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# CAPSTONE PROJECT

## STARTUP BLUEPRINT GENERATOR AGENT

**Presented By:**  
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# OUTLINE

- **Problem Statement**
- **Proposed System/Solution**
- **System Development Approach (Technology Used)**
- **Algorithm & Deployment**
- **Result (Output Image)**
- **Conclusion**
- **Future Scope**
- **References**

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# PROBLEM STATEMENT

Today, thousands of young entrepreneurs have startup ideas, but most don't know how to begin. The process of crafting a business model, identifying the right market, estimating initial funding, or structuring a roadmap requires access to expert knowledge and experience.

Many early-stage founders struggle to build a clear vision or blueprint for their startup. This often results in confusion, lack of direction, or abandoned ideas before execution.

There is a need for an intelligent assistant that can guide users by generating personalized startup plans based on their ideas.

# PROPOSED SOLUTION

The proposed solution is an AI agent called the Startup Blueprint Generator Agent. Using IBM Watsonx.ai, the agent allows users to enter natural language prompts - for example, "I want to start an E-commerce Company in India" - and the agent will return a structured startup plan.

It covers:

- Business model options
- Market and customer analysis
- Operational Plan
- Marketing and scaling strategies

To provide realistic and useful recommendations, the agent uses a combination of foundation models and integrated tools like Google search and Web Search.

# SYSTEM APPROACH

## Technologies Used:

- IBM Watsonx.ai (to build the GenAI agent)
- Granite-13B-Chat (foundation model used)
- IBM Cloud (hosting and deployment)

## Tools Integrated:

- Web Search (for real-world facts)
- Google Search
- Wikipedia Search

## Libraries/Resources:

- Agentic AI framework
- Watsonx.ai Runtime services
- Deployment space for tool linking

# ALGORITHM & DEPLOYMENT

## **Model Used: Granite-13B-Chat**

Chosen for its reasoning capability and instruction-following behavior.

Example - Input: Natural language queries from users (e.g., "Generate a startup plan for a E-Commerce Comapny.")

## **Execution Flow:**

- Agent receives the user prompt
- Uses the model + tools (Web Search, Google Search)
- Produces a detailed blueprint with structured sections

## **Deployment Steps:**

- Created Watsonx.ai Runtime Service
- Deployed Python Engine (with API Key & Deployment Space)
- Linked tools with agent
- Saved and previewed the agent for real-time output

# RESULT

IBM watsonx

Upgrade ? 🔔 Nishtha Jain's Account ▾ Dallas ▾ NJ

Projects / Startup Blueprint Generator Agent / watsonx Agent

Share feedback β Autosaved 4:10 PM New agent + Deploy 🔒 ⓘ

Build

AI Model: granite-3-3-8b-instruct ▾

Instructions

Advanced configuration

You are a great startup planner, analysing economy of India you guide with the best strategies and planning to start a Business. Generate a detailed and structured startup blueprint that includes the following sections:

Startup Idea Validation: Explain how I can validate my idea in the market, conduct surveys, and gather early feedback.

Target Audience & Market Segmentation: Define the target customers and segment the market demographically and behaviorally.

Problem & Solution Fit: Describe the core problem my startup is solving and how my solution is unique or better than existing alternatives.

Business Model Canvas: Present the business model including value proposition, customer segments, channels, key resources, and revenue streams.

Minimum Viable Product (MVP): Suggest the key features of the MVP and tools I can use to build it.

Competitive Landscape: Provide an overview of existing competitors in this space and suggest how I can differentiate my offering.

Initial Funding & Budget Estimation: Provide a rough breakdown of the funds required, expected costs for development, marketing, and operations for the first 6 months.

Agent preview

NJ You: 04:10 PM

Generate a detailed startup plan for an e-commerce business that sells eco-friendly personal care products in India.

🤖 watsonx Agent 04:10 PM

### Eco-Friendly Personal Care E-commerce Startup Plan for India

#### 1. Startup Idea Validation


To validate your idea, conduct surveys using platforms like Google Forms or SurveyMonkey targeting eco-conscious consumers in India. Engage with potential customers on social media platforms like Instagram and Facebook to gather early feedback. Analyze the engagement rates, interest levels, and feedback received to refine your product offerings and marketing strategy.





