2013. Cybercrime and cybersecurity in the global south. Springer.
4. Asghari, H., van Eeten, M., and Bauer, J. M. 2016. 13. Economics of cybersecurity. Handbook on the Economics of the Internet, 262.
5. Kesharwani, A. and Tripathy, T. 2012. Dimensionality of perceived risk and its impact on Internet banking adoption: An empirical investigation. Services Marketing Quarterly, 33(2), pp.177-193.
6. Broadhurst, R. and Chang, L.Y. 2013. Cybercrime in Asia: trends and challenges. In Handbook of Asian criminology (pp. 49-63). Springer, New York, NY.
7. Min, K. S., Chai, S. W., and Han, M. 2015. An international comparative study on cyber security strategy. International Journal of Security and Its Applications, 9(2), 13-20.
8. Robert J. 2018. Biggest cyber security breaches. ITProPortal.https://www.itproportal.com/features/biggest-cyber-security-breaches-2018/
9. Cavelti, M. D., and Mauer, V. 2016. Power and security in the information age: Investigating the role of the state in cyberspace. Routledge.
10. Ashibani, Y., and Mahmoud, Q. H. 2017. Cyber physical systems security: Analysis, challenges and solutions. Computers & Security, 68, 81-97.
11. Robinson, M., Jones, K., and Janicke, H. 2015. Cyber warfare: Issues and challenges. Computers & security, 49, 70-94.
12. Wells, L. J., Camello, J. A., Williams, C. B., and White, J. 2014. Cyber-physical security challenges in manufacturing systems. Manufacturing Letters, 2(2), 74-77.
13. Lagazio, M., Sherif, N., and Cushman, M. 2014. A multi-level approach to understanding the impact of cyber crime on the financial sector. Computers & Security, 45, 58-74.
14. Dawson, M., Omar, M., and Abramson, J. 2015. Understanding the methods behind cyber terrorism. In Encyclopedia of Information Science and Technology, Third Edition (pp. 1539-1549). IGI Global.
15. Mann, I. 2017. Hacking the human: social engineering techniques and security countermeasures. Routledge.
16. Levi, M. 2017. Assessing the trends, scale and nature of economic cybercrimes: overview and issues. Crime, Law and Social Change, 67(1), 3-20.
17. Hutchinson, W. 2006. Information warfare and deception. Informing Science, 9.
18. Bullock, K., Clarke, R. V. G., and Tilley, N. 2010. Situational prevention of organised crimes. New York, NY: Taylor & Francis.
19. Sadeghi, A. R., Wachsmann, C., and Waidner, M. 2015, (June). Security and privacy challenges in industrial internet of things. In Design Automation Conference (DAC), 2015 52nd ACM/EDAC/IEEE (pp. 1-6). IEEE.
20. Taylor, R. W., Fritsch, E. J., and Liederbach, J. 2014. Digital crime and digital terrorism. New Jersey, NJ: Prentice Hall Press.
21. Tcherni, M., Davies, A., Lopes, G., and Lizotte, A. 2016. The dark figure of online property crime: Is cyberspace hiding a crime wave?. Justice Quarterly, 33(5), 890-911.
22. Roberts, L. D., Indermaur, D., and Spiranovic, C. 2013. Fear of cyber-identity theft and related fraudulent activity. Psychiatry, Psychology and Law, 20(3), 315-328.
23. Abadinsky, H. 2012. Organized crime. Boston, MA: Cengage Learning.
24. Jing, Q., Vasilakos, A. V., Wan, J., Lu, J., and Qiu, D. 2014. Security of the Internet of Things: perspectives and challenges. Wireless Networks, 20(8), 2481-2501.
25. Wang, T., Zheng, Z., Rehmani, M. H., Yao, S., and Huo, Z. 2018. Privacy Preservation
Strengthen of Cybersecurity in the Organizations: Challenges and Solutions

in Big Data from the Communication Perspective—A Survey. IEEE Communications Surveys & Tutorials.

26. Hautala, L. 2015. None of us are safe: Major cybersecurity company hacked. Retrieved December 11, 2018, from CBS Interactive Inc.: http://www.cnet.com/news/none-of-us-are-safe-major-cybersecurity-company-hacked/

27. Easttom, C., and Taylor, J. 2010. Computer crime, investigation, and the law. Boston, MA: Course Technology, a part of Cengage Learning.

28. Palazzi, P., and Marco, R. J. 2015. "Search Engine Liability for Third Party Infringement: A Keenly Awaited Ruling." Journal of Intellectual Property Law & Practice, (10)(4): 244-245.

29. Jakobsen, S. S. 2011. “Mobile Commerce and ISP Liability in the EU.” International Journal of Law and Information Technology, 29-52.

30. Edwards, L. ed. 2005. The new legal framework for e-commerce in Europe. Bloomsbury Publishing.

31. Menestrel, M. L., Hunter, M., and Bettignies, H.-C. d. 2002. Internet e-ethics in confrontation with an activists' agenda: Yahoo! on trial. Journal of Business Ethics , 135-144.

32. Holt, T.J. and Bossler, A.M. 2015. Cybercrime in progress: Theory and prevention of technology-enabled offenses. Routledge.

33. Sood, A.K., Bansal, R. and Enbody, R.J. 2013. Cybercrime: Dissecting the state of underground enterprise. Ieee internet computing, 17(1), 60-68.

34. Do, Q., Martini, B., & Choo, K. K. R. 2015. Exfiltrating data from Android devices. Computers & Security, 48, 74-91.

35. Wells, A. 2013. The importance of design thinking for technological literacy: A phenomenological perspective. International Journal of Technology and Design Education, 23(3), 623-636.

36. Wong, K., Wong, A., Yeung, A., Fan, W., and Tang, S. K. 2014. Trust and privacy exploitation in online social networks. IT Professional, 16(5), 28-33.

Index Terms

Computer Science Security

Keywords

Cybersecurity, data threats, Information Security, organizations data protection, Internet security solutions.