# THE CREW

Product and services for transport hub



**Group Members** 

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#### Problem statement



Steering wheel pose significant risks to road safety. Existing safety mechanisms often lack real-time, automated responses to detect and act upon situations where the driver removes their hands from the steering wheel for extended periods.

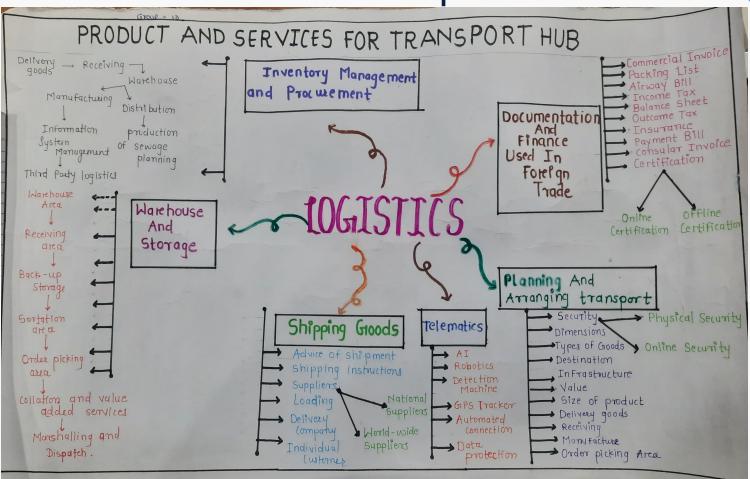
# Relivance of problem statement

Drivers often lose control of vehicles when they are inattentive or unable to maintain hand contact with the steering wheel. This lack of attention can result in severe accidents, especially on highways or in heavy traffic. A system that detects the removal of hands from the steering wheel and automatically stops the car can prevent such incidents, saving lives and reducing injuries.

#### MIND MAPPING

Mind map is a process of creating a map that connects the ideas in the form of a map of the topic we have selected. Mind mapping is activity in which we find words related to our topic and separate the words having common ideas by giving sub points to the topic and selected.

# Mind map



#### Persona Construction

Persona construction is the process of creating a deatailed summary of a person, that represent the different type of users, audiences product or a service you're trying to provide In this activity we have to find our end user which will be helpful to our project in future.

### Persona(Product Owner)

#### Background:-

- Grew up in a middle-class family with both parents working.
- Education: Hold a bachelors degree in business administration.
- Childhood: Raised in a stable, supportive environment, where the importance of education &hard work.

#### Challenges faced:-

- Operational efficiency across his expanding fleet.
- Balancing the cost of innovations.
- Managing rapid growth.
- Balance personal and professional life.

#### Motivation:-

- Profit in his business.
- He enjoys exploring new technologies.
- Motivated by the challages of staying ahead in competive industry.
- Financially independent.

#### Doubts/Fears:-

- Impact of economic downturns.
- Bussniess not survive in long terms.
- Douts about his ability to leave a lasting legacy.
- Market challenges.

#### Aspirations:-

- Built one of the best workplace.
- Dream of expanding his business.
- Achieving financial independence.
- Large corporation and event organizers
- By forming strategies for business.

#### Summary:-

Transport services owner operational efficiency, customer satisfaction and lequlatery compliance. The primary goal is to deliver reliavel sell and profitable service while adupting to market demands and innovations.

## Persona(Commuters)

#### Background:-

- Grew up in a middle-class family with both parents working.
- Holds a bachelors degree in business administration.
- Raised in a stable, supportive environment where the importance of education and hard work was emphasized.

#### Motivation:-

The commuters doubts whether they will receive timel and accurate updates on delays, route changes or cancellations.

#### Doubts / Fears:-

The commuter is by the desire to maintain a healthy work-life balance.

#### Challenges faced:-

 Commuters often deal with unreliable public transportation services, such as delays, cancellations which can disrupt theirndaily schedules.

#### Aspirations:-

- Have to achieve professional success with stability.
- The commuter aspire to be an environmentally responsible individual.

#### Summery:-

Commuters are typically urban professional who prioritize efficients, reliable and costeffective transformation for their daily routines. Their primary goal is a smooth, hasslefree commute.

# 5W 1H

Applying 5W1H method to product and services for transport hub.

The 5W1H method (who,what,when,where,why and how) Is a powerful tool and for planning and problem solving. I have applied it to the complex issue of product and services for transport hub for ensure a safety.

### 5W 1H Activity

#### What :-

- 1. What type of vehicle is best in todays world?
- 2. What type of sensor is used?
- 3. What kind of mechanism is behind?
- 4. What kind of technology is used?
- 5. What type of automatic speed limit system available?

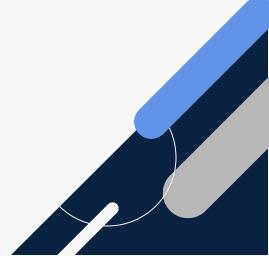
#### When:-

- 1. When does the aromatic speed limit sensor activate?
- 2. When does sensor update?
- 3. When it will provide alert?
- 4. When is the best time is to install and modified car?
- 5. When this technology is useable?



#### Where:-

- 1. Where car owner can purchase all its services?
- 2. Where does the sensor get its speed limit information?
- 3. Where does this car will be used?
- 4. Where does the car owner view speed limit?
- 5. where will service options will centralized?



