ENTREPRENEURSHIP (EP7001)

ASSIGNMENT-1

ACTIVITY 1

Identify an example of entrepreneurship in your region and make a list of motivating factors that would have helped to that effect.

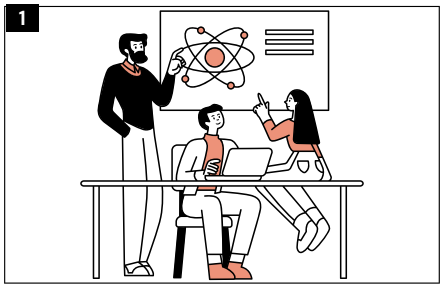
SHEIKH MUHAMMED TADEEB (AU19B1014)

ABOUT THE STARTUP

EngineerBabu is an IT services company, with a committed team. Armed with 250+ Geeks, in three cities in India, Melbourne, Australia. They are specialized in building MVP (minimum viable product) for startups. With their extremely innovative, dedicated & experienced team, they have developed robust & scalable solutions that helped their clients to overcome their hurdles.
The story behind this startup is really inspirational as it comes from the background of involuntarily helping other engineers to become a better version of themselves and get their dream jobs.
We have tried to show the story of both individuals and how they landed together to fulfill a purpose through storyboarding.

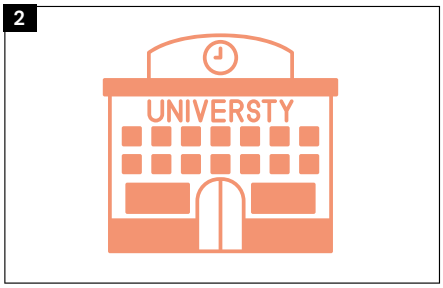
Story of EngineerBabu (Mayank)

1



Scene: Mayank used to teach in an institute. He kept observing that the institute used to charge a lot for placements.

2

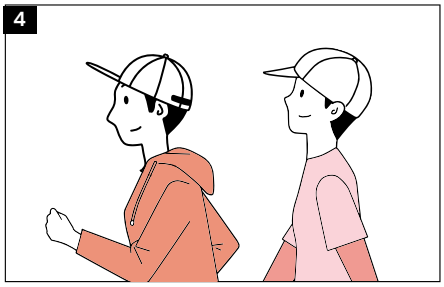


Scene: One day , the institute shut down out of nowhere. and there were 23 students left jobless.

3

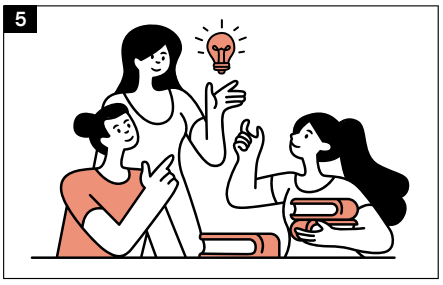
Scene: Mayank felt really bad for them and started teaching them

4



Scene: The day he started teaching those students he created a group on Facebook for such students. His aim was to help engineers to get job.

5



Scene: Then I had an idea of EngineerBabu, met a great co-founder on my journey and now we are a team of 35 happy members.

Story of EngineerBabu (Aditi)

1

Scene: Aditi Chourasia was an ambitious girl from a small village who faced all the stereotypical struggles.

2

Scene: She was the first girl in her village brave enough to attend an English medium school in spite of all the pointed fingers at her.

3

Scene: She worked hard towards the preparation for medical entrance but unfortunately was unsuccessful in her every attempt.

4

Scene: She met Mayank in her college during her MBA and thought she could have new dreams.

5

Scene: Then after many hardships , she started working towards EngineerBabu with Mayank to inspire girls like her and help them achieve their goals

MOTIVATING FACTORS THAT HELPED THE STARTUP GROW FASTER

1. THE PURPOSE BEHIND THE IDEA

EngineerBabu started on a purpose of helping other people to get jobs and work with the founders as family to put their skills to better purpose. This great cause served thousands of people and reached everyone at a great speed.

