**Business domain** - Customer Support

**The Problem** - High Volume of Customer Support Requests Slowing Response Time

The current challenge or inefficiency-

1. Average response time: **48 hours**
2. Customer satisfaction score (CSAT): **72%**
3. Support team overwhelmed, leading to **burnout** and **increased churn**

**AI Agent-Based Solution:**

**Deploy an AI-Powered Virtual Customer Support Agent (Chatbot + Email Assistant)**

 **Capabilities of the AI Agent:**

* 1. **24/7 Automated Handling** of FAQs, order tracking, returns, password resets, etc.
	2. **Triage and Prioritization** of complex queries for human escalation.
	3. **Sentiment Analysis** to route angry customers to senior agents.
	4. **Multi-language Support** to serve a diverse customer base.

**Implementation Steps:**

* + 1. **Define**:
		Goal – Reduce first response time to < 1 hour; increase CSAT to > 85%.
		2. **Design**:
		Agent trained on past support tickets, company policies, and knowledge base.
		3. **Implement**:
		Integrate with CRM (e.g., Zendesk, Salesforce), website chat, and email system.
		4. **Iterate**:
		Regularly retrain with new tickets and customer feedback.

**Measurable Outcomes:**

| **Metric** | **Before AI Agent** | **After AI Agent Implementation** |
| --- | --- | --- |
|  Avg. Response Time | 48–72 hours | Under 1 minute |
|  Ticket Volume (human-handled) | 100% | Reduced by 60–80% |
|  Customer Satisfaction (CSAT) | 3.2 / 5 | 4.5 / 5 |
|  Cost per Ticket | ₹100–₹150 | ₹20–₹30 |
|  Agent Utilization | Overloaded | Focused on complex issues |

**Workflow Example:**

* + - 1. Customer: *"I want to return my order."*
			2. AI Agent: Identifies intent → provides return policy + step-by-step instructions.
			3. If query is complex (e.g., damaged item), it escalates to a human agent.
			4. Learns from the resolution for future improvement.

**Tools/Tech Stack (Example):**

* + - 1. **Dialogflow / Microsoft Bot Framework / Rasa** for conversational design.
			2. **OpenAI APIs** for natural language understanding.
			3. **Zendesk / Freshdesk integration** for ticketing.
			4. **Analytics dashboard** for measuring CSAT, resolution time, etc