

Product Requirements Document (PRD) Template

For SQE AI Product Case Study

Product Name: [Product Name]
Version: [X.X]
Author: [Name]
Date: [Date]
Status: [Draft / Final]

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PART 1: AI PRODUCT CONCEPT EVALUATION & RECOMMENDATION

1. Project Selection & Justification

1.1 Executive Summary

Chosen Project: [State your chosen project clearly]

One-line Justification: [Brief statement on why this project was selected]

1.2 Comparative Analysis

Criteria	Concept 1: [Name]	Concept 2: [Name]	Winner
Market Opportunity	[Assessment]	[Assessment]	[1/2]
Competitive Landscape	[Assessment]	[Assessment]	[1/2]
Technical Feasibility	[Assessment]	[Assessment]	[1/2]
Business Impact	[Assessment]	[Assessment]	[1/2]
Strategic Fit	[Assessment]	[Assessment]	[1/2]
TOTAL	[X/5]	[X/5]	[Winner]

1.3 Justification Narrative

Why [Chosen Project]?

- Market opportunity: [Explanation]
- Competitive advantage: [Explanation]
- Technical feasibility: [Explanation]
- Business impact: [Explanation]
- Strategic alignment: [Explanation]

Why NOT [Rejected Project]?

[Brief explanation]

2. Market Opportunity & Problem Solved

2.1 Problem Statement

The Core Problem:

[Clear articulation of the business problem]

Who Experiences This Problem?

Stakeholder	Pain Point	Current Solution	Gap
[User 1]	[Pain]	[Current]	[Gap]
[User 2]	[Pain]	[Current]	[Gap]

2.2 Market Size

Market	Size	Source
TAM (Global)	[USD X B]	[Source]
SAM (Regional)	[USD X M]	[Source]
SOM (Year 1-3)	[USD X M]	[Assumptions]
CAGR	[X%]	[Source]

2.3 Target Customer Segments

Segment	Description	Priority
[Segment 1]	[Description]	P0
[Segment 2]	[Description]	P1

3. Competitive Landscape

3.1 Competitor Analysis

Competitor	Type	Strengths	Weaknesses
[Competitor 1]	Direct	[List]	[List]
[Competitor 2]	Direct	[List]	[List]
[Competitor 3]	Indirect	[List]	[List]

3.2 SQE's Strategic Advantages

Advantage	How to Leverage
[Advantage 1]	[Strategy]
[Advantage 2]	[Strategy]
[Advantage 3]	[Strategy]

3.3 Key Differentiators

1. [Differentiator 1]: [Explanation]
2. [Differentiator 2]: [Explanation]
3. [Differentiator 3]: [Explanation]

4. Feasibility Assessment

4.1 Data Availability & Quality

Data Type	Source	Availability	Challenges
[Data 1]	[Internal/External]	[H/M/L]	[Issues]
[Data 2]	[Internal/External]	[H/M/L]	[Issues]

Privacy & Ethical Considerations:

Concern	Regulation	Mitigation
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[Concern]	[PDP Law/GDPR]	[Approach]

4.2 AI Model Complexity

Capability	AI Type	Complexity	Maturity
[Capability 1]	[NLP/ML/GenAI]	H/M/L	[Proven/Emerging]
[Capability 2]	[Type]	H/M/L	[Proven/Emerging]

4.3 Computational Needs & Infrastructure

Requirement	Specification	Cost Estimate
Training	[GPU/Cloud specs]	[\$/month]
Inference	[Specs]	[\$/month]
Storage	[TB]	[\$/month]