2. THE BOND BETWEEN THE CO-FOUNDERS

When we work on a startup , it's built on a foundation of many other factors than money and investments. A startup is built on trust. And no business partners can trust each other better than two friends. As Mayank and Aditi had their personal problems and helped each other become better, they had a strong bond with one another, thus making EngineerBabu a strong foundation.

3. NETWORKS OF THE FOUNDERS AND INVESTORS -

As Mayank came from the similar domain of their startup, He had many connections who were ready to invest , join and be a part of the team right away. This resulted in the formation of a strong team and network from the outside world.

4. AVAILABILITY OF THE TARGET AUDIENCE

The target audience of the startup plays a vital role in determining the success of the idea. Here, EngineerBabu targets all the engineers who are struggling to prove themselves and provide them with global opportunities.
So the target audience of this startup is large in number and thus increasing the scope of the idea. This is one of the major reasons why EngineerBabu became so successful in so little time.

5. REGION OF THE STARTUP

The region/area in which the startup originates plays an important role. Since Indore has less opportunities for people compared to the metropolitan cities. The people will go for the next best and convenient thing they find close to them. This is also one of the reasons EngineerBabu flourished so soon. They found talents which were not acknowledged by the world.

Assignment Activity 2

Sheikh Muhammed Tadeeb (AU19B1014)

Strength	Weakness	Annual Goal	Action Plan
Disciplined	Procrastination	1st: Cloud Practioner	Completed AWS Training + edx certs
Motivated	Lack of Patience	2nd: Linux Administrator roles	Finished KodeKloud engineer bootcamp
Communication	Harsh Self-Criticism	3rd: Cloud Solution Architect	Finished 2 month working on practical projects
Time-management	Trouble with work life balance	4th: DevOps engineer	Will start preparing for AWS DevOps
Leadership	Talkative	5th: Good Physique	Doing regular GYM from past 5 years.

AUG. 28, 2022

Sheikh Muhammed Tadeeb (AU19B1014)

ACTIVITY-3

1. Internal hub gearing

An smart interlocking set of gears, called a planetary system, helps you ride up a hill–or go faster on a flat. Depending on the gear, the driver unit either first spins outer ring gears, or the planetary gears deeper in the hub, rotating around sun gears near the center

2. Shaft drives

They offer much less noise and go longer periods without maintenance as compared to chains

3. Concealed brakes

No more wires jutting out

SMART CYCLE

4. Folding bicycles

There are few stores that sell some outdated models, but prices are in the range of INR 20K - INR 50K which is pretty absurd. Lots of scopes to manufacture these locally or increase import efficiencies. BSA had a Feldman model long time back, but the quality wasn't up to the mark nor was the market ready for it then

5. Automatic gears

Yes, for bicycles - detects the change in the force of pedaling and switch gears automatically to a more comfortable cadence

2022

ENTREPRENEURSHIP

ACTIVITY - 4

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1. With most schools adopting the online mode of education, many children find difficulty in using or affording the required technical devices to participate in class.

About the Problem

Online education has witnessed a major rise during the period of 2019-2020. Especially after Covid 19 imposed lockdown, the online learning market has seen a massive growth rate globally with the increase in emphasis on e-learning.

The industry is expected to reach $336.98 billion globally by 2026 with an anticipated CAGR of 9.1% from 2018 to 2026.

Problem Statement

Building a team of e-helpers that will act as a mediator (Broker) to help students take cost-effective decisions thereby avoiding difficulty in using or affording required technical devices

Business Idea

The student is facing 2 problems :

1st is affording the required technical devices (hardware + software), so for this problem, we came up with a solution that we'll act as a mediator which will be providing 3rd party AWS solution to the students so that the students could easily access the AWS-provided computer services in a very low price.

2nd is difficult in using the technology or technical devices. So for this, we will be charging 300 rupees per month per student 24/7 for technical support that will help the student to avoid any technology-usage-related issues.