#### 2. Target Audience & Market Segmentation










- **Demographics:** Health-conscious and environmentally aware individuals aged 18-45, residing in urban areas of India.
- **Psychographics:** Lifestyle segments such as vegan, zero-waste, and minimalist consumers.
- **Behavioral:** Online shoppers, brand loyal to sustainable products, and those willing to pay a premium for eco-friendly alternatives.





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# RESULT

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 Build  Model: granite-3-3-8b-instruct  

 Agent preview

Competitive Landscape: Provide an overview of existing competitors in this space and suggest how I can differentiate my offering.

Initial Funding & Budget Estimation: Provide a rough breakdown of the funds required, expected costs for development, marketing, and operations for the first 6 months.

Go-to-Market Strategy: Recommend a marketing and distribution plan to acquire my first 1000 users, including offline and online tactics.

Technology Stack Recommendations: Suggest technologies and platforms I can use to build the solution quickly and cost-effectively.

Legal and Compliance Checklist: Mention the licenses, registrations, or compliance requirements needed to legally operate a startup in India.

Growth Plan & Scaling: Propose how I can grow after initial traction, scale operations, and possibly expand to other cities or globally.

Team Building: List the key roles I should hire or outsource in the first phase of the startup.

Milestone Timeline: Break down the startup journey into a 12-month roadmap with monthly goals and checkpoints.

Return the final answer in readable Markdown, not JSON or code. Use headings and bullet points.




### 8. Go-to-Market Strategy

- **Acquiring First 1,000 Users:**
  1. Content marketing via blog posts and social media engagement on platforms like Instagram and Facebook.
  2. Influencer partnerships with green lifestyle influencers.
  3. SEO optimization to rank for relevant keywords.
  4. Email marketing campaigns using Mailchimp.
  5. Participation in eco-friendly events and trade shows.

### 9. Technology Stack Recommendations

- **E-commerce Platform:** Shopify
- **Branding Materials:** Canva
- **Email Marketing:** Mailchimp
- **Website Analytics:** Google Analytics
- **Inventory Management:** Zoho Inventory (optional)

### 10. Legal and Compliance Checklist

Type something...   



# CONCLUSION

- Working on this project helped me realize how GenAI can effectively make something as daunting as startup planning simple and creative. With a simple prompt, I was able to build an agent that could help plan everything from an idea to a complete strategy (including business models, projected costs and expenses, and a marketing strategy).
- I also learned how to create and deploy an intelligent agent using IBM Watsonx.ai, and connect it to a tool chain that included Web Crawler, Google Search, and Wikipedia Search in order to produce contextual and realistic outputs.
- What I found most interesting was the potential for AI to help entrepreneurs with resources and direction towards their goal. The agent provided the encouragement, structure, and confidence to take an idea to the next step — even if that person did not have a business background.

# FUTURE SCOPE

Improvements I could pursue:

- Enable exporting of created plans to PDF or Notion pages
- Include additional tools like database querying or live news feeds
- Expand to be applicable in universities, accelerators, or startup hackathons
- Build a website interface that anyone can use this agent

Integration with APIs like Google Trends, Startup India, or investor databases can take this project into all new directions.

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# REFERENCES

- IBM Cloud Documentation
- IBM Watsonx.ai Official Overview
- Sessions conducted by mentors during the virtual internship
- GenAI and Agentic AI concepts discussed in IBM Labs workshops
- Personal experimentation, test cases, and Watsonx deployment practice

# IBM CERTIFICATIONS

In recognition of the commitment to achieve  
professional excellence



## Nishtha Jain

Has successfully satisfied the requirements for:

### Getting Started with Artificial Intelligence



Issued on: Jul 16, 2025  
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### Journey to Cloud: Envisioning Your Solution




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# IBM CERTIFICATIONS

IBM SkillsBuild	Completion Certificate
	
This certificate is presented to <b>Nishtha Jain</b>	
for the completion of <b>Lab: Retrieval Augmented Generation with LangChain</b> (ALM-COURSE_3824998)	
According to the Adobe Learning Manager system of record	
<b>Completion date:</b> 24 Jul 2025 (GMT)	<b>Learning hours:</b> 20 mins



**THANK YOU**