
CAPSTONE PROJECT

STARTUP BLUEPRINT GENERATOR AGENT

Presented By:

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OUTLINE

- Problem Statement
- Technology used
- Wow factor
- End users
- Result
- Conclusion
- Git-hub Link
- Future scope
- IBM Certifications

PROBLEM STATEMENT

Aspiring entrepreneurs, students, and innovators often face challenges in transforming abstract ideas into structured startup concepts due to a lack of access to domain-specific knowledge, market insights, technical frameworks, and validated business models. The process of researching, synthesizing, and planning a viable startup blueprint is fragmented, time-intensive, and overwhelming—especially for those without prior entrepreneurial experience or cross-domain expertise.

Proposed Solution:

Develop an AI-powered Startup Blueprint Generator that uses Natural Language Processing (NLP) and Retrieval-Augmented Generation (RAG) to help users transform vague ideas into actionable startup plans. Users can input a problem, idea, or domain, and the system will automatically generate:

- A structured startup blueprint (problem, solution, market, tech stack, target users, etc.)
- Relevant industry trends and competitor analysis
- Recommended tools, datasets, and MVP components
- Potential collaborators, investors, and accelerators

TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

IBM Granite model

IBM CLOUD SERVICES USED

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Agent Lab
- IBM Granite foundation model

WOW FACTORS

- This agent will significantly reduce research time, improve the quality of literature reviews, help early-stage researchers find direction, and foster interdisciplinary collaboration by making knowledge more accessible and actionable.

Unique features:

- ☐ Semantic search across research papers, journals, and datasets
- ☐ Auto-summarization of selected papers
- ☐ Citation and reference analysis to trace influence
- ☐ Recommendation of research papers based on a user's current topic
- ☐ Trend analysis over time for specific keywords or domains.
- ☐ Collaboration mapping: suggests potential co-authors or institutions based on similar research interests.

END USERS

- Aspiring entrepreneurs
- Student innovators
- Early-stage startup founders
- Incubators and accelerators
- Business mentors and consultants
- Corporate intrapreneurs

RESULTS

[Deployment spaces](#) / [Agentic_AI_01](#) / [Startup Blueprint Generator Agent](#) /

Startup Blueprint Generator Agent ✓ Deployed Online

[API reference](#)

[Test](#)

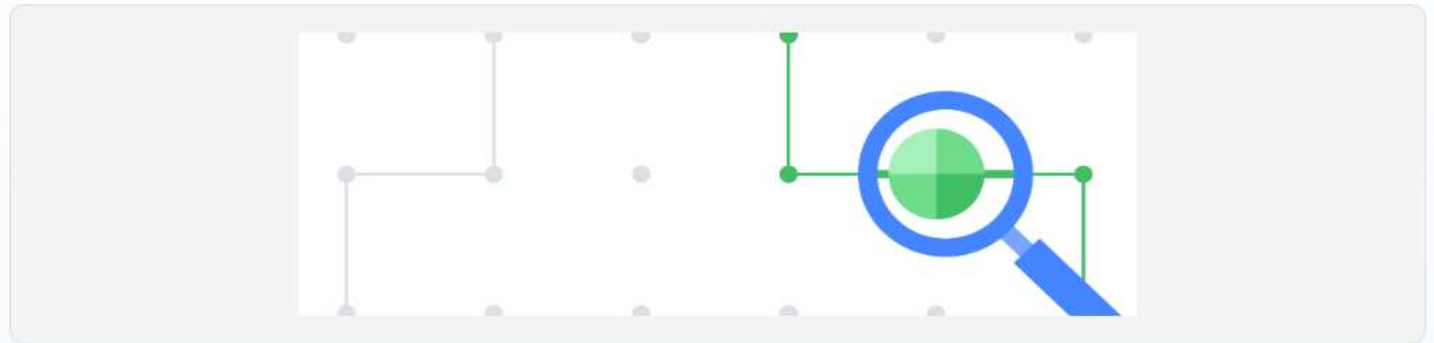
[Preview](#)



Startup Blueprint Generator Agent 07:11 PM

Welcome to Startup Blueprint Generator Agent

I'm here to turn your raw startup dream into a complete business plan -tailored exactly to your idea



Type something...



