

## **Autonomous Government Scheme Eligibility & Action Agent**

**Theme:** Open Innovation

**Category:** Agentic AI System for Public Welfare

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### **1 Project Definition**

An autonomous AI system that helps Indian citizens identify applicable government schemes, evaluate eligibility with reasoning, and generate a step-by-step action plan to apply—without relying on agents, middlemen, or manual research.

This system does not behave like a chatbot.

It behaves like a **digital case worker** that understands user data, evaluates rules, rejects invalid options, and plans next actions.

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### **2 Problem Statement**

In India, millions of citizens fail to access government benefits because:

- They do not know which schemes they are eligible for
- Eligibility rules are complex and scattered
- Application processes are confusing
- Middlemen exploit people by charging money

Even educated users struggle to:

- Understand eligibility
- Collect correct documents
- Apply without mistakes

There is no system that **thinks on behalf of the citizen** and guides them end-to-end.

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### **3 Proposed Solution**

An **Agentic AI platform** that:

1. Understands the citizen's profile
2. Discovers relevant schemes
3. Evaluates eligibility using rule-based reasoning

4. Rejects or approves schemes with explanation
5. Identifies missing documents
6. Builds a step-by-step action plan
7. Adapts when user data changes

This replaces:

- Human agents
- Guesswork
- Trial-and-error

With **autonomous decision-making**

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#### 4 Target Users

- Low-income families
  - Students
  - Farmers
  - Women beneficiaries
  - First-time government scheme applicants
  - NGOs and social workers
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#### 5 Key Features

- Citizen profile builder
- Automatic scheme discovery
- Eligibility evaluation with reasoning
- Conditional eligibility detection
- Document requirement mapping
- Step-by-step action plan
- Follow-up and reminder system
- Adaptive updates when user data changes
- Web dashboard + mobile companion app

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## 6 Functional Workflow

1. User enters personal and financial details
  2. Profile Analyzer agent structures the data
  3. Scheme Discovery agent finds relevant schemes
  4. Eligibility Agent evaluates each scheme
  5. Rejected schemes are explained
  6. Eligible schemes are approved
  7. Action Planner creates a real-world execution plan
  8. Follow-up Agent monitors changes and updates the plan
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## 7 Agentic Approach

This system uses **multi-agent architecture**, where each agent has a single responsibility and uses tools to perform tasks.

Unlike chatbots, this system:

- Makes decisions
- Rejects options
- Explains reasoning
- Plans actions
- Adapts to changes

It simulates how a real government case worker thinks.

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## 8 Agents in the System

Agent	Responsibility
Profile Analyzer	Converts raw user input into structured data
Scheme Discovery	Finds potentially applicable schemes
Eligibility Reasoning	Evaluates rules and determines eligibility

<b>Agent</b>	<b>Responsibility</b>
Action Planner	Creates application steps
Follow-up Agent	Updates plans and sends reminders

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## **9 Agent Tools**

Each agent uses specialized tools:

### **Profile Agent**

- normalize\_profile\_data
- detect\_missing\_fields
- logical\_inference

### **Scheme Discovery Agent**

- query\_scheme\_db
- score\_scheme\_relevance
- exclude\_irrelevant\_schemes

### **Eligibility Agent**

- evaluate\_eligibility\_rules
- generate\_rejection\_reason
- detect\_conditional\_eligibility
- map\_required\_documents

### **Action Planner Agent**

- generate\_action\_steps
- resolve\_step\_priority
- merge\_common\_steps
- estimate\_effort

### **Follow-up Agent**

- detect\_profile\_changes
- analyze\_change\_impact

- `adjust_action_plan`
  - `generate_follow_up_reminders`
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## 10 Global System Tools

- `agent_decision_logger`
- `user_state_store`
- `scheme_rule_engine`
- `human_readable_explainer`
- `safe_failure_handler`

These ensure:

- Transparency
  - Memory
  - Rule consistency
  - Human-readable output
  - Error handling
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## 11 Why This Is Agentic AI (Not a Chatbot)

This system:

- Evaluates rules
- Rejects invalid options
- Justifies decisions
- Plans actions
- Adapts over time

A chatbot only answers.

This system **acts**.

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## 12 Innovation & Uniqueness

- First AI system that behaves like a **government case worker**

- Uses **rule-based reasoning + AI**
  - Not dependent on APIs, IoT, or government integration
  - Fully explainable and transparent
  - Works even in low-resource environments
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### **13 Scalability & Future Scope**

- Can integrate with DigiLocker, Aadhaar, or state portals
- Can support real-time application submission
- Can be extended to:
  - Pension
  - Healthcare
  - Education
  - Subsidy management