

# **RESEARCH PROPOSAL**

## **USE OF INFORMATION SYSTEMS (IS) TO TRANSFORM SMALL BUSINESSES IN INDONESIA**

# SIGNIFICANCE & CONTRIBUTION STUDY

## THE CHALLENGE: WHY FOCUS ON SMEs AND DIGITAL TRANSFORMATION?

- SMEs are crucial to Indonesia's economy but lag in digital transformation (Tambunan & Busnetti, 2024)
- Information Systems (IS) adoption drives efficiency, competitiveness, and inclusion (Ghobakhloo & Iranmanesh, 2021)
- Existing research remains fragmented and urban-focused (Wiweko & Anggara, 2025)
- This study addresses regional and sectoral gaps in IS adoption.
- Contributes a framework for sustainable SME digital transformation in emerging economies.



# RESEARCH PROBLEM AND RATIONALE

Despite national initiatives,  
SME digital transformation  
remains uneven.

Fewer than 4 million of  
Indonesia's 65 million SMEs  
are online (Tambunan &  
Busnetti, 2024).

Existing research is urban-  
focused and examines early  
adoption only (Ardiansah et  
al., 2024).

Limited studies explore long-  
term transformation or rural  
contexts (Wiweko & Anggara,  
2025).

Need for regionally inclusive,  
outcome-oriented research  
on IS-driven SME  
performance.

# RESEARCH QUESTIONS

What factors influence the adoption of Information Systems in small businesses in Indonesia?

1

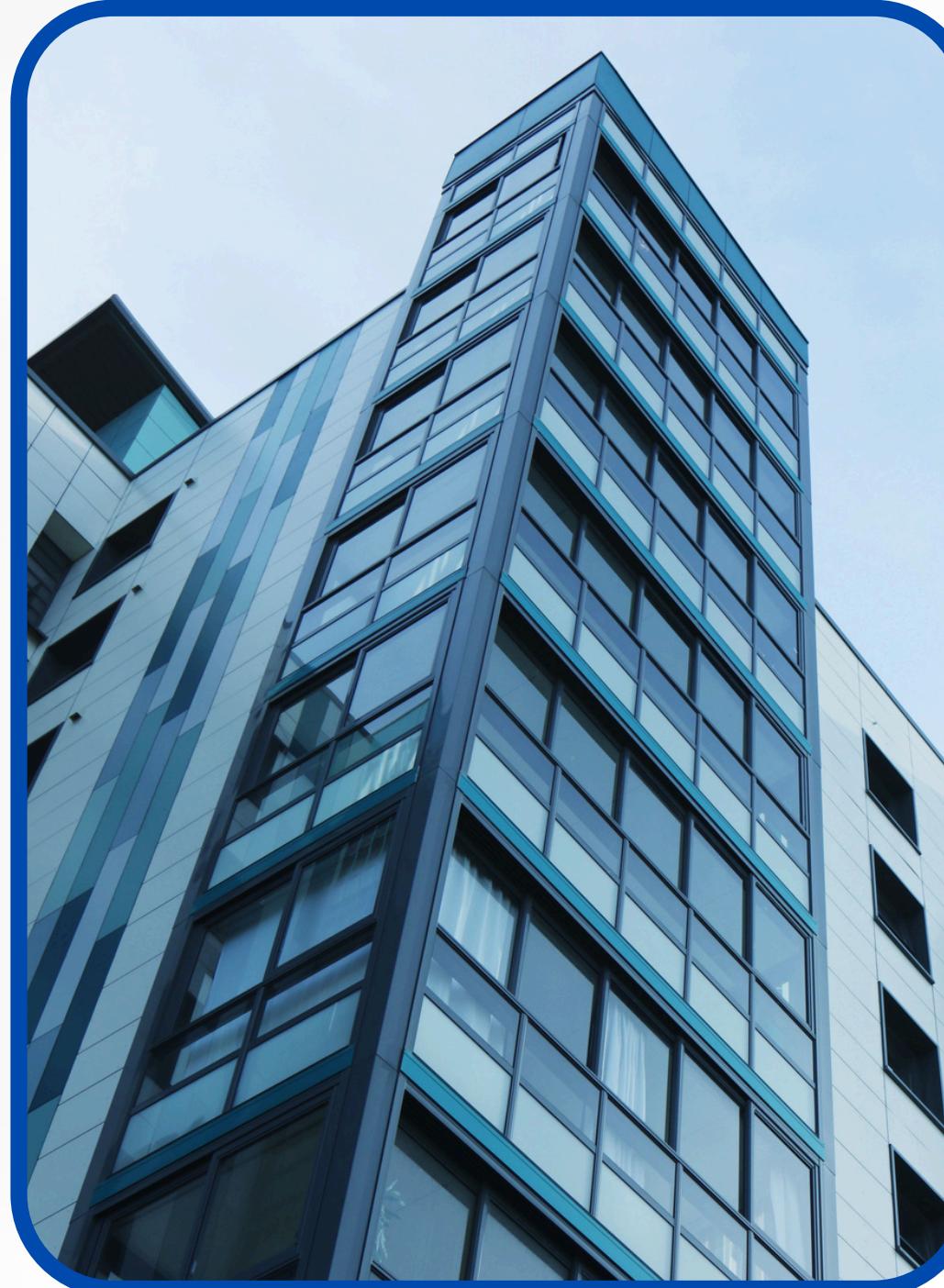
How do small businesses integrate Information Systems into their operations and strategies?

