

Double Sided Optimism in Information Security: Cross Cultural Variations

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Abstract

As global business prevails in the modern economy, there has been an increase in cross-cultural business interactions. Along with this structural transition, the sharing of information and information systems cross-cultural boundaries become a matter of routine business practice. In this business environment, information security risks are magnified because a threat to an information system can affect an entire network of computers within a very short period of time. Therefore, an understanding of information security issues cross-cultural boundaries becomes critical to the protection of firms' assets. Despite its practical and theoretical importance, there is little study which has investigated the cultural variation in this dimension.

The research described here examined cross cultural variations of a cognitive bias in information security context: the tendency people believe that own information security risk is lower, but their perceived controllability is greater than others.

Using surveys, we first studied if CIOs and end users in US are subject to such a bias in information security. Then, the research was replicated with Korean CIOs and end users to study if such a bias is more prevalent in certain cultural context.

Korea was chosen for this comparative analysis since these two countries have a very similar information technology environment (e.g., the Internet usage, % of Internet shoppers, and E-commerce penetration rate) yet notable differences in cultural values (e.g., the uncertainty avoidance index, individualism index, and self-construal perspective). In addition, the two nations have strong business trading relationships. Thus, knowledge of any differences in information security risk perception between members of these two countries would provide theoretical and practical values.

The results demonstrate that there exist significant cultural differences in risk perceptions and controllability perceptions in information security. The implications of these findings for risk management of information security are discussed.

Keywords: Information Security, Risk Perception, Perceived Controllability, Cross National Differences