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Techathon 6.0



Problem Statement II: **BFSI**

Problem statement
co-created with **Tata Capital**

About the business:

A large-scale Non-Banking Financial Company (NBFC) with a presence across India offers personal loans, home loans, auto loans and more. To increase revenue from existing customers, the NBFC aims to sell personal loans to prospects and its existing customers through a web-based chatbot interface.

The chatbot will serve as a digital sales assistant, where a Master Agent (Agentic AI Controller) coordinates multiple Worker AI agents to handle the end-to-end loan sales process – from conversation and verification to credit evaluation, and approval and generating a sanction letter.

Problem statement:

The NBFC wants to improve its sales success rate for personal loans by using an AI-driven conversational approach. The solution must simulate a human-like sales process, where the Master Agent handles customer conversations, engages customers in a personalized manner and collaborates with multiple Worker AI agents to complete the loan process.

Goal:

Teams must design an Agentic AI solution where the Master Agent:

- Chats with customers landing on the web chatbot via digital ads or marketing emails.

- Understands the customer's needs and convinces them to take a personal loan.
- Orchestrates multiple Worker AI agents to complete all tasks—verification, underwriting and sanction letter generation—before closing the chat.

Key deliverable:

A live demo or recorded video (maximum four minutes) showcasing the **end-to-end journey** from the initial chat to sanction letter generation.

Agentic AI roles	Data and system assumptions	Evaluation criteria	Submission form
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Master Agent (Main orchestrator)

- Manages the conversation flow with the customer.
- Hands over tasks to Worker Agents and coordinates the workflow.
- Starts and ends the conversation.

Worker Agents

- Sales Agent: Negotiates loan terms, discusses customer needs, amount, tenure and interest rates

- Verification Agent: Confirms KYC details (phone, address) from a dummy CRM server.
- Underwriting Agent:
- Fetches a dummy credit score (out of 900) from a mock credit bureau API.
- Validates eligibility:
 - If the loan amount \leq pre-approved limit, approve instantly.
 - If $\leq 2 \times$ pre-approved limit, request a salary slip upload. Approve only if expected EMI $\leq 50\%$ of salary.
 - Reject if $> 2 \times$ pre-approved limit or credit score < 700 .
- Sanction Letter Generator: Generates an automated PDF sanction letter if all conditions are met.

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