
CAPSTONE PROJECT

STARTUP BLUEPRINT GENERATOR AGENT

Presented By:

Student name : Nitin Verma

College Name & Department : Invertis University, Department Of Computer Applications

OUTLINE

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

PROBLEM STATEMENT

Aspiring entrepreneurs, students, and early-stage founders often struggle to convert raw startup ideas into structured and actionable business plans. The process of gathering market research, identifying suitable funding options, analyzing competitors, understanding government schemes, and fulfilling legal requirements is time-consuming, overwhelming, and often inaccessible to non-experts. This lack of clarity and direction delays or even discourages innovation and startup creation.

Proposed Solution:

An AI-powered Startup Blueprint Generator Agent that leverages **Natural Language Processing (NLP)** and **Retrieval-Augmented Generation (RAG)** to transform simple startup ideas into comprehensive business blueprints.

TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

IBM Granite model (granite-3-3-8b-instruct)

IBM CLOUD SERVICES USED

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

WOW FACTOR

This agent turns raw startup ideas into full business blueprints within minutes. It simplifies entrepreneurship by offering ready-to-use plans backed by real data, making startup planning fast, easy, and accessible — even for beginners.

Unique Features

- Understands idea & auto-detects domain
- Generates complete Business Model Canvas
- Estimates startup budget with cost breakdown
- Suggests funding & govt. schemes
- Retrieves competitor & market data
- Creates Go-To-Market strategies
- Recommends investors/incubators
- Allows PDF download of the plan


END USERS

- Aspiring entrepreneurs with raw startup ideas
- College students working on startup projects
- Innovation and incubation cell members
- Business mentors and startup coaches
- Small business owners entering new markets
- Hackathon participants and ideation teams
- Early-stage founders seeking structured guidance

RESULTS

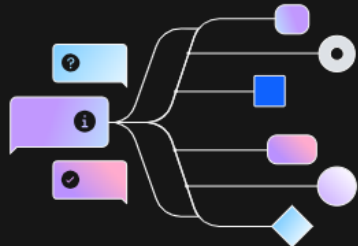
Build >

Agent preview

 Startup Blueprint Generator Agent 03:50 PM

Welcome to Startup Blueprint Generator Agent

I'm your AI startup buddy – just drop your idea, and I'll build your full plan: market, budge, more.





Sample questions

I want to build a clothing brand for college students. →


I want to start a photography business for weddings and events. →

Type something...



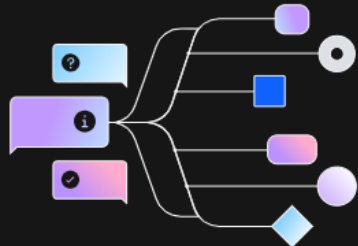
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 Startup Blueprint Generator Agent 03:50 PM

Welcome to Startup Blueprint Generator Agent

I'm your AI startup buddy – just drop your idea, and I'll build your full plan: market, budge, more.



Sample questions



I want to build a clothing brand for college students. →

I want to start a photography business for weddings and events. →

I want to build an app that connects home chefs with local customers who want affordable, homemade meals. Please generate a complete startup blueprint including business model, market research, budget estimate, go-to-market strategy, and legal requirements. →

I want to start a solar panel installation and supply business focused on serving government projects, public sector buildings, and rural electrification programs. →

Type something...



RESULTS

Build > Agent preview

NV You: 03:53 PM

I want to start a solar panel installation and supply business focused on serving government projects, public sector buildings, and rural electrification programs.

Startup Blueprint Generator Agent 03:53 PM

Startup Blueprint for Solar Panel Installation and Supply Business

1. Problem & Solution

Problem: India faces a significant energy deficit, with a large portion of the population lacking access to reliable electricity, particularly in rural areas. Traditional energy sources are often inadequate, expensive, and environmentally damaging.

Solution: A solar panel installation and supply business catering to government projects, public sector buildings, and rural electrification programs. This will provide clean, renewable, and cost-effective energy solutions, contributing to India's renewable energy goals and sustainable development.

2. Target Audience

Type something...



Build > Agent preview

2. Target Audience

- Government bodies and departments (Ministry of New and Renewable Energy, state-level energy departments)
- Public sector undertakings (PSUs)
- Rural electrification programs (e.g., Saubhagya, Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan - Pradhan Mantri KUSUM)
- Non-governmental organizations (NGOs) focused on rural development
- Local municipal corporations and panchayats

3. Competitor Analysis

- **Existing Players:** Companies like Tata Power Solar, Welspun Solar, and Acme Solar are major players in the solar EPC (Engineering, Procurement, and Construction) and supply segments.
- **Strengths:** Established supply chains, experienced workforce, and a track record of successful projects.
- **Weaknesses:** High entry barriers, intense competition, and reliance on government policies.
- **Opportunities:** Growing government focus on renewable energy, increasing demand from rural areas, and potential for innovative financing models.

