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Importance of Human Factors on Cybersecurity within Organizations: A Study of Attitudes and Behaviours

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Abstract : The ascent of cybersecurity incidents is a rising threat to most organisations in general, while the impact of the incidents is unique to each of the organizations. It is a need for behavioural sciences to concentrate on employees’ behaviour in order to prepare key security mitigation opinions versus cybersecurity incidents. There are noticeable differences among users of a computer system in terms of complying with security behaviours. We can discuss the people's differences under several subjects such as delaying tactics on something that must be done, the tendency to act without thinking, future thinking about unexpected implications of present-day issues, and risk-taking behaviours in security policies compliance. In this article, we introduce high-profile cyber-attacks and their impacts on weakening cyber resiliency in organizations. We also give attention to human errors that influence network security. Human errors are discussed as a part of psychological matters to enhance compliance with the security policies. The organizational challenges are studied in order to shape a sustainable cyber risks management approach in the related work section. Insiders’ behaviours are viewed as a cyber security gap to draw proper cyber resiliency in section 3. We carry out the best cybersecurity practices by discussing four CIS challenges in section 4. In this regard, we provide a guideline and metrics to measure cyber resilience in organizations in section 5. In the end, we give some recommendations in order to build a cybersecurity culture based on individual behaviours.

Keywords : cyber resilience, human factors, cybersecurity behavior, attitude, usability, security culture
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