RESULTS

The screenshot displays the IBM watsonx user interface. At the top, a dark navigation bar includes the 'IBM watsonx' logo, an 'Upgrade' button, and user information for 'SONALI KUMARI GOUDA's ...' in the 'Dallas' region. Below this, a breadcrumb trail shows the path: 'Deployment spaces / Agentic_AI_01 / Startup Blueprint Generator Agent'. The main heading is 'Startup Blueprint Generator Agent', which is marked as 'Deployed' and 'Online'. Three tabs are visible: 'API reference', 'Test', and 'Preview', with 'Preview' being the active tab. A 'New chat +' button is located in the top right of the chat area. The chat history shows a user message at 07:20 PM: 'I want to create a digital platform for renting college textbooks'. The agent's response, also at 07:20 PM, begins with 'Great idea! Here's a simple blueprint to get you started:' and lists three steps: 1. **Market Research:** Use GoogleSearch or DuckDuckGo to understand the current market for textbook rentals. Look for competitors, pricing models, and customer reviews. 2. **Business Model:** Consider a subscription-based model where students pay a yearly fee for unlimited textbook rentals. Alternatively, a per-book rental model could work, where students pay a fixed price for a set period. 3. **Business Model Canvas:** This section includes a sub-point for **Key Partners:** Publishers, shipping companies. At the bottom, there is a text input field with the placeholder 'Type something...' and a send button.

IBM watsonx Upgrade ? SONALI KUMARI GOUDA's ... Dallas SG

Deployment spaces / Agentic_AI_01 / Startup Blueprint Generator Agent

Startup Blueprint Generator Agent

Deployed Online

API reference Test Preview

New chat +

S You 07:20 PM

I want to create a digital platform for renting college textbooks

AI Startup Blueprint Generator Agent 07:20 PM

Great idea! Here's a simple blueprint to get you started:

- 1. Market Research:** Use GoogleSearch or DuckDuckGo to understand the current market for textbook rentals. Look for competitors, pricing models, and customer reviews.
- 2. Business Model:** Consider a subscription-based model where students pay a yearly fee for unlimited textbook rentals. Alternatively, a per-book rental model could work, where students pay a fixed price for a set period.
- 3. Business Model Canvas:**
 - Key Partners:** Publishers, shipping companies.

Type something...

RESULTS

IBM watsonx Upgrade ? SONALI KUMARI GOUDA's ... Dallas SG

Deployment spaces / Agentic_AI_01 / Startup Blueprint Generator Agent /

Startup Blueprint Generator Agent Deployed Online

API reference Test **Preview**

New chat +

3. **Business Model Canvas:**

- **Key Partners:** Publishers, shipping companies.
- **Key Activities:** Sourcing books, managing inventory, customer service.
- **Key Resources:** Website, database of textbooks, shipping network.
- **Value Propositions:** Affordable textbook rentals, convenience, environmental benefits (less paper waste).
- **Customer Relationships:** Easy online platform, responsive customer service.
- **Channels:** College bookstores, student unions, social media, email marketing.
- **Customer Segments:** College students, particularly those in high-cost-of-living areas.
- **Cost Structure:** Book sourcing, storage, shipping, website maintenance, customer service.

4. **Revenue Streams:** Rental fees, subscription fees, late return penalties.

5. **Go-to-Market Strategy:** Partner with colleges and universities for promotion. Leverage social media and email marketing to reach students. Offer incentives for early sign-ups and referrals.

Type something...

RESULTS

Deployed AI Agent

The screenshot displays the IBM Watsonx interface for a deployed AI agent. The top navigation bar includes the IBM Watsonx logo, an 'Upgrade' button, and user information for SONALI KUMARI GOUDA. The breadcrumb trail indicates the path: Deployment spaces / Agentic_AI_03 / Startup Blueprint Generator Agent.

The main section is titled 'Startup Blueprint Generator Agent' with a green 'Deployed' status and an 'Online' badge. Below the title are tabs for 'API reference', 'Test', and 'Preview', with 'Preview' being the active tab. A 'New chat +' button is located to the right of the tabs.

The chat interface shows a conversation between a user and the agent. The user's message is: 'I want to start a handmade jewelry business using Instagram.' The agent's response is: 'Great idea! Here's a simple blueprint to get you started:' followed by a list of three steps:

- 1. Market Research:** Use Instagram to explore existing handmade jewelry brands. See what styles, prices, and aesthetics are popular. Use the WebCrawler function to analyze top-performing pages for insights.
- 2. Unique Selling Proposition (USP):** Identify what makes your jewelry unique. Is it the materials, design, or ethical production? Your USP will be key to standing out.
- 3. Target Audience:** Define your ideal customer. Consider age, gender, location, interests, and lifestyle. Use Instagram's demographic data and trends research to help.

