

Navigating Trust and Security: Integrating Zero Trust Paradigm into Trust Management and Principal-Agent Theories for Organizational Success

ANGELICA PIGOLA

UNIVERSIDADE ESTADUAL DE CAMPINAS (UNICAMP)

FERNANDO DE SOUZA MEIRELLES

ESCOLA DE ADMINISTRAÇÃO DE EMPRESAS DE SÃO PAULO (FGV-EAESP)

PRISCILA REZENDE DA COSTA

UNIVERSIDADE NOVE DE JULHO (UNINOVE)

Navigating Trust and Security: Integrating Zero Trust Paradigm into Trust Management and Principal-Agent Theories for Organizational Success

Introdução

The shift from traditional perimeter-based security strategies to a trust management approach is increasingly vital in today's threat landscape. Organizations across various industries are adopting the Zero Trust (ZT) paradigm to tackle cybersecurity challenges and protect critical assets, data, and systems.

Problema de Pesquisa e Objetivo

This study explores the management factors influencing Zero Trust initiatives, using trust management theory and principal-agent theory to address the challenges of the ZT paradigm. The objective is to understand how different management factors affect the implementation of ZT in organizations.

Fundamentação Teórica

Drawing on trust management theory and principal-agent theory, this study examines the challenges associated with the ZT paradigm. Existing literature suggests that organizational culture and investments are crucial for ZT success, while operational and regulatory aspects may have less impact.

Metodologia

We conducted structured interviews with 28 cybersecurity experts and utilized the multi-criteria decision-making (MCDM) approach. Additionally, we carried out an empirical survey with 267 cybersecurity professionals to validate our findings.

Análise dos Resultados

The findings highlight that management factors such as organizational culture, costs, and investments are significantly linked to Zero Trust initiatives. Conversely, operational changes, process modifications, and regulatory compliance do not significantly impact ZT.

Conclusão

This study sheds light on the current theoretical framework on trust management and principal-agent relationship, providing new management perspectives and practical guidance for organizations seeking to enhance their ZT initiatives. As cyber threats evolve, ZT offers a proactive and comprehensive approach to trust management.

Referências Bibliográficas

Jr. Hair, J.F., Howard, M.C., Nitzl, C., 2020. Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research* 109, 101-110. <https://doi.org/10.1016/j.jbusres.2019.11.069> Shemshadi, A., Shirazi, H., Toreihi, M., Tarokh, M.J., 2011. A fuzzy VIKOR method for supplier selection based on entropy measure for objective weighting. *Expert Systems with Applications* 38, 12160-12167. <https://doi.org/10.1016/j.eswa.2011.03.027>