

# **Building Trust Management in Businesses Thoughts**

ANGELICA PIGOLA

UNIVERSIDADE NOVE DE JULHO (UNINOVE)

#### FERNANDO DE SOUZA MEIRELLES

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

Agradecimento à orgão de fomento:

This study received financial support was provided by Coordination of Higher Education Personnel Improvement - CAPEs (Grant 001)



# **Building Trust Management in Businesses Thoughts**

## Introdução

Trust management is an auxiliary tool to reach out consensus mechanisms about data because the nature of trust is dynamic allowing change over time in context and objects. Some processes that involve trust management are information gathering, trust assessment and maintenance, decision making in trust relationships as well as the automation of these processes to amplify the visibility about risks between principals and agents transactions (Liu et al., 2023; Yan & Prehofer, 2011). In this vein, Zero-Trust (ZT) emerges as a paradigm to mitigate such risks supporting trust management.

## Problema de Pesquisa e Objetivo

ZT has gained momentum in recent years, even though lacks critical literature on the topic, shortcomings about managing ZT and no theoretical foundations to support a robust analysis of this phenomenon of trust in IS research field became a strong motivation to investigate ZT as a new cybersecurity paradigm that has been promoting a shifting in business thoughts. Thus, further investigations about what are the management challenges in the ZT realm posited as the main research question.

## Fundamentação Teórica

The ZT paradigm appears in the literature in 2010 (Kindervag, 2010) and recently it has been study in many organization contexts such as supply chain (Collier et al., 2021); medical image (Sultana et al., 2020); digital forensic (Neale et al., 2022); and with more emphasizes in its architecture and implementation transaction (Phiayura & Teerakanok, 2023). However, as Uttech (2020) highlighted: "Despite its popularity, realizing the concept of ZT has some critical shortcomings.

### Metodologia

We run a systematic literature review in ZT analysing 131 publications in the last five years (2019-2023) and the perceived relevance of managing ZT by experts in different industries and regions through a virtual Delphi to develop a theoretical framework offering research questions and propositions to the future agenda in ZT realm.

### Análise dos Resultados

Findings revealed topics beyond technical and technological aspects to manage ZT such as business culture, operational change, processes review, costs, investments, risks awareness, and compliance challenges as main management challenges in ZT realm. From each area, business issues were discussed and analysed to identify the ten most relevant ones in managing ZT realm.

### Conclusão

The ZT realm requires attention to new theoretical models that meet business needs for trust management. Findings provided greater ZT awareness to make academics think about new ways to theorize about the topic and change their mindset from technology to management. Therefore, we emphasized that the research questions presented in this study may foster new avenues for researchers in ZT realm.

### **Referências Bibliográficas**

Dhillon, G., Smith, K., & Dissanayaka, I. (2021). Information systems security research agenda: Exploring the gap between research and practice. The Journal of Strategic Information Systems, 30(4), 101693. Gupta, A., Khan, H. U., Nazir, S., Shafiq, M., & Shabaz, M. (2023). Metaverse



Security: Issues, Challenges and a Viable ZTA Model. Electronics, 12(2), 391. Hireche, O., Benzaïd, C., & Taleb, T. (2022). Deep data plane programming and AI for zero-trust self-driven networking in beyond 5G. Computer Networks, 203, 108668.