# Why:-

- 1. Why we need to improve safety?
- 2. Why is sensor accuracy is important?
- 3. Why is speed limit detection is important for road safety?
- 4. Why to upgrade technology?
- 5. Why would a car owner choose install this sensor?

#### Who:-

- 1. Who is the target audience for this sensor technology?
- 2. who can access the data collected by sensor?
- 3. Who is responsible for data collected by sensor?
- 4. Who benefit from the installation of sensor?
- 5. Who manufacture this sensor?

#### How:-



- 1. How can the sensor be updated?
- 2. How does it handle speed limit?
- 3. How does sensor data store and access it?
- 4. How does sensor alert the driver?
- 5. How we can target audience?

# THEORY OF PRIORITIZATION

Problem	Sakshi	Bhumika	Rutuja	Jay	Hrushil	Mayur	Total
1.Maintanance and downtime	10	10	1000	100	10	10	1140
2.Damage and loss of car	100	100	100	1000	100	10	1410
3.Car safety	100	1000	10	100	1000	1000	3210
4.Why system are crictical	100	100	1000	10	10	1000	2320
5.How we can understand this cars	1000	1000	100	100	10	10	2220
6. Accidents due to sleep during driving	1000	1000	1000	1000	1000	1000	6000
7.Customer demands	100	10	100	10	100	100	420

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# SCAMPER ACTIVITY

SCAMPER is a creative thinking and problem-solving technique that helps individuals or teams generate new ideas or improve existing ones.



Substitute:- Replace traditional sensors with advanced technologies like LiDAR or Al-based vision systems for better obstacle detection. Use electric braking systems instead of hydraulic ones to improve response time.

Combine:-Integrate the auto car stop feature with other safety systems like lane departure warnings, adaptive cruise control, or pedestrian detection systems. Combine radar and camera systems for a more reliable detection mechanism.

# **Journey Map**

### **End User: Commuter**



**Excitement:** the commuter is excited to try out the new technology

about Reliance on technology to control their speed

**Curiosity:** the computer is curious about how the system work **Apprehension:** the commuter may feel slightly apprehensive

### **During the journey emotions**

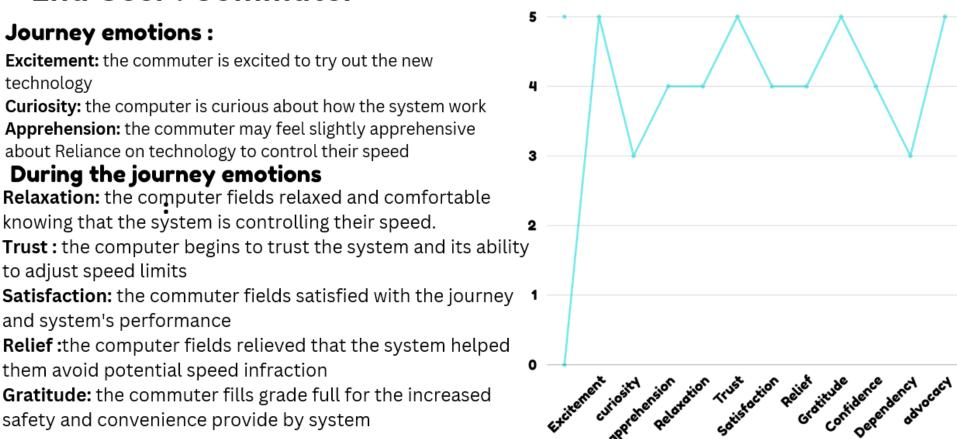
Relaxation: the computer fields relaxed and comfortable knowing that the system is controlling their speed.

**Trust:** the computer begins to trust the system and its ability to adjust speed limits

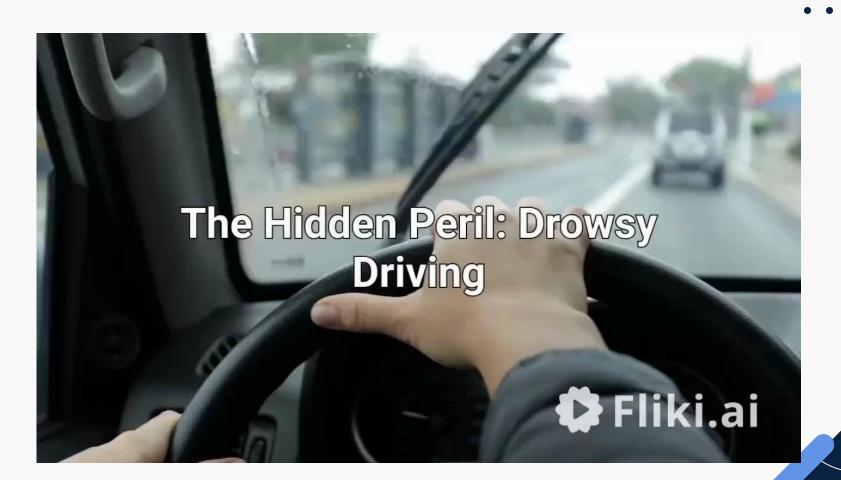
and system's performance

**Relief:** the computer fields relieved that the system helped them avoid potential speed infraction

Gratitude: the commuter fills grade full for the increased safety and convenience provide by system



Video(prototype)





Thank you......