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RESULTS

4. Revenue Model

- **Project-based Contracts:** Secure contracts from government bodies and PSUs for large-scale solar installations.
- **Supply of Components:** Sell solar panels, inverters, mounting structures, and other components to smaller installers or directly to end-users.
- **Maintenance and Support Services:** Offer post-installation maintenance and support contracts for recurring revenue.
- **Grants and Subsidies:** Leverage government subsidies and incentives for renewable energy projects.

5. Government Schemes

1. **Saubhagya Scheme** (<https://pib.gov.in/PressReleasePage.aspx?PRID=1700000>): Ensures electricity connectivity to all households, promoting solar connections in rural areas.
2. **Pradhan Mantri KUSUM (PM-KUSUM)** (<https://pm-kusum.gov.in/>): Focuses on providing solar-powered pumps, grid-connected solar power plants, and stand-alone solar power plants for farmers.
3. **Assured Return Scheme (ARS)** (<https://mnre.gov.in/schemes-and-components/components/assured-return-scheme>): Provides a fixed tariff for solar power generated for 25 years.

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Agent preview

4. **Solar Rooftop Program** (<https://mnre.gov.in/schemes-and-components/components/solar-rooftop-program>): Encourages solar installations on rooftops of residential, commercial, and industrial buildings.
5. **State-level Schemes:** Many states have their own schemes, such as the Tamil Nadu's solar policy and the Gujarat Solar Policy.
6. **Production Linked Incentive Scheme (PLI) for Solar PV Modules** (<https://www.investindia.gov.in/scheme/doc/PLI-Solar-PV-Modules-2021-2026.PDF>): Incentivizes domestic manufacturing of solar PV modules.
7. **National Hydrogen Mission** (https://mnre.gov.in/files/press_release/National_Hydrogen_Mission_Press_Release_2021.pdf): Promotes green hydrogen production, which can be powered by solar energy.
8. **Atmanirbhar Bharat Rojgar Yojana** (<https://www.mha.gov.in/agriculture-farmer-welfare/atmanirbhar-bharat-rojgar-yojana>): Supports job creation in sectors like renewable energy.
9. **Credit Guarantee Scheme for MSMEs** (<https://www.msme.gov.in/credit-guarantee-scheme-for-msmes>): Provides credit guarantee to banks for lending to MSMEs, including those in the renewable energy sector.
10. **Startup India Recognition** (<https://www.startupindia.gov.in/content/sihns/startup-india-recognition.html>): Offers recognition and benefits to startups, including tax exemptions and funding opportunities.

Type something...



RESULTS

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6. Legal Steps

1. **Business Registration:** Register as a Private Limited Company (LLP is also an option).
2. **GST Registration:** Obtain Goods and Services Tax (GST) registration.
3. **Environmental Clearances:** Secure necessary environmental clearances and permissions.
4. **Safety Compliance:** Ensure compliance with safety standards (e.g., Factory Act, Electrical Safety).
5. **Import/Export Licenses:** If importing/exporting solar components, obtain relevant licenses.
6. **Intellectual Property Protection:** Consider trademarking your business name and logo.

7. Business Model Canvas

| Key Partners | Key Activities | Value Propositions | Customer Segments |
Channels | Customer Relationships | Revenue Streams | Key Resources | Key
Activities | Cost Structure | |-----|-----|-----|-----|
-----|-----|-----|-----|-----|-----|
---|-----|-----| | Government bodies, PSUs, NGOs, municipal

Type something...



Build > Agent preview

corporations | Solar panel installation, supply, and maintenance | Clean, reliable, and cost-effective energy solutions | Government, PSUs, rural electrification programs | Direct sales, project bids, partnerships | Dedicated project managers, post-installation support | Project-based contracts, component sales, maintenance fees | Solar panels, inverters, mounting structures, skilled workforce | Project execution, supply chain management, maintenance services | Manufacturing/procurement, installation, workforce salaries, logistics |

8. Go-to-Market Strategy

- **Networking and Partnerships:** Attend industry events, join solar energy associations (e.g., Solar Power Europe, Suzlon Group), and partner with local NGOs and government bodies.
- **Online Presence:** Develop a professional website showcasing past projects, testimonials, and expertise. Utilize LinkedIn for B2B networking.
- **Content Marketing:** Publish case studies, whitepapers, and blog posts on renewable energy trends and success stories.
- **Tender Alerts:** Subscribe to government tender portals (e.g., PEPsUP, TenderSure) for project opportunities.
- **Local Outreach:** Engage with local communities and stakeholders to build trust and awareness.