Student total investment Normally

The students usually invest in these things if they are having online education

- 1 laptop = 50,000 Rs minimum
- Softwares = 500 Rs minimum
- Internet cost = 4500 Rs minimum
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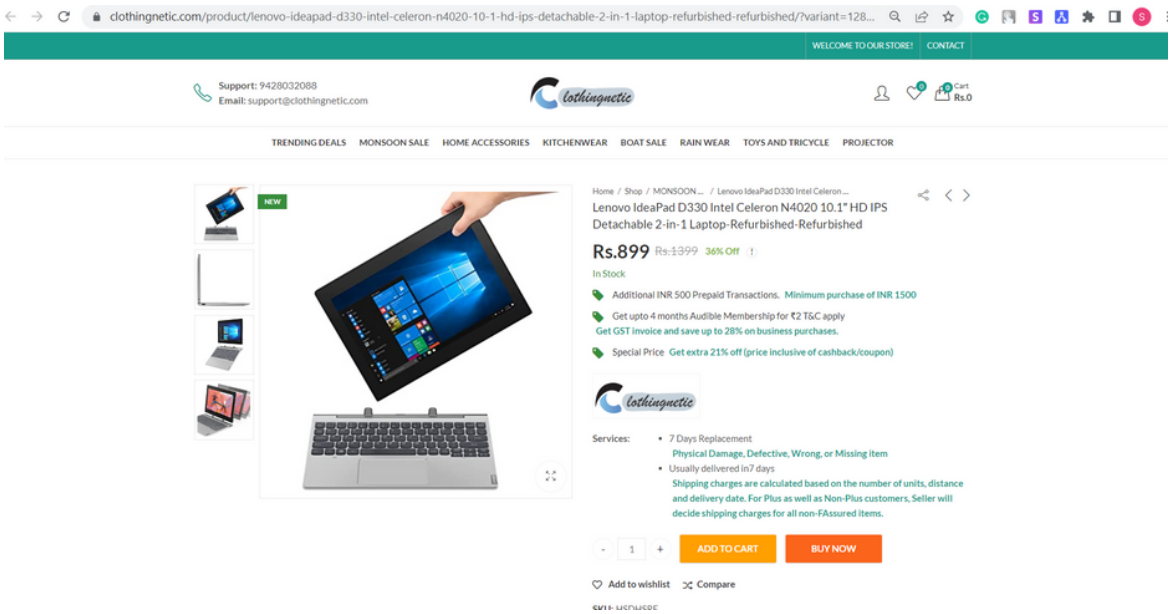
- Total = 55,000-60,000 per year

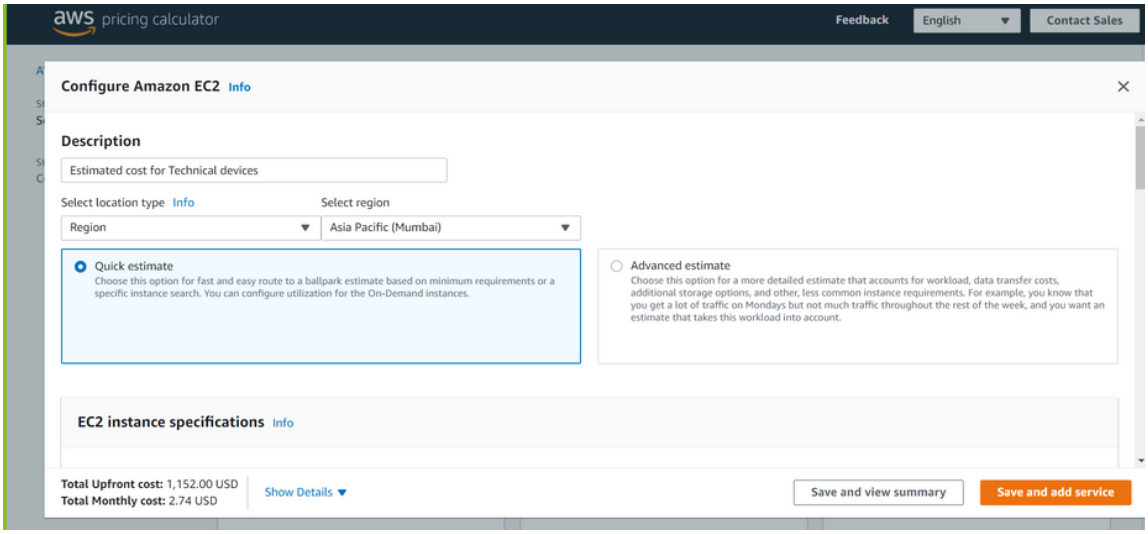
Student Investment with our Business Model