4.4 Integration Challenges

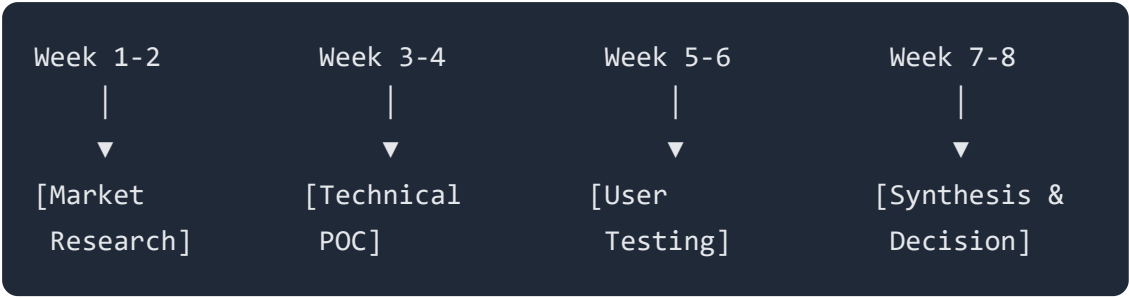
System	Complexity	Challenge	Mitigation
[System 1]	H/M/L	[Challenge]	[Strategy]
[System 2]	H/M/L	[Challenge]	[Strategy]

5. Hypothesis Validation

5.1 Key Hypotheses & Validation

ID	Hypothesis	Category	Validation Method	Success Criteria
H1	[Statement]	Market	[Method]	[Criteria]
H2	[Statement]	Technical	[Method]	[Criteria]
H3	[Statement]	User Need	[Method]	[Criteria]

5.2 Validation Timeline



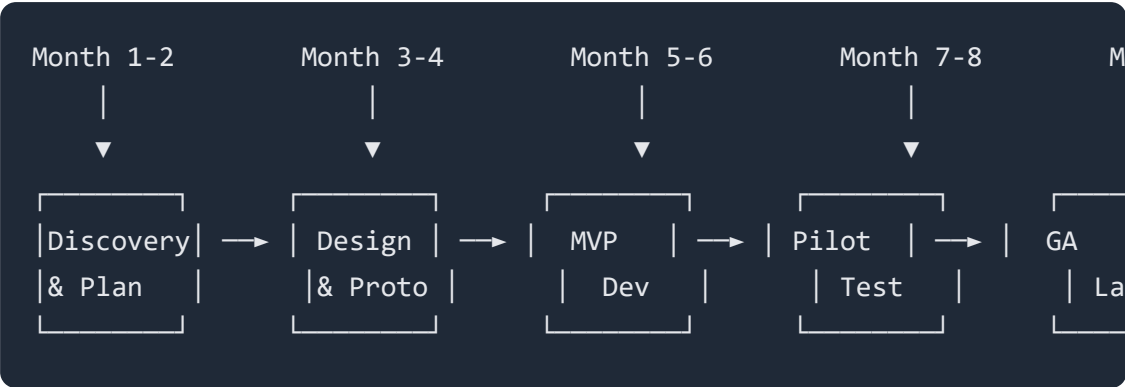
PART 2: HIGH-LEVEL PROJECT PLAN & SIMPLE PRD

6. Project Plan Approach

6.1 Strategic Alignment

SQE Strategic Goal	How This Project Aligns
Digital Transformation	[Alignment]
Market Leadership	[Alignment]
Revenue Growth	[Alignment]

6.2 Key Milestones & Timeline



Phase	Duration	Key Deliverables
Discovery & Planning	[X weeks]	[Deliverables]
Design & Prototyping	[X weeks]	[Deliverables]
MVP Development	[X weeks]	[Deliverables]
Pilot & Testing	[X weeks]	[Deliverables]
GA Launch	[X weeks]	[Deliverables]

6.3 Key Stakeholders

Internal:

Stakeholder	Role	Engagement
[C-Level]	Sponsor	[Strategy]
[Product]	Owner	[Strategy]

| [Engineering] | Builder | [Strategy] |
| [Compliance] | Reviewer | [Strategy] |

External:

Stakeholder	Role	Engagement
[Customers]	Pilot users	[Strategy]
[Regulators]	Oversight	[Strategy]

6.4 Metrics of Success

AI Performance:

