Information security awareness through the use of social media

Abstract

The proliferation of online social media use amongst employees has been reported to be incriminating organizational information security. Despite the benefits of social media to organizations, there were cases of information leakage, malware, identity theft, espionage and sabotage through such use. This paper explores employees' awareness of information security around social media and presents the initial findings of a study on a tertiary education institution in Malaysia. As an extension to a previous study, this study also found that employees were not only disclosing personal information but they are also disclosing organizational information on social media. This indicates there is a potential for information security threats to organizations through employees' use of social media. Nevertheless, the findings demonstrate that some participants were aware about the implications of employees' use of social media to information security. © 2014 IEEE.

Author keywords

information leakage  information security awareness  information security management  social media  social networking

Indexed keywords

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References (36)

   Berita Harlan Online-Nasional

   in The Star Online

   January 25 Available

4. Ng, V. (2009) US Congressman Twitter's Secret Trip to Iraq
   13 January 2010) Available
   http://security.networksasia.net/content/us-congressman-twitter-s-secret-trip-iraq

   BBC 9 March 2010) Available
   http://news.bbc.co.uk/2/hi/middleeast/8549099.stm

6. Everett, C. Social media: Opportunity or risk?
   doi: 10.1016/S1361-3723(10)70066-X
   View at Publisher

7. Hekkala, R., Väyrynen, K., Wiander, T. Information security challenges of social media for companies
   ISBN: 978-848897154-8
8 Furnell, S., Botha, R.A.
Social networks - Access all areas?
View at Publisher

9 Smith, A.M., Toppel, N.Y.
Case study: Using security awareness to combat the advanced persistent threat
University of Alaska, Fairbanks, Seattle

10 Abdul Molok, N.N., Ahmad, A., Chang, S.
Disclosure of organizational information by employees on facebook: Looking at the potential for information security risks
http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1077&context=acis2011
ISBN: 978-174210239-9

11 Molok, N.N.A., Chang, S., Ahmad, A.
Disclosure of organizational information on social media: Perspectives from security managers
http://aisel.aisnet.org/pacis2013/

ISO/IEC [International Standard]

CSI Computer Security Institute

14 Oltosik, J.
(2011) The ESG Information Security Management Maturity Model
Enterprise Strategy Group, Milford, Massachusetts

15 Lim, J.S., Chang, S., Ahmad, A., Maynard, S.
Towards an organizational culture framework for information security practices
http://www.igi-global.com/book/strategic-practical-approaches-information-security/58283
ISBN: 978-146660197-0
doi: 10.4018/978-1-4666-0197-0.ch017
View at Publisher
16. Pahnila, S., Siponen, M., Mahmood, A.
Employees' behavior towards IS security policy compliance
ISBN: 0769527558; 978-076952755-0
doi: 10.1109/HICSS.2007.206
View at Publisher

17. Siponen, M.T.
Conceptual foundation for organizational information security awareness
View at Publisher

18. Hinson, G.
NoticeBored Newsletter

19. Whitman, M.E., Mattord, H.J.
Stamford, Connecticut: Course Technology

Social network sites: Definition, history, and scholarship
doi: 10.1111/j.1083-6101.2007.00393.x
View at Publisher

21. Heidemann, J., Klier, M., Probst, F.
Online social networks: A survey of a global phenomenon
doi: 10.1016/j.comnet.2012.08.009
View at Publisher

22. Vance, A.
15 February 2013 Available
http://www.businessweek.com/printerarticles/74602-facebook-the-making-of-1-billion-users

Sophos Sophos Group, Boston, Massachusetts

Antisocial networks: Turning a social network into a botnet
(2008) 11th Information Security Conference (ISC 2008), Taipei, Taiwan
| 25 | Leitch, S., Warren, M. | Security issues challenging Facebook |


| 28 | Boyd, D. | Taken out of context: American teen sociality in networked publics |
|    |         | (2008) *Doctor of Philosophy, Information Management and Systems* |
|    |         | University of California, Berkeley |

| 29 | Colwill, C. | Human factors in information security: The insider threat-Who can you trust these days? |

| 30 | Bulgurcu, B., Cavusoglu, H., Benbasat, I. | Information security policy compliance: An empirical study of rationality-based beliefs and information security awareness |

| 31 | Straub Jr., D.W. | Effective IS security: An empirical study |
|    |                   | View at Publisher |

| 32 | Theocharidou, M., Kokolakis, S., Karyda, M., Kiountouzis, E. | The insider threat to information systems and the effectiveness of ISO17799 |
|    |               | View at Publisher |

| 33 | Workman, M., Gathegi, J. | Punishment and ethics deterrents: A study of insider security contravention |
|    |                   | View at Publisher |
Information security: Management's effect on culture and policy

doi: 10.1108/09685220610648355

View at Publisher

von Solms, B.
Information Security - The Fourth Wave

doi: 10.1016/j.cose.2006.03.004

View at Publisher

Boyatzis, R.E.
Thousand Oaks California: Sage Publications

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