1. Rental Laptop



2. AWS Based Computer Service

As the laptops are refurbished we'll act as mediator and help the student access AWS services so that he can perform high-end techincal tasks even with low configuration reburbished laptop (provided by us)



Student total investment with our Business Model

The students will invest in these things if they are using our solution:

- 1 laptop = 500 Rs per month or 6000 Rs per year minimum
- Softwares = All AWS Based Compute resources = 2880 Rs per year
- Internet cost = 4500 Rs minimum
- Total = 13,680 Rs per year

2. Growing waste, and garbage in the city with the ineffective civic bodies collection system

About the Problem

Over 377 million urban people live in 7,935 towns and cities and generate 62 million tonnes of municipal solid waste per annum. Only 43 million tonnes (MT) of the waste is collected, 11.9 MT is treated and 31 MT is dumped in landfill sites.

Solid Waste Management (SWM) is one among the basic essential services provided by municipal authorities in the country to keep urban centers clean. However, almost all municipal authorities deposit solid waste at a dumpyard within or outside the city haphazardly.

Waste management rules in India are based on the principles of "sustainable development", "precaution" and "polluter pays".

Problem Statement

Building a system for sustainable waste management in municipalities, recycling centers, MRFs, and other waste management businesses which reduces the grwoing waste in cities

IOT BASED WASTE MANAGEMENT

Waste management is still carried out with traditional methods in municipalities, recycling centers, MRFs, and other waste management businesses using IoT are already reaping the fruits of technology.

We came up with the solution of using IoT sensors in Municipalities, recycling centers, and other waste management businesses as an effective solution for civic body collection systems contributing to E-waste management and more sustainability.

These systems not only offer optimization for your operational plans but can also help reduce extra spending and ensure a more intelligent budget. In addition, they set an example for eco-friendly waste management, and the new resources created by advanced recycling practices make an important contribution to the circular economy

SMART BIN SENSORS AND WASTE SEGREGATOR

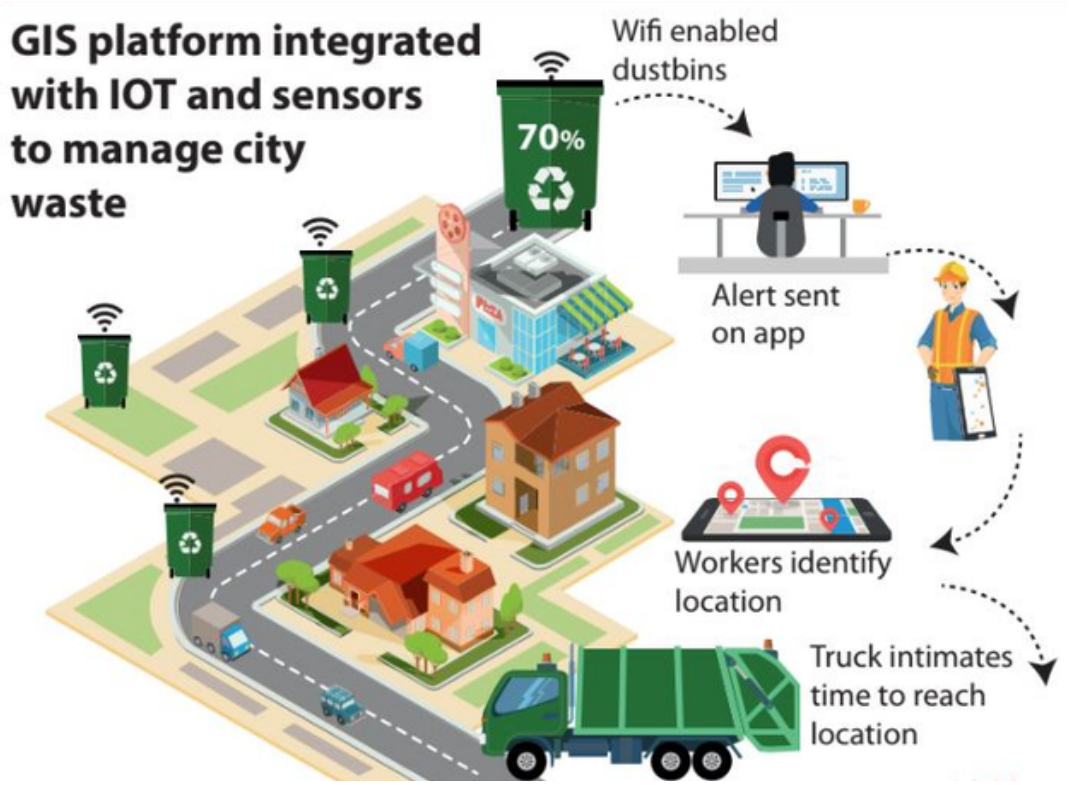
Waste bins are one of the essential components of waste management operations because they start the cycle of waste operations. IoT-based smart sensors help you utilize smart bin sensor technology from the beginning.

