

## INFORMATICS INSTITUTE OF TECHNOLOGY In Collaboration with UNIVERSITY OF WESTMINSTER

## Conceptual Framework for Secure Teleworking and Organizational Security Management in SMEs

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Submitted in partial fulfilment of the requirements for the MSc in Cyber Security and Forensics degree at the University of Westminster.

**July 2022** 

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**ABSTRACT** 

Teleworking has become one of the most important topics in the year 2020 with the Covid-19

pandemic situation. There was a sudden requirement for companies to allow employees to work

from home and companies had to do it in a secure manner. When it comes to SMEs one of the

most common problem SME has is less interest in security, less expertise in security and less

budget allocated for security. Due to that, SMEs started using ad-hoc security to facilitate

sudden teleworking requirements and most SMEs got attacked and breached due to inadequate

controls.

SMEs are resistant to implementing security standards like ISO, PCI DSS, HIPPA and

GDPR.etc due to constraints like lack of skills and budget. There are no easy-to-follow

frameworks specifically defined for SMEs. There were guidelines published by various

security vendors when pandemic comes but that was not specifically crafted for SMEs in mind.

According to a European Union Agency for Cyber security, ENISA report published in 2021

one of the security challenge for SMEs are "lack of suitable guidelines".(ENISA, 2021)

This research project is proposing a conceptual framework for easy adoption to secure

teleworking for SMEs. Also this will provide a reliable and easy way of adopting with defined

maturity levels and eliminates problems with teleworking security in SME.

To gather data to conduct this study, security expert opinions gathered via interviews and

thematic analysis used to extract relevant information. At the evaluation stage also security

expert opinion taken to measure effectiveness of defined framework and results showed that

this framework is accepted as a valuable and successful framework by industry security

experts.

Keywords: Teleworking security, SME, Attacks, Cyber Security

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