

PRD Generation Workflow

Dynamic 360 - Comprehensive Product Requirements Documentation

workflow_id: "prd-generation-comprehensive"

version: "1.0.0"

description: "Complete PRD generation workflow for validated D365 manufacturing ISV opportunities"

Workflow Overview

This workflow transforms validated market opportunities into comprehensive Product Requirements Documents that serve as the foundation for technical development and business planning.

Stage 1: Requirement Gathering (2 hours)

Agent: research_agent

Mode: requirement_extraction

Inputs:

- Market research findings and validated opportunity
- Customer interview data and feedback
- Competitive analysis and differentiation requirements
- Business objectives and success criteria

Activities:

- Stakeholder requirement collection
- User story development and prioritization
- Acceptance criteria definition
- Constraint identification and documentation

Outputs:

- Comprehensive requirement catalog
- Prioritized user stories with acceptance criteria
- Stakeholder requirement matrix
- Constraint documentation

Quality Gates:

- All key stakeholder groups represented
- Requirements are SMART (Specific, Measurable, Achievable, Relevant, Time-bound)
- User stories follow standard format and include acceptance criteria
- Constraints are clearly documented with impact assessment

Stage 2: PRD Structure and Content Creation (3 hours)

Agent: prd_agent

Mode: comprehensive_documentation

Inputs:

- Requirement catalog from Stage 1
- Market context and competitive positioning
- Technical constraints and platform requirements
- Business model and go-to-market strategy

Activities:

- Executive summary creation
- Product overview and positioning
- Functional requirement specification
- Non-functional requirement definition
- Success metrics and KPI identification

Outputs:

- Complete PRD draft with all sections
- Functional requirements with clear specifications
- Non-functional requirements with measurable criteria
- Success metrics and measurement plan

Quality Gates:

- All PRD sections complete and comprehensive
- Requirements traceability maintained
- Success metrics aligned with business objectives
- Document follows enterprise standards

Stage 3: Technical Feasibility Validation (1 hour)

Agent: technical_planning_agent

Mode: feasibility_assessment

Inputs:

- PRD draft from Stage 2
- Technical constraints and platform requirements
- Integration requirements with D365
- Performance and scalability requirements

Activities:

- Technical requirement validation
- Architecture feasibility assessment
- Integration complexity evaluation
- Risk identification and mitigation planning

Outputs:

- Technical feasibility report
- Identified technical risks and mitigation strategies
- Architecture recommendation summary
- Integration complexity assessment

Quality Gates:

- All functional requirements technically feasible
- Integration requirements validated against D365 capabilities
- Technical risks identified with mitigation strategies
- Architecture recommendations align with requirements

Stage 4: Stakeholder Review and Refinement (1 hour)

Agent: evaluator_agent

Mode: stakeholder_validation

Inputs:

- Complete PRD with technical validation
- Stakeholder feedback and requirements
- Business priorities and constraints
- Technical feasibility assessment

Activities:

- Stakeholder requirement validation
- Priority alignment and conflict resolution
- Gap identification and resolution
- Final quality assurance review

Outputs:

- Validated and refined PRD
- Stakeholder sign-off documentation
- Priority matrix and trade-off decisions
- Quality assurance report

Quality Gates:

- All stakeholder requirements addressed
- Priority conflicts resolved with clear rationale
- PRD passes quality assurance checklist
- Document ready for development handoff

PRD Quality Standards

Mandatory Sections

1. Executive Summary

- Product vision and value proposition
- Business case and ROI projections
- Key success factors and risks

2. Product Overview

- Product description and positioning
- Target market and customer segments
- Key features and capabilities

3. Functional Requirements

- Detailed feature specifications
- User stories with acceptance criteria
- Priority classification (must-have, should-have, nice-to-have)

4. Non-Functional Requirements

- Performance and scalability requirements
- Security and compliance requirements
- Usability and accessibility standards

5. Integration Requirements

- Dynamics 365 integration specifications
- External system integration requirements
- Data migration and synchronization needs

6. Success Metrics

- Key Performance Indicators (KPIs)
- Success criteria and measurement methods
- Timeline and milestone definitions

Quality Criteria

- **Completeness:** All sections present and comprehensive
- **Clarity:** Requirements are unambiguous and testable
- **Traceability:** Clear linkage from market needs to requirements
- **Feasibility:** Technical and business feasibility validated
- **Measurability:** All requirements have clear acceptance criteria

Document Standards

Format Requirements

- Professional document formatting and structure
- Consistent terminology and naming conventions
- Visual aids (diagrams, tables, charts) where appropriate

- Version control and change management

Review Process

- Technical review by solution architects
- Business review by product management
- Stakeholder review and sign-off
- Legal and compliance review (if required)

Output Artifacts

Primary Deliverable

- **Complete PRD Document:** Comprehensive product requirements specification

Supporting Documents

- **Requirement Traceability Matrix:** Linkage from market needs to requirements
- **Stakeholder Analysis:** Stakeholder groups and engagement strategy
- **Risk Assessment:** Identified risks and mitigation strategies
- **Success Metrics Dashboard:** KPI definitions and measurement plan

Success Metrics

- **Completeness:** 100% of mandatory sections complete
- **Quality Score:** >8/10 on standardized quality rubric
- **Stakeholder Satisfaction:** >85% approval rating
- **Development Readiness:** <5% requirement changes during development
- **Timeline:** Complete workflow in <8 hours of effort