



Literary Criticism (3) _Task 2
Cybersecurity Governance in Critical
Infrastructure: A Risk-Based
Approach for Developing Countries

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Literary Criticism (3)

Task 2

Introduction

Hello Professor, Hello everyone,
As part of the Literary Criticism 3 course, and in accordance with the requirements of the second week, I will present a methodological critical analysis of a doctoral study in the field of Information Technology, specializing in cybersecurity.

After some consideration, I have chosen a new doctoral study titled:
“Cybersecurity Governance in Critical Infrastructure: A Risk-Based Approach for Developing Countries”

Author: John A. Smith

University: University of Oxford

Year of Publication: 2021

Type: Doctoral thesis in Cybersecurity Policy

1. General overview of the study

The main objective of this thesis is to propose a risk-based cybersecurity governance model tailored to the critical infrastructures of developing countries.

The author mainly relies on:

- ✓ The National Institute of Standards and Technology (NIST) Cybersecurity Framework
- ✓ The International Organization for Standardization ISO/IEC 27001 standard

The study adopts a mixed approach combining:

- ☐ Documentary analysis,
- ☐ Case studies,
- ☐ Semi-structured interviews with security managers.

2. Analysis of the methodology used

According to the author, the research is explanatory and descriptive in nature.

Methods used:

1. Systematic literature review
2. Comparative case studies (3 countries)
3. Qualitative interviews with 25 experts
4. Thematic data analysis

Methodological strengths (according to the author)

The author states that:

- ❖ The qualitative approach allows for understanding local realities.
- ❖ Cross-country comparison improves external validity.
- ❖ The integration of international standards ensures scientific rigor.

3. Personal critical analysis of the methodology

At this stage, I clearly distinguish:

- ◆ What belongs to the author
- ◆ What constitutes my critical analysis

First critical observation

The author claims that using the NIST framework ensures objectivity.

However, according to my analysis,

the NIST is a normative framework developed in an American context, and its application in developing countries may introduce structural bias.

Thus, the methodology is based on a theoretical model that is already culturally situated.

Second critique: sample size and representativeness

The study is based on only 25 experts.

Although this is acceptable in qualitative research, the author does not sufficiently justify:

- ❑ The selection criteria for participants

- ❑ Nor the limits of representativeness

This slightly weakens the generalization of the findings

Third review: literature review
The author structures the literature review around three axes:

1. Cyber governance

2. Risk management

- ❑ Critical infrastructures

However, I observe that:

- ❑ The literature analyzed is mostly Western.

- ❑ Few African studies or studies from developing countries are used.

This gap reduces the contextual depth of the study.

4. Overall assessment of the methodology

Despite these criticisms, the study has several strengths:

- ✓ Internal coherence
- ✓ Clearly explained methodology
- ✓ Data triangulation
- ✓ Alignment between objectives and methods

However, to strengthen its academic rigor, it would have been relevant for the author to:

- Justify the choice of normative frameworks more thoroughly
- Integrate a postcolonial critical perspective
- Make explicit the epistemological limitations of their approach

CONCLUSION

In conclusion,

This thesis constitutes an important contribution to cybersecurity governance.

However, my critical analysis shows that:

- The methodology is solid but only partially contextualized.
- The theoretical frameworks used require critical adaptation.
- Certain gaps in the literature review limit the analytical depth.

This critical approach fully aligns with the objective of the Literary Criticism 3 course, which aims not only to understand a study but also to examine its methodological structure, theoretical assumptions, and limitations.

Thank you for your attention.

رمضان مبارك

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Thank you!!!

