An analysis on the dimensions of information security culture concept: A review

Akhyari Nasir^{a,} * Ruzaini Abdullah Arshah^b, Mohd Rashid Ab Hamid^c, Syahrul Fahmy^a

 ^aFaculty of Computer, Media and Technology Management, TATI University College, Teluk Kalong, Kemaman, Terengganu 24000, Malaysia
^bFaculty of Computer Systems & Software Engineering, Universiti Malaysia Pahang, Lebuhraya Tun Razak, Kuantan, Pahang 26300, Malaysia
^cFaculty of Industrial Management, Universiti Malaysia Pahang, Lebuhraya Tun Razak, Kuantan, Pahang 26300, Malaysia

ABSTRACT

The cultivation of positive *Information Security Culture* (ISC) is an effective way to promote security behav- ior and practices among employees in the organization. However, there is yet a consensus on a standard set of dimensions for the ISC concept. ISC has been associated with many facets, with some overlapping dimensions found in the literature. There is little explanation, if any, as to why this happens or to what extent do variances of dimensions affects ISC concept and findings. This paper presents an analysis of the different dimensions in conceptualizing the ISC. Eight major databases including *Web of Science, Scopus* and *Google Scholar* were systematically exhausted using PRISMA and a total of 79 studies from 20 0 0 to 2017 was selected for analysis also covered other contributing factors such as the objective of the study, type of or- ganization under study and the information security maturity level. In addition, we found no evidence of a set of widely accepted concepts and dimensions for ISC. This review provides substantial evidence on the numerous dimensions used in ISC and could be utilized by academicians as a reference in ISC-related studies.

KEYWORDS: Information security culture ISC concept ISC model ISC dimensions

DOI: https://doi.org/10.1016/j.jisa.2018.11.003

ACKNOWLEDGMENT

This research is funded by Universiti Malaysia Pahang under the Post Graduate Research Grant Scheme (<u>PGRS170303</u>).