

The Template for The Methodology Chapter

This document provides a generic template for a typical methodology section within the final project.

توفر هذه الوثيقة نموذجًا عامًا لقسم المنهجية النموذجي ضمن المشروع النهائي.

3. Chapter 3: Research Methodology

الفصل الثالث: منهجية الدراسة

3.1. Introduction المقدمة

This chapter presents the research methodology followed in the study to determine how Agile Project Management (APM) can influence the effectiveness of startups in the business world. The chapter addresses the definition of the operations of the study variables, the general research design (based on the research onion model), target population, sample, methods and instruments of collecting data, and the process of analyzing data. Considering the exploratory and contextual character of the present research, a qualitative methodology is chosen, which is the most appropriate to seize the lived experiences and practices in startups utilizing Agile frameworks.

3.2. Operational definitions for research variables التعريفات الإجرائية لمتغيرات الدراسة

3.2.1. Agile Project Management (APM) (The independent variable):

Operational Definition: APM is set as a practice of implementing Agile frameworks (e.g., Scrum, Kanban, Lean) and principles (collaboration, adaptability, iterative development, and customer feedback), and practices (daily stand-ups, retrospectives, sprint reviews) in project management. The APM will be discussed using interviews concentrating on the context of implementation, processes, and artefacts applied during daily startup jurisdiction.

3.2.2. Operational Efficiency (The dependent variable):

Operational Definition: The operational efficiency can be described as the quality of a startup to maximize outputs (provided services/products, speed at which delivery of the services/products is made, customer satisfaction) with minimum inputs (time, cost, human resources). This variable shall be quantified by evaluating the stakeholders' perceptions of time-to-market, workflow integration, resource management, and product or service quality.

3.3. Research design (تصميم البحث)

Following the research onion model, the methodology components are as follows:

- Research Philosophy: Interpretivist
- Research Approach: Inductive
- Research Strategy: Case Study
- Research Choice: Qualitative
- Time Horizon: Cross-sectional (interviews and case reviews conducted at a single point in time)
- Data Collection and Analysis Techniques: Semi-structured interviews and document analysis; thematic analysis for interpretation.

3.4. Research population & Sampling methods and techniques

3.4.1. Research Population مجتمع الدراسة

The population in the research is startups that are involved in the business sector within the urban centers of innovation. The target audience will be startups between 1-5 years of age, not functioning in the IT sector, but in digital marketing, consulting, electronic commerce, financial services, and product design. The participating organizations should have formally adopted at least one Agile framework.

3.4.2. Research Sample عينة الدراسة

A purposive sampling method will be used to select:

- 10–15 participants from 5–8 startups
- Including founders, project managers, Agile coaches, and team members

This sample is appropriate given the study's exploratory nature and the need to gather expert and experiential insights from those actively using Agile practices.

3.4.3. Sampling Method & Techniques طرق وتقنيات أخذ العينة

- Sampling Technique: Non-probability Sampling
- Sampling Method: Judgmental Sampling (focusing on participants with direct involvement in Agile implementation)

3.5. Data collection method طريقة جمع البيانات

Primary Data:

- Semi-structured interviews will be conducted with selected participants using a flexible interview guide.

- Interview questions will focus on adopting and using Agile, the impact on internal processes, success metrics, encountered challenges, and adaptation strategies.
- Interviews will be recorded (with permission), transcribed, and coded for analysis.

Secondary Data:

- Literature from academic journals, books, and industry publications related to Agile and operational efficiency.
- Agile artefacts and internal project documentation (if accessible).

3.6. Types of data أنواع البيانات

3.6.1. Primary data البيانات الأولية:

Derived from qualitative interviews and internal Agile artefacts such as sprint boards, planning documents, and retrospectives.

3.6.2. Secondary data البيانات الثانوية :

Scholarly literature and published case studies were used to inform the research background and triangulate findings.

3.7. طرق وأساليب تحليل البيانات Data Analysis Methods & Procedures

- **Thematic Analysis:** This method will identify, analyse, and report patterns (themes) within the data.
- Steps include transcription, open coding, categorizing themes, interpretation, and concluding.
- **NVivo software** may be used to assist in managing and coding qualitative data.

To ensure robust interpretation:

- **Triangulation** of data sources (interviews + documents) will be applied.
- **Member checking** may be conducted to validate interpretations with participants.

3.8. الخاتمة Conclusion

This chapter has given an elaborate description of the research methodology utilized to conduct the study on Agile Project Management and its influence on the efficiency of startups' operations. The methodology will be based on a qualitative, interpretivism-focused, case-based design, allowing the study to discover nuanced insights and best practices. The specific intellectual point in the methodological rigor is that the findings will be valid, reliable, and valuable as far as both the academic and practical implications in reality in the area of project management.

