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ACCEPTED MANUSCRIPT

Information security policy compliance model in organizations

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Highlights:

Information security policy compliance protects information assets in organizations. Involvement positively influences information security policy compliance. Attachment does not positively influence information security policy compliance. Commitment positively influences information security policy compliance. Personal norms positively influence information security policy compliance.

Abstract

The Internet and information technology have influenced human life significantly. However, information security is still an important concern for both users and organizations. Technology cannot solely guarantee a secure environment for information; the human aspects of information security should be taken into consideration, besides the technological aspects. The lack of information security awareness, ignorance, negligence, apathy, mischief, and resistance are the root of users' mistakes. In this research, a novel model shows how complying with organizational information security policies shapes and mitigates the risk of employees' behaviour. The significant aspect of this research is derived from the conceptualization of different aspects of involvement, such as information security knowledge sharing, collaboration, intervention and experience, as well as attachment, commitment, and personal norms that are important elements in the Social Bond Theory. The results of the data analysis revealed that information security knowledge sharing, collaboration, intervention and experience all have a significant effect on employees' attitude towards compliance with organizational information security policies. However, attachment does not have a significant effect on employees' attitude towards information security policy compliance. In addition, the findings have shown that commitment and personal norms affect employees' attitude. Attitude towards compliance with information security organizational policies also has a significant effect on the behavioural intention regarding information security compliance.

Keywords: Information security, organization policies, users' behaviour, involvement, attitude

Steven Furnell is a Professor of information systems security and leads the Centre for Security, Communications and Network Research at Plymouth University, United Kingdom. He is also an Adjunct Professor with Edith Cowan University in Western Australia. His research interests include usability of security and privacy technologies, security management and culture, and technologies for user authentication and intrusion detection. Furnell is the BCS representative to Technical Committee 11 (security and privacy) within the International Federation for Information Processing, and is a member of related working groups on security management, security education, and human aspects of security.

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