Agent POC Canvas

Product → Agent → Data → Model

Inspired by Swyx's "Rise of the AI Engineer" blog post and diagram

Based on the excellent MLOps Canvas stack here: MLOps Stack Canvas

This canvas follows the optimal flow for modern agentic AI development:

PRODUCT VALIDATION	Start with user problems and validate demand before building
AGENT DESIGN	Define what the agent needs to do and how it should behave
DATA ENHANCEMENT	Add knowledge and data to improve performance after basic validation
MODEL IMPLEMENTATION	Leverage foundation model capabilities with minimal setup

For questions, please reach out to:

the author, Mikiko Chandrasekhar
AI/ML DevRel, Richmond Alake
AI/ML DevRel, Pavel Duchovny

The canvas helps teams systematically work through all aspects of an agentic AI project while avoiding redundancy and ensuring nothing critical is missed.

Project Name **Date**	**Team Members**

TIER 1: PRODUCT VALIDATION

Square 1 - PRODUCT VISION & USER PROBLEM		
What user problem are we solving and why it matters		
Core Problem	What specific workflow or task frustrates users today?	
Target Users	Who experiences this pain and how often?	
Success Vision	What would success look like for users?	
Value Hypothesis	Why would users prefer an agent to current solutions?	

Square 2 - USER VALIDATION & INTERACTION		
How users will actually engage with the agent		
User Journey	What's the complete interaction from start to finish?	
Interface Preference	How do users want to interact?	
Feedback mechanisms	How will you know it's working for them?	
Adoption Barriers	What might prevent users from trying it?	

TIER 2: AGENT DESIGN

Square 3 - AGENT CAPABILITIES & WORKFLOW		
What the agent needs to do to solve the user problem		
Core Agent Tasks	What specific tasks must the agent perform?	
Decision Logic	How should the agent break down complex requests?	
Tool Requirements	What capabilities does the agent need?	
Autonomy Boundaries	What can the agent decide vs. escalate?	

Square 4 - AGENT INTERACTION & MEMORY		
How the agent will communicate and remember		
Conversation Flow	How should the agent guide interactions?	
Agent Personality	What tone and style fits the use case?	
Memory Requirements	What should the agent remember during and between conversations?	
Error Handling	How should the agent handle confusion?	

TIER 3: DATA REQUIREMENTS

Square 5 - KNOWLEDGE REQUIREMENTS & SOURCES		
What information the agent needs to function effectively		
Essential Knowledge	What information must the agent have to complete tasks?	
Data Sources	Where does this knowledge currently exist?	
Update Frequency	How often does this information change?	
Quality Requirements	What accuracy level is needed?	

Square 6 - DATA COLLECTION & ENHANCEMENT		
How to gather and improve the agent's knowledge		
Collection Strategy	How will you gather initial data?	
Enhancement Priority	What data would have the biggest impact?	
Feedback Loops	How will user interactions improve the data?	
Integration Approach	How will data be ingested and updated?	

TIER 4: MODEL IMPLEMENTATION

Square 7 - PROVIDER SELECTION & PROMPT ENGINEERING		
Choosing and optimizing external models for your data and use case		
Provider Evaluation	Which external models can handle your requirements?	
Prompt Engineering	How to structure requests for best results?	
Context Management	How to work within token limits?	
Cost Validation	Is this economically viable?	

Square 8 - API INTEGRATION & VALIDATION		
Building the orchestration layer and validating performance		
Integration Architecture	How to connect to external providers?	
Response Processing	How to handle model outputs?	
Performance Testing	Does it meet requirements with your data?	
Production Readiness	What needs hardening for scale?	

TIER 4: POC METADATA

PROJECT METADATA & GOVERNANCE		
Team	Who's involved?	

Timeline	Key milestones	
Budget Tracking	Expected costs	
Decision Makers	Who decides next steps?	
Learning Goals	What assumptions are you testing?	