Research Method(s) Suitable for My Project

Based on this week’s reading and the nature of my research topic, a mixed-methods approach would best suit my project.

The goal of my study is not only to identify *which* factors influence Information Systems (IS) adoption among Indonesian SMEs, but also to understand *how* adoption contributes to business transformation. This requires both quantitative measurement and qualitative interpretation.

Chosen Methods:

* Quantitative component: To capture measurable trends and relationships between factors such as digital literacy, cost, and business performance.
* Qualitative component: To explore deeper motivations, barriers, and perceptions among SME owners and decision-makers.

Using a sequential explanatory design, I plan to conduct the quantitative phase first (survey), followed by a qualitative phase (interviews) to explain and expand on the numerical results.

This method suits my purpose because it allows me to validate findings through triangulation while maintaining flexibility to explore unexpected insights during the qualitative phase. It also aligns with recommendations from *Creswell (2018)*, who notes that combining methods strengthens research credibility and provides richer understanding in socio-technical studies.

**Data Collection Methods to be Used**

To match the mixed-methods design, I plan to use two complementary data collection techniques:

1. Online Survey (Quantitative)

* Target participants: SME owners and managers across multiple Indonesian provinces.
* Distribution: via business associations, LinkedIn, and WhatsApp business groups.
* Instrument: structured questionnaire using Likert-scale questions measuring IS usage, perceived benefits, and barriers.
* Purpose: to identify adoption trends, correlations between business size, IS use, and performance outcomes.

1. Semi-Structured Interviews (Qualitative)

* Participants: 8–10 SME owners and policymakers selected from survey respondents.
* Medium: Zoom or in-person interviews (depending on location and access).
* Focus: exploring contextual barriers (cost, culture, training) and long-term transformation effects.
* Recording: with participant consent; transcripts will be analysed thematically.

This combination allows me to balance breadth and depth—the survey provides generalisable findings, while the interviews capture rich, lived experiences that explain the statistical results.

**Skills I Need to Have or Develop**

To conduct this project successfully, I have identified several key skills I either already possess or need to strengthen:

* 1. Technical and Analytical Skills
* Statistical analysis (SPSS or Excel): for running descriptive and regression analysis on survey data.
* Qualitative coding (NVivo or manual thematic coding): to categorise patterns and themes from interview transcripts.
* Data visualisation: to present findings clearly using charts, graphs, and summary dashboards.
  1. Research and Communication Skills
* Survey design and question formulation: ensuring clarity, neutrality, and validity of items.
* Interviewing skills: asking open-ended questions, active listening, and maintaining neutrality during discussions.
* Academic writing and referencing: for synthesising literature and presenting results in an academically rigorous manner.
  1. Ethical and Professional Skills
* Applying ethical principles — informed consent, data anonymisation, and confidentiality.
* Managing cultural sensitivity and respecting participants’ time and perspectives.

By Unit 10, I plan to have practiced statistical testing and thematic analysis using simulated datasets so that I can confidently interpret real findings when I collect my own data.

**Summary Reflection**

This week’s exercise helped me see how methodology is not just about tools, but about aligning methods with research purpose. For my project, combining surveys and interviews will provide a comprehensive picture of how IS adoption impacts SME transformation in Indonesia.

Equally important is developing the technical and ethical competence to analyse, interpret, and communicate data responsibly. These methodological and professional skills will be central to my Project Proposal Presentation in Unit 10 and to any future research I conduct in the computing field.

References

* Creswell, J.W. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* 5th ed. Sage Publications.