We will use Fill Level Sensor which will help in -

- Tracking the location with real-time data
- View fullness levels for creating daily optimized routes for collection
- Monitor the temperature of your smart bins
- Get instant alerts in case of emergencies

This is an effective solution to reduce the number of missing containers with location tracking and reach advanced inventory management.

Monitoring the temperatures will help prevent unwanted accidents like explosions and fires. Viewing the fullness levels will be one of the critical components of a multi-stop route optimization system.

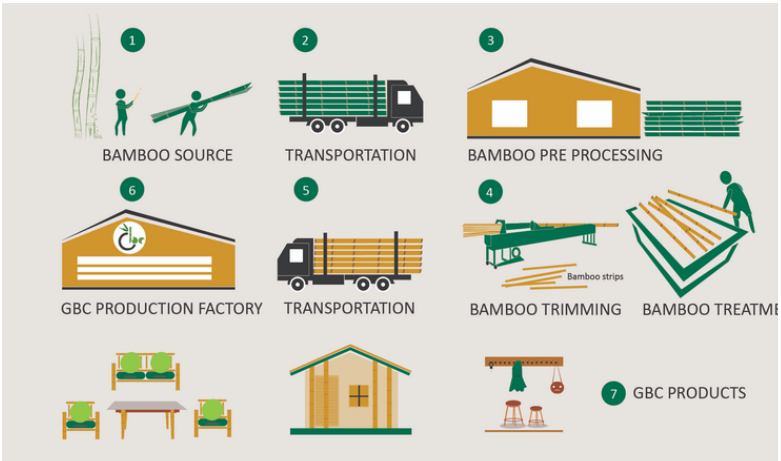


This system help cities reduce traffic congestion, cut CO2 emissions, and decrease waste management costs, which comprise up to 50% of municipal budgets in most developing countries.

2nd Business Idea

Bamboo products as an alternative to plastic. Which is used to develop and sell zero waste range of products manufactured from sustainable bamboo material that are eco-friendly thereby maintaining the ecosystem and giving back to the community.
Instead of using a single-use plastic material that sits in a landfill and pollutes the Earth, it's smarter to use something that is not only durable but will break down and feed the environment once its use is over. **And that's why we will be turning to bamboo to make their goods for consumers. They can produce a quality green product while giving something to consumers that they can feel good about using.**

- The solution is to use the used bamboo from machines and waste bamboo to make furnitires, usable plates and daily life materials llike Kitchen utensils, coffee cups, flasks, t-shirts, underwear and socks etc.