At the bottom of the chat area is a text input field with the placeholder 'Type something...' and a send button.

On the right side, there is a sidebar titled 'About this deployment' with a close button. It contains the following information:

- Name:** Startup Blueprint Generator Agent
- Description:** I'm here to turn your raw startup dream into a complete business plan - tailored exactly to your idea.
- Deployment Details:**
 - Deployment ID: `dee9e8d3-3706-47...`
 - Serving name: No serving name.
 - Software specification: `runtime-24.1-py3.11`
 - Hardware specification: Extra extra small: 1 CPU and 2 GB RAM
 - Copies: 1
- Tags:** `ai-agent`
- Associated asset:** Startup Blueprint Generator Agent (ID: `87f34878-4a87-442b-8bec-fa5b88aa33fe`)

CONCLUSION

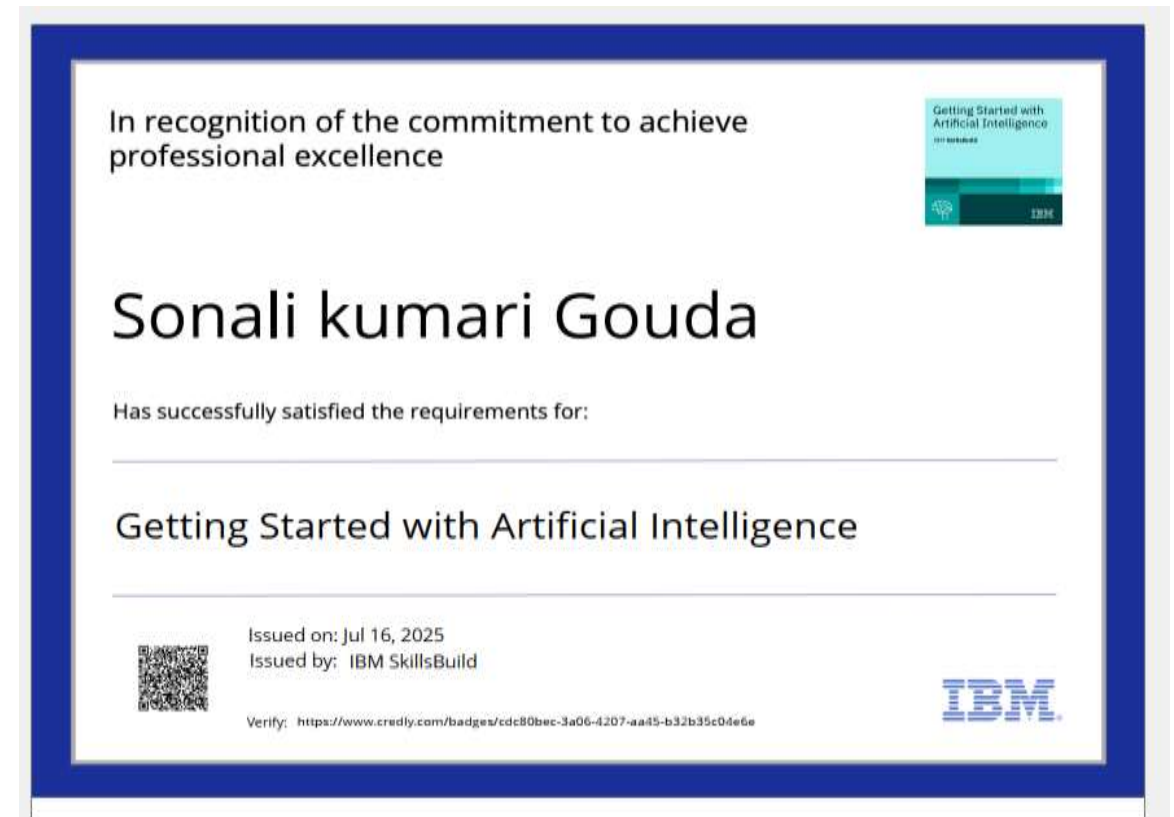
- The Startup Blueprint Generator can validate ideas, provide market insights, and generate investor-ready plans.
- It saves time by automating business planning, market research, and pitch preparation.
- This tool enhances clarity, speed, and success potential for entrepreneurs and innovators