2

In what ways does IS adoption contribute to the long-term transformation and performance of Indonesian SMEs across different regions?

3

# AIMS AND OBJECTIVES



## Aim:

To investigate how Information Systems (IS) adoption transforms small businesses in Indonesia and identify the key factors that influence successful and sustainable digital transformation.

## Objectives:

1. To examine the internal and external factors that influence IS adoption among Indonesian SMEs.
2. To analyse how SMEs integrate IS into their daily operations and strategic planning.
3. To evaluate the impact of IS adoption on long-term SME performance, innovation, and competitiveness across different regions.

# KEY LITERATURE INSIGHTS OR SUMMARY OF EXISTING STUDIES

**Ardiansah et al. (2024):** Quantitative study (Central Java, 237 SMEs) – found perceived usefulness and customer integration as key IS adoption drivers.

**Tambunan & Busnetti (2024):** Survey + secondary data – identified digital-literacy and infrastructure gaps; highlighted slower adoption in rural SMEs.

**Wiweko & Anggara (2025):** Systematic literature review – found fragmented, short-term adoption strategies and lack of longitudinal data.



**Ghobakhloo & Iranmanesh (2021):** Global manufacturing SMEs – showed digital transformation improves competitiveness under Industry 4.0 frameworks; useful for theoretical grounding.

**Purnomo et al. (2024):** Literature review – emphasised the need for comparative and sector-specific research across Indonesian provinces.



# COMPARISON TABLE OF KEY LITERATURE

<b>Author</b>	<b>Method</b>	<b>Focus</b>	<b>Limitation</b>
Ardiansah et al.	Quantitative (SEM)	Adoption factors	Urban-only sample
Tambunan & Busnetti	Mixed	Literacy / infrastructure	Uneven regional data
Wiweko & Anggara	Review	Fragmented strategies	No outcome evidence
Purnomo et al.	Review	Sectoral gaps	Limited empirical scope
Ghobakhloo & Iranmanesh	Conceptual	Global IS transformation	Context differs (developed nations)

# PROPOSED METHODOLOGY AND RESEARCH DESIGN

**Research Approach:** Mixed methods (quantitative + qualitative).

## Data Collection:

- Online survey of ~100 SMEs (urban & rural regions).
- 8–10 semi-structured interviews with SME owners and policymakers.