3. Malnutrition in children and women in low income groups.

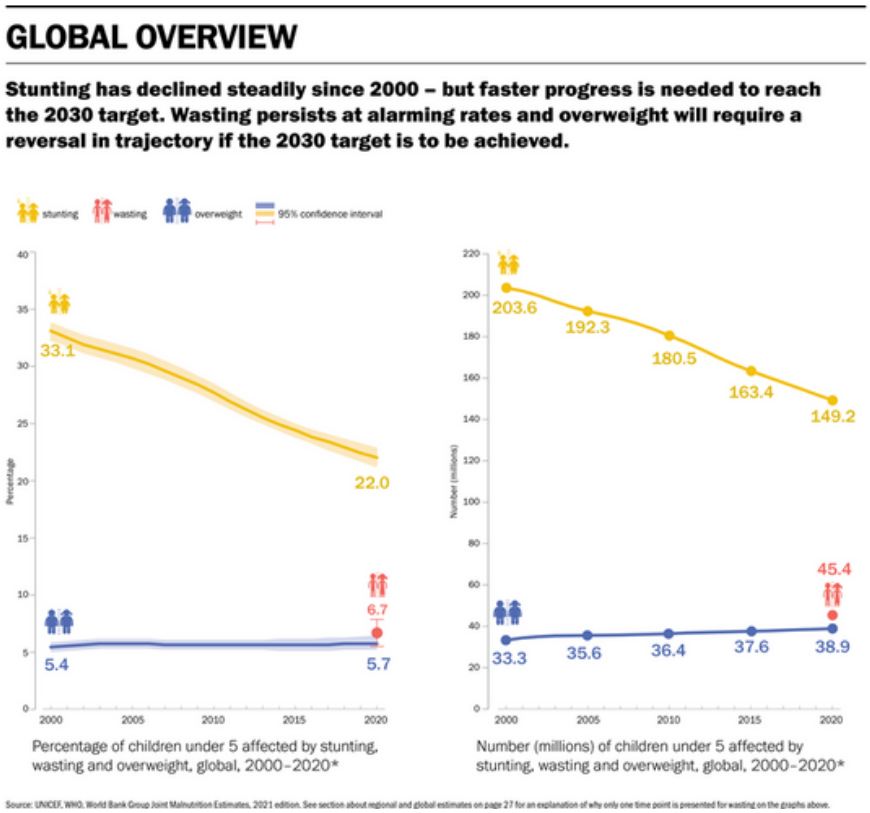
About the Problem

According to World Health Organization (WHO) following facts have been stated:

Malnutrition, all told in its forms, includes undernutrition (wasting, stunting, underweight), inadequate vitamins or minerals, overweight, obesity, and leading diet-related noncommunicable diseases.

1.9 billion adults are overweight or obese, while 462 million are underweight. Globally in 2020, 149 million children under 5 were estimated to be stunted (too short for age), 45 million were estimated to be wasted (too thin for height), and 38.9 million were overweight or obese.

Around 45% of deaths among children under 5 years old are linked to undernutrition. These mostly occur in low- and middle-income countries. At the identical time, in these same countries, rates of childhood overweight and obesity are rising.



Problem Statement

Building a chain of Non-Profitable Organizations or NGOs

Non-Profitable Organiztion

A non-profitable organization that aims, to help people who cannot afford a single meal in a day. The organization will work with the government and use government policies to provide food to all these people.

This organization will locate such areas in its research phase. After gathering the locations, they will work on finding the statistics of people and families who need a regular supply of food.

After all the research, and gathering of funds from investors, the organization will be able to deploy its NGOs in different locations

4. Rising use of Electric Vehicles

The India Electric Vehicle Market was valued at USD 5 billion in 2020 and is predicted to reach a whopping USD 47 billion by 2026 while registering a CAGR of above 44% during the forecast period (2021 – 2026).

Though, the Indian automotive market has been impacted by the outbreak of the COVID-19 pandemic thanks to supply chain disruptions and the halt of manufacturing units due to continuous lockdowns.

