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Organizational Decision to Adopt Digital Forensics: An Empirical Investigation in the Case of Malaysian Law Enforcement Agencies

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Abstract : The use of digital forensics (DF) is nowadays essential for law enforcement agencies to identify analysis and interpret the digital information derived from digital sources. In Malaysia, the engagement of Malaysian Law Enforcement Agencies (MLEA) with this new technology is not evenly distributed. To investigate the factors influencing the adoption of DF in Malaysia law enforcement agencies' operational environment, this study proposed the initial theoretical framework based on the integration of technology organization environment (TOE), institutional theory, and human organization technology (HOT) fit model. A questionnaire survey was conducted on selected law enforcement agencies in Malaysia to verify the validity of the initial integrated framework. Relative advantage, compatibility, coercive pressure, normative pressure, vendor support and perceived technical competence of technical staff were found as the influential factors on digital forensics adoption. In addition to the only moderator of this study (agency size), any significant moderating effect on the perceived technical competence and the decision to adopt digital forensics by Malaysian law enforcement agencies was found insignificant. Thus, these results indicated that the developed integrated framework provides an effective prediction of the digital forensics adoption by Malaysian law enforcement agencies.

Keywords : digital forensics, digital forensics adoption, digital information, law enforcement agency
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