## Sampling:

Purposive – diverse sectors, regions, and sizes.

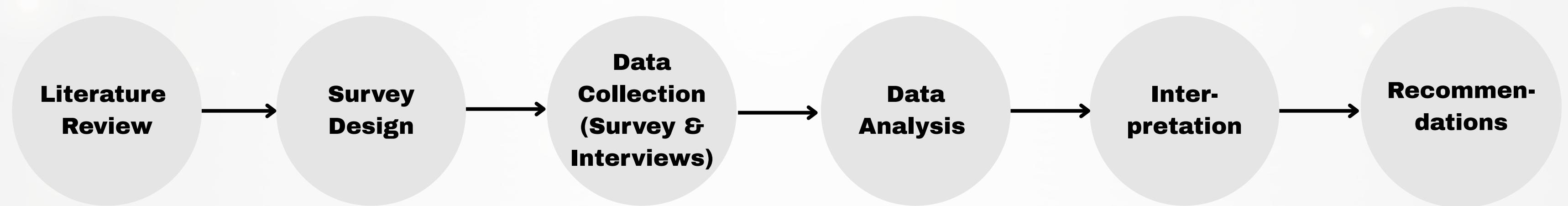
## Data Analysis:

- Quantitative → descriptive & regression analysis (SPSS).
- Qualitative → thematic analysis (NVivo).

**Rationale:** Triangulates perspectives and addresses urban bias, short-term focus, and outcome gaps in prior studies (Tambunan & Busnetti, 2024; Wiweko & Anggara, 2025).



# RESEARCH PROCESS OVERVIEW



# ETHICAL CONSIDERATIONS AND RISK MANAGEMENT

## **Informed consent:**

Participants will receive clear information sheets and consent forms before data collection.

## **Confidentiality:**

Responses anonymised; no identifying data will be stored or published.

## **Voluntary participation:**

Participants may withdraw at any stage without consequence.

## **Data protection:**

All data securely stored on encrypted drives (GDPR and university policy compliant).

## **Risk mitigation:**

Ethical approval obtained before fieldwork; minimal psychological or reputational risk expected.

# DATA ANALYSIS AND EXPECTED OUTCOMES

DATA  
ANALYSIS

EXPECTED  
OUTCOMES

- Quantitative data: Descriptive and regression analysis (SPSS).
- Qualitative data: Thematic coding and analysis (NVivo).
- Triangulation: Integration of survey and interview results for validity.
- Focus: Patterns of adoption, integration, and impact across regions.

- Identification of key internal and external factors shaping IS adoption.
- Empirical evidence on how IS integration drives SME performance.
- Insights into regional disparities and contextual barriers.
- Framework for inclusive and sustainable SME digital transformation in Indonesia.

# PROPOSED TIMELINE OF ACTIVITIES

Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
Phase 1 – Preliminary Research	█						
Phase 2 – Data Collection Preparation		█					
Phase 3 – Data Collection			█	█			
Phase 4 – Data Analysis					█		
Phase 5 – Integration & Interpretation						█	
Phase 6 – Writing, Review & Submission							█

# CONCLUSION AND NEXT STEPS

## Conclusion

- **Information Systems play a crucial role in driving innovation, efficiency, and competitiveness among small businesses in Indonesia.**
- **Understanding adoption factors, business impacts, and transformation challenges is essential for successful IS implementation.**
- **This study will contribute to both academic insight and practical guidance for SMEs and policymakers.**

## Next Steps

- **Contact SMEs willing to participate and engage relevant policymakers.**
- **Complete ethics review and finalize research instruments**
- **Begin the research process**



# THANK YOU

# REFERENCES

- Ardiansah, M.N., Murtini, S., Raharjanti, R., Hidayati, U. & Mansur, A.W., 2024. Determinants of ICT Adoption in Business for Emerging SME Entrepreneurs in Indonesia. European Journal of Business and Management Research, 9(5), pp.1-28.
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