Metric	Target
Accuracy	[X%]
Precision	[X%]
Recall	[X%]
Latency	[< X sec]

Business Impact:

Metric	Baseline	Target
[Cost Savings/Revenue]	[Current]	[Target]
[Efficiency Gain]	[Current]	[Target]
User Adoption	N/A	[X%]
NPS	N/A	[X]

7. Simple PRD - Core AI Feature

Focus: ONE core AI-powered feature

7.1 Feature Overview

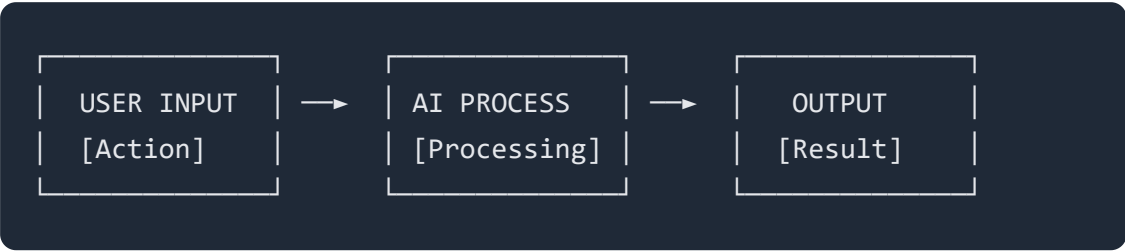
Attribute	Description
Feature Name	[Name]
Purpose	[Why this feature exists]
User Problem	[Problem it solves]
Target User	[Primary user]

7.2 Acceptance Criteria

ID	Criteria (Given/When/Then)
AC-1	Given [context], When [action], Then [outcome]
AC-2	Given [context], When [action], Then [outcome]
AC-3	Given [context], When [action], Then [outcome]

7.3 Key AI-Driven Functionality

How AI Works (User Perspective):



Step	User Action	AI Response	User Sees
1	[Action]	[AI processing]	[Output]
2	[Action]	[AI processing]	[Output]
3	[Action]	[AI processing]	[Output]

7.4 High-Level AI Technical Considerations

Data Feeds:

Data	Source	Frequency
-----	-----	-----
[Data 1]	[Source]	[Real-time/Batch]
[Data 2]	[Source]	[Frequency]

Core AI Approach:

Component	Approach	Rationale
-----	-----	-----
[Component]	[NLP/ML/LLM/RAG]	[Why]

7.5 Negative Cases (AI Failure Modes) & Mitigation

Failure Mode	Impact	Probability	Mitigation	Fallback
[Failure 1]	H/M/L	H/M/L	[Strategy]	[Behavior]
[Failure 2]	H/M/L	H/M/L	[Strategy]	[Behavior]

7.6 Quality Measurement

Metric	Target	Measurement
Accuracy	[X%]	[Method]
Precision	[X%]	[Method]
Recall	[X%]	[Method]
Response Time	[< X sec]	[Method]
User Satisfaction	[X NPS]	[Survey]

7.7 Non-Functional Requirements (AI-Specific)

Category	Requirement
Compliance	[OJK/PDP Law/ISO 27001]
Explainability	[SHAP/LIME/Confidence scoring]
Auditability	[X years log retention, decision trail]
Latency	[< X sec response time]
Security	[Encryption, RBAC, data masking]
Availability	[99.X% uptime SLA]

8. Screen Inventory (Sampling)

Screenshot/mockup untuk fitur utama - akan diisi kemudian

Screen	Description	Screenshot
Dashboard	[Description]	[Insert SS]
[Feature Screen]	[Description]	[Insert SS]
[AI Interaction]	[Description]	[Insert SS]
[Alert/Notification]	[Description]	[Insert SS]

Appendix

A. Glossary

Term	Definition
[Term]	[Definition]

B. References

Document	Description
[Ref]	[Description]

Template: SQE AI Product Case Study - Simple PRD