FUTURE SCOPE

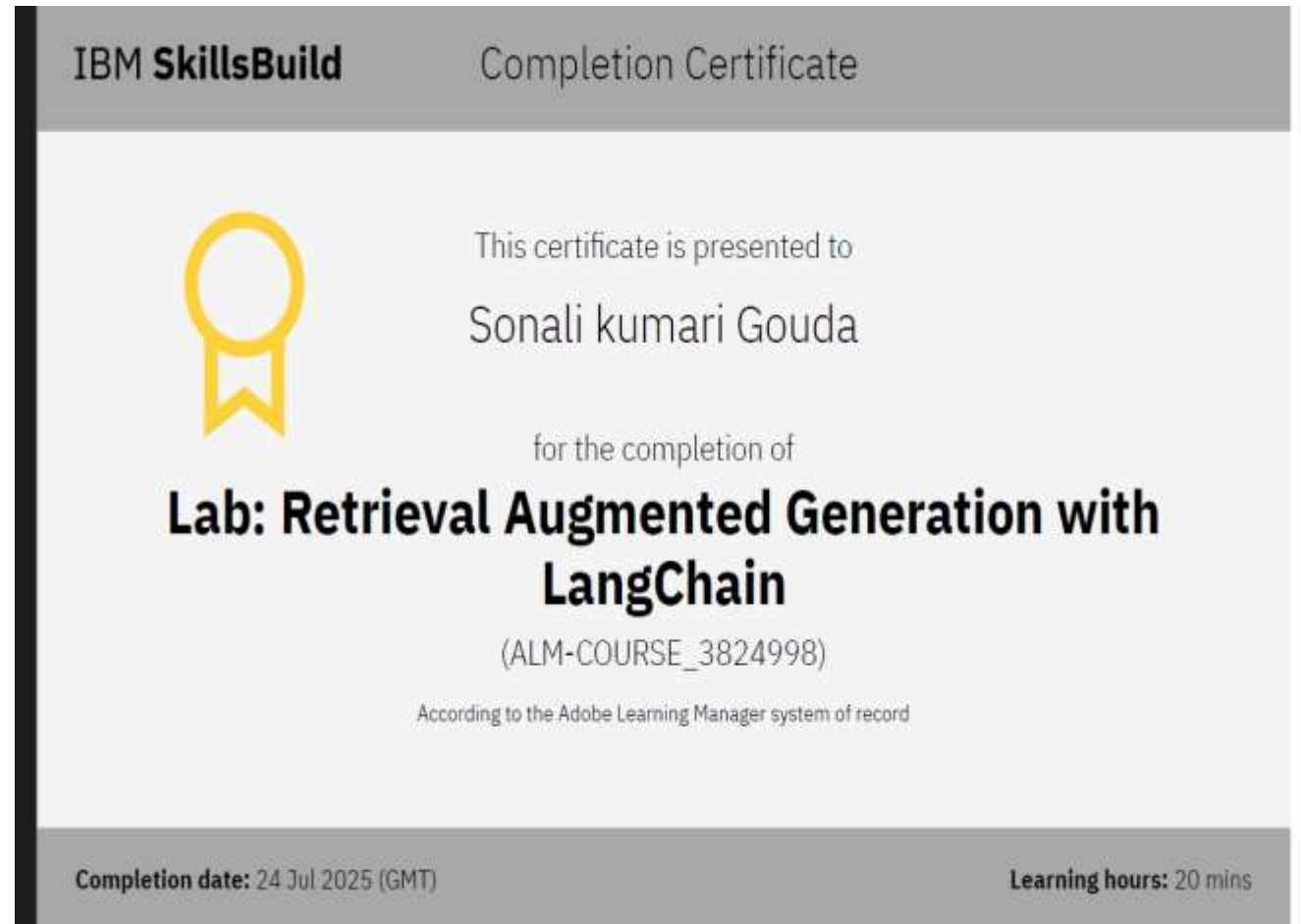
- Integration with live funding databases and investor networks
- Multi-language and regional market support
- AI-driven competitor risk analysis
- Collaboration features for team-based planning
- Export to advanced formats (PDF, Google Slides, Notion)
- Gamified learning modules for first-time founders

IBM CERTIFICATIONS

- Screenshot/ credly certificate(getting started with AI)



Attach your RAG LAB certificate here



Git hub link : <https://github.com/Sonalikumari2345/AICTE-IBM-internship-Cloud-and-AI.git>

GITHUB LINK

- Make sure that there should be readme file



THANK YOU