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RESULTS

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9. Estimated Budget

- **Initial Investment:** ₹50-100 lakhs (for equipment, initial projects, office setup, and working capital)
- **Operational Costs:** ₹10-20 lakhs/year (salaries, logistics, marketing, administrative expenses)
- **Contingency Fund:** ₹5-10 lakhs (for unforeseen expenses and market fluctuations)

10. Funding & Investor Suggestions

- **Angel Investors:** Platforms like LetsVenture (<https://www.letsventure.com/>), Tracxn (<https://tracxn.com/>), and 91springboard (<https://91springboard.com/>) can connect you with angel investors.
- **Venture Capital:** Explore VC firms like Ola Money, Blume Ventures, and WaterBridge Ventures, which have invested in renewable energy startups.
- **Government Schemes:** Apply for funding under the Ministry of New and Renewable Energy (MNRE) schemes, such as the Solar Energy Corporation of India (SECI) schemes.
- **Incubators and Accelerators:** Join programs like the National Incubation Centre (NIC), IIT incubators, and the Indian Solar Council's incubation support.

Type something...



Build > Agent preview

Incubators and Accelerators join programs like the National Incubation Centre (NIC), IIT incubators, and the Indian Solar Council's incubation support.

11. Legal Requirements

- **Company Registration:** Register as a Private Limited Company

► How did I get this answer?

NV You: 03:56 PM

can you teach me python

Startup Blueprint Generator Agent 03:56 PM

I'm sorry for the misunderstanding, but as per the guidelines, I can only provide information related to startup business planning. I cannot teach programming languages like Python. If you have any questions about starting a tech-based startup, such as a software development company or a fintech startup, I'd be glad to help with those.

► How did I get this answer?



Type something...



RESULTS

Deployed AI Agent

The screenshot displays the IBM Watsonx web interface for the 'Startup Blueprint Generator Agent'. The browser address bar shows the URL: https://dataplatform.cloud.ibm.com/ml-runtime/deployments/b7e57c17-a4a9-4d9f-b342-cc09fe5cad85/chat?space_id=56abf0f7-f6b4-449e-b894-5b855b869380&context=wx&flush=true. The page header includes the IBM Watsonx logo, an 'Upgrade' button, and user account information for 'Nitin Verma's Account' in the 'Dallas' region. The main content area shows the agent is 'Deployed' and 'Online'. Below this, there are tabs for 'API reference', 'Test', and 'Preview', with the 'Preview' tab selected. The chat interface shows a welcome message from the 'Startup Blueprint Generator Agent' at 03:43 PM, stating: 'Welcome to Startup Blueprint Generator Agent. I'm your AI startup buddy – just drop your idea, and I'll build your full plan: market, budge, more.' Below the message is a diagram of a flowchart with various colored nodes and connecting lines. At the bottom, there is a 'Quick start samples' section with a text input field containing the placeholder 'Type something...'. The interface is dark-themed with blue and purple accents.

CONCLUSION

- The agent can generate complete startup blueprints, recommend funding sources, and provide market and competitor insights—all from a simple idea input.
- It saves time by automating tasks like business model creation, cost estimation, and strategy planning.
- Startup Blueprint Agents boost efficiency, clarity, and innovation—empowering individuals to launch ventures with confidence and speed.

FUTURE SCOPE

- Multilingual Startup Idea Support (Hindi, Tamil, etc.)
- Voice-Activated Idea Input
- Real-Time Collaboration for Team Startups
- AI-Based Feasibility & Risk Analysis
- Integration with Pitch Deck & PDF Export Tools
- AI-Assisted MVP & Wireframe Suggestions

IBM CERTIFICATIONS



Screenshot/ credly certificate(getting started with AI)

Attach your RAG LAB certificate here

IBM SkillsBuild

Completion Certificate



This certificate is presented to

Nitin Verma

for the completion of

**Lab: Retrieval Augmented Generation with
LangChain**

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 18 Jul 2025 (GMT)

Learning hours: 20 mins

THANK YOU 🙏