On the opposite hand, electric vehicle (EV) markets saw an uptick in inquiries. it's expected to grow faster during the forecast period due to various government initiatives and policies. the govt, too, has unrolled several incentives to both the consumer and manufacturer to stimulate the EV market.

Problem Statement

Building a manufacturing unit/factory for the production of EV chargers and deploying them to several parts of India.

Manufacturing of EV Chargers.

People face many problems with EVs. one of the foremost problems is the smaller amount of availability of charging points.

There is a requirement for conveniently accessible charging points for the charging infrastructure to support the Indian electric vehicle market. Recently, A technical committee met in Hyderabad Post-electric to debate existing building codes and government regulations to line up charging infrastructure in Telangana.

As per reports, there are 1,000,000 public charging points within the world and only 0.1% are in India. and this might be a good Business Opportunity to figure in EVs Sector.

One of the key hurdles of mass EV adoption is range anxiety. The doubt looms over a passenger who wishes to travel to a far-off place. Without an honest network of chargers, a long-distance traveler will always doubt the results of running out of battery energy.

And not just long-distance travelers, this might be the case for urban travelers yet. What would she do if the vehicle runs out of energy before reaching her office? These questions are one of the hindrances to mass EV adoption.

Therefore, a factory for manufacturing EV Chargers would be the best business plan for the upcoming years.

5. **Improving road connectivity of your city to other parts of the country.**

About the Problem

Urban development has taken precedence in the past few years and the adoption of new technologies to ensure a smoother and more comfortable connectivity experience for people has been of importance. Despite hurdles, many cities in the country have worked towards using 'intelligent & smart' transport management systems.

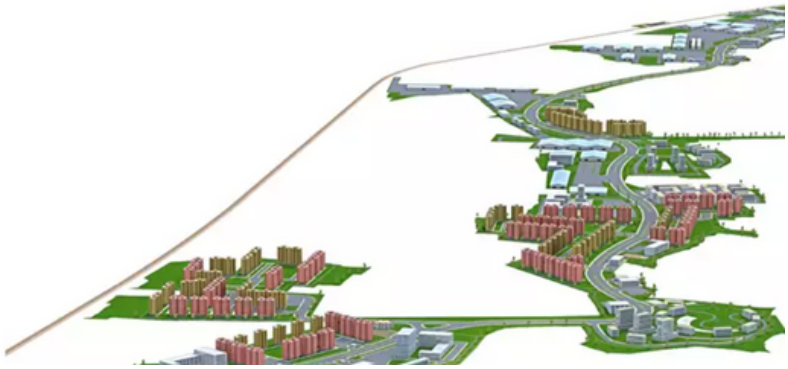
Problem Statement

Development of highways and flyovers in effective manner thereby allowing separate path for smart vehicles and also introduction of industrial coridor

Business Idea

1. **Development of highways and flyovers**

While admittedly the development of highways and flyovers has been plagued by delays, many new expressways have come up that have provided better inter and intra-city connectivity. One such example is Mumbai's Eastern Freeway, the country's second-largest flyover which opened in 2013. Yet another case is that of the 165kmlong Yamuna expressway, which is one of the longest access-controlled six-lane rigid pavements in India. The expressway provides a safe and uninterrupted movement of passenger and freight traffic between the nation



2. Industrial corridors

Urban development in the country is now a serious discipline, with many fascinating ideas being explored. Industrial corridors ensure good infrastructure connectivity. Most industrial corridors are built on the central theme of providing state-of-the-art infrastructure It is meant to make sure that there is planned land use, energy-efficient technology, social infrastructure, and skill development

3. Intelligent transport system

Manual scheduling of buses and banking on an auto-scheduling (AS) technology to fix loopholes in the system. The passenger-friendly initiative - intelligent transport system (ITS). The pilot project has reported success over the past several months in the city. The bus scheduling system in place at present is flawed because it is based on theoretical assumptions. ITS draws up schedules based on data from electronic ticketing machines and actual journey time. It splits the frequency of buses based on the different operating hours - peak and non-peak.