

Basic Details of the Team and Problem Statement

Ministry/Organisation Name/Student Innovation:

Ministry of Micro, Small & Medium Enterprises

PS Code:

SIH1509

Problem Statement Title:

App-Based Solution to provide market access to micro and small enterprises

Team Name:

Hack Hustlers

Team Leader Name:

Rajat Raj

Institute Code (AISHE):

U-1056

Institute Name:

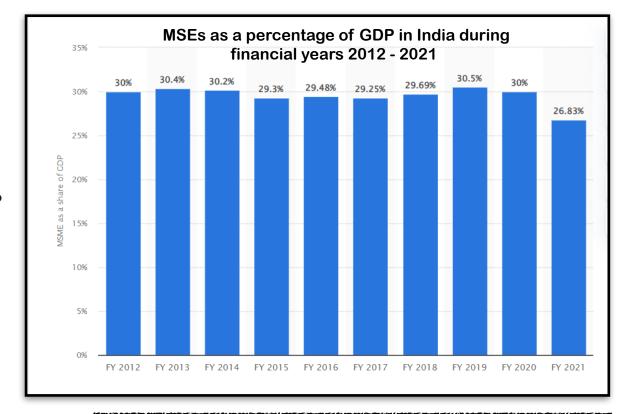
Netaji Subhas University of Technology

Theme Name:

Miscellaneous

MARKET RESEARCH

According to Forbes, SMEs contribute around 30% to India's Gross Domestic Product (GDP) and employ approximately 40% of the country's workforce, around 45% of the country's industrial output and 40% of the country's exports. There are around 6000 products manufactured by 31.7% SMEs while the remaining 68.2% are engaged in delivering various services. This sector, if extended the right support, has the potential to spread industrial growth throughout the country.



Contribution of MSMEs in Country's Economy at Current Price

[Figures in Rs. Crores adjusted for FISIM at current prices]

Year	MSME GVA	Growth (%)	Total GVA	Share of MSME in GVA (%)	Total GDP	Share of MSME in GDP (in %)
2011-12	2622574	-	8106946	32.35	8736329	30.00
2012-13	3020528	15.17	9202692	32.82	9944013	30.40
2013-14	3389922	12.23	10363153	32.71	11233522	30.20
2014-15	3704956	9.29	11504279	32.21	12467959	29.70
2015-16	4025595	8.65	12566646	32.03	13764037	29.20
2016-17	4405753	9.44	13841591	31.83	15253714	28.90

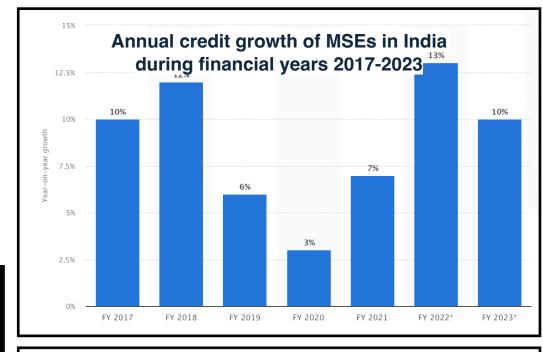
Source: Central Statistics Office (CSO), Ministry of Statistics & Programme Implementation

Almost 86% of the country's manufacturing MSMEs are unregistered. Only about 1.1 crore of the 6.3 crore MSMEs are registered with the Goods and Services Tax (GST) regime, and the number of income tax filers is even lower. Regulatory risks and policy uncertainty limit the scaling-up of MSMEs. Lack of resources – time, money, and skilled employees make it impossible to increase visibility and generate quality leads.

IDEA/APPROACH DETAILS

We look forward to developing a solution that is driven by **Data Science**, **Machine Learning**, **Web Development**, and **Artificial Intelligence** to give SMEs market access and offer a **multifaceted** answer to every difficulty they confront, utilising the following strategies:

- credit requirements are met and the challenges faced in obtaining permits, contracts, taxes and international trade due to regulatory risks and policy uncertainty by making legal activities easier, are reduced using **AI**, **blockchain** and **web development**.
- SMEs are able to present their goods and services to a wider audience in the digital marketplace and **connect** with prospective customers, partners, suppliers and investors.
- a **chatbot** is developed using **AI**, to assist users with their concerns.
- knowledge and abilities are enhanced; educational materials, webinars, training programs and courses are provided.
- access to loans and crowdfunding opportunities are facilitated while preserving a **positive cash flow**.
- market analysis and insights are offered to assist SMEs in making wise decisions.
- required **certifications** are achieved and quality requirements are met.
- trustworthy security measures protect user data and ensure privacy compliance.
- creating a platform where:
 - 1. Customers can directly **contact** the MSEs.
- 2. Our application informs MSEs about trends and suggests the specified locations where advertising can significantly increase **profits**.
 - 3. Customer base can be expanded in domestic as well as international market.





IDEA/APPROACH DETAILS

USE CASE:

Imagine an SME named "Green India Innovations" that specialises in eco-friendly household products. They want to expand internationally but face challenges like understanding foreign regulations, accessing funds for production scaling, and identifying potential markets.

- Green India Innovations uses the platform to access AI-driven regulatory **guidance**, streamlining the process of complying with environmental regulations in their target countries.
- They utilise the **crowdfunding integration** to raise funds for a new product line, attracting investors interested in **sustainable** solutions.
- Green India Innovations benefits from market trend **analysis**, discovering a growing demand for eco-friendly products in India.
- They **expand** their customer base using the customer-contact platform, **directly** engaging with retailers in **major** Indian cities.
- User feedback leads to the development of a feature that calculates carbon emissions for each shipment, aligning with their **environmentally** conscious brand.

This use case illustrates how the project's dependencies enable Green India Innovations and other SMEs to navigate international expansion Successfully, tapping into new markets and achieving sustainable growth.

DEPENDENCIES:

Platform Development and User Engagement:

Creating a user-friendly platform for SMEs, including an Al chatbot for assistance, a direct interaction platform for customers and SMEs, and continuous improvement based on user feedback.

Data Collection and Analysis:

Gathering market data for SMEs to make informed decisions. Example: collecting import/export statistics to help SMEs identify lucrative international markets.

Al and Blockchain Integration:

Using AI and Blockchain to simplify regulatory processes and reduce risks. Example: implementing AI algorithms to automate custom documentation verification for international trade.

Certification and Quality Compliance:

Assisting SMEs in meeting industry certifications and quality standards. Example: guiding a food manufacturer to obtain necessary FDA certifications for exporting to the U.S.

Security Measures:

Ensuring data security and privacy compliance. Example: implementing robust encryption to protect SME's financial data.

International Expansion:

Assisting SMEs in expanding their customer base globally. Example: Offering guidance on adapting marketing strategies for different countries.

Team Members

Team Leader Name: Rajat Raj

Branch (Btech/Mtech/PhD etc): **Btech** Stream (ECE, CSE etc): **CIOT** Year (I,II,III,IV): **III**

Team Member 1 Name: Manish Kumar Kohli

Branch (Btech/Mtech/PhD etc): **Btech** Stream (ECE, CSE etc): **CIOT** Year (I,II,III,IV): **III**

Team Member 2 Name: Kartik

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Team Member 4 Name: Paras Jain

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Team Member 5 Name: Krisha Garg

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