Workflow Mapping Template

A practical tool for understanding current workflows, identifying friction, and planning process redesign

Organization / Team:	
Workflow Name:	
Workflow Owner:	
Assessment Date:	

This template is designed to help teams document how work actually moves through an organization before redesigning the process. It can be used for commercialization planning, AI adoption, operational improvement, grant-funded growth, client delivery workflows, or optimization engineering discovery.

- Define the workflow boundary before mapping the process.
- Capture the current state honestly, including informal workarounds and recurring delays.
- Identify bottlenecks, handoff issues, data gaps, risk points, and unclear ownership.
- Design a future-state workflow that is practical, measurable, and easier to scale.

How to Use This Tool

Complete the template with the people who actually perform or manage the workflow. For best results, include leadership, end users, process owners, technical staff, and anyone responsible for data, compliance, customer communication, or implementation.

1. Workflow Inventory

Use this section to define the workflow before attempting to redesign it. A clear workflow inventory helps the team understand purpose, boundaries, stakeholders, inputs, outputs, and current pain points.

Element	Notes / Current Understanding	Questions to Resolve
Purpose of this workflow		
Trigger / starting point		
Primary users or stakeholders		
Inputs required		
Systems, tools, or data sources used		
Major outputs or deliverables		
Dependencies and handoffs		
Known bottlenecks or friction points		
Risks, compliance issues, or quality concerns		
Success criteria for improvement		

2. Current-State Workflow Map

Document how the process works today. Do not begin by mapping the ideal process. Capture the real process, including workarounds, delays, rework, and informal decision points.

Step	Activity / Task	Owner	Input	Output	Tool / System	Pain Point
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Mapping Tip

If the workflow has more than ten steps, group related tasks into phases first. The goal is not to capture every minor action, but to understand how work moves, where decisions occur, and where friction appears.

3. Handoff, Bottleneck, and Risk Analysis

Use this table to identify the parts of the workflow most likely to slow performance, create errors, frustrate users, or prevent effective scaling.

Issue / Bottleneck	Where It Occurs	Likely Cause	Impact	Priority
Waiting for approvals or decisions				
Manual data entry or duplicate work				
Unclear ownership or role confusion				
Information lost between teams or systems				
Rework caused by incomplete inputs				
Compliance, security, or documentation gaps				
Customer, funder, or stakeholder delays				
Workflow depends too heavily on one individual				

4. Future-State Process Redesign

After the current state is understood, define the future-state workflow. Focus on practical improvements that reduce friction, clarify ownership, strengthen quality, and prepare the organization for growth, AI adoption, commercialization, or operational optimization.

Future Phase / Step	What Changes?	Owner	Tools / Data Needed	Expected Benefit	Implementation Notes
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					

5. AI, Automation, and Optimization Opportunities

Not every workflow should be automated or optimized immediately. Use this section to identify practical opportunities where AI, automation, analytics, or optimization engineering could improve speed, quality, consistency, decision-making, or resource allocation.

Opportunity	Candidate Use Case	Data Required	Readiness Level	Next Step
Reduce repetitive manual work				
Improve routing, scheduling, or resource allocation				
Create better dashboards or decision support				
Use AI for document review, summarization, or knowledge retrieval				
Improve forecasting or scenario planning				
Support grant, commercialization, or compliance workflows				

6. Workflow Improvement Action Plan

Translate the workflow map into a manageable action plan. Prioritize improvements that are realistic, measurable, and aligned with leadership goals.

Action Item	Owner	Priority	Due Date	Success Metric	Status / Notes

Discussion Questions

- Which step creates the most delay, rework, or confusion?
- Where is decision authority unclear?
- Which handoffs depend on informal communication rather than documented process?
- What information is entered, copied, or transferred more than once?
- Where could AI, automation, or optimization improve quality or efficiency?
- What must be true before the future-state workflow can be implemented successfully?

ScienceDocs Change Management, AI, and Optimization Support

ScienceDocs helps startups, research teams, and innovation-focused organizations map workflows, redesign processes, plan AI adoption, and improve operational performance. Ready to improve how work moves through your organization? Contact ScienceDocs to discuss workflow mapping, process redesign, AI implementation, or optimization engineering support.