

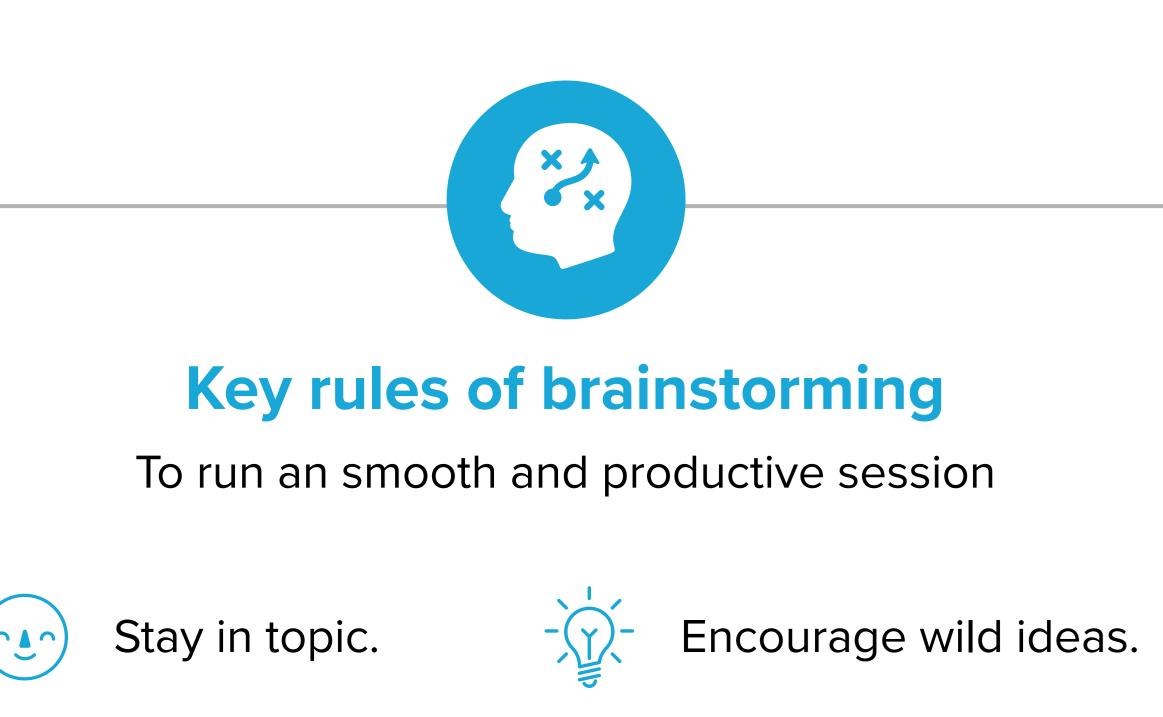
Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.



PROBLEM

How to efficiently manage railway operation using advanced loT approaches?





Defer judgment.







Brainstorm

Write down any ideas that come to mind that address your problem statement.

① 10 minutes

SMART RAILWAY SOLUTION

ARAVIND RAJ

Machine Learning Algorithm to predict the arrival time of train.

API fetches

information from

the calendar app

for automatic pre-

booking of ticket.

MANOJ SINGH

RSA encryption

algorithm for

ticket checking.

and decryption

Augmented reality enabled solution to guide the passenger to

Automatic

using NFC for

IOU-Max matching tracking algorithm based on YOLOv3 Network used to track passenger

Scalable sensor

platforms for

managing

requirements of

rail sector.

RAHUL KARAN

IR Sensor

used for

obstacle

detection.

YUVASREE

Automatic train operation via ETCs

FBG strain sensors to monitor critical rail

Using training

training system

for improved

personnel

capabilities.

simulator & VR

components.

3D laser scanner to accurately measure tracks.

GPS receiver is used for location identification,

Increased personal surveillance using interior and exterior locomotive mounted video surveillance.

Direct method for interlocking mechanism

B-scan

ultrasonic for

rail flaw

detection.

Track-laying machines for speed construction.

Social data repository for predictive analytics.

Discover

Digital twin model system to monitor activities in real time and respond to changes in advance.

MAHESWARI

Big data analytics to handle customer information.

NAVEEN KUMAR

Advanced Interlocking system to avoid conflicting movements on the tracks.

Interactive windows to improve services for passengers.

TWS are

used for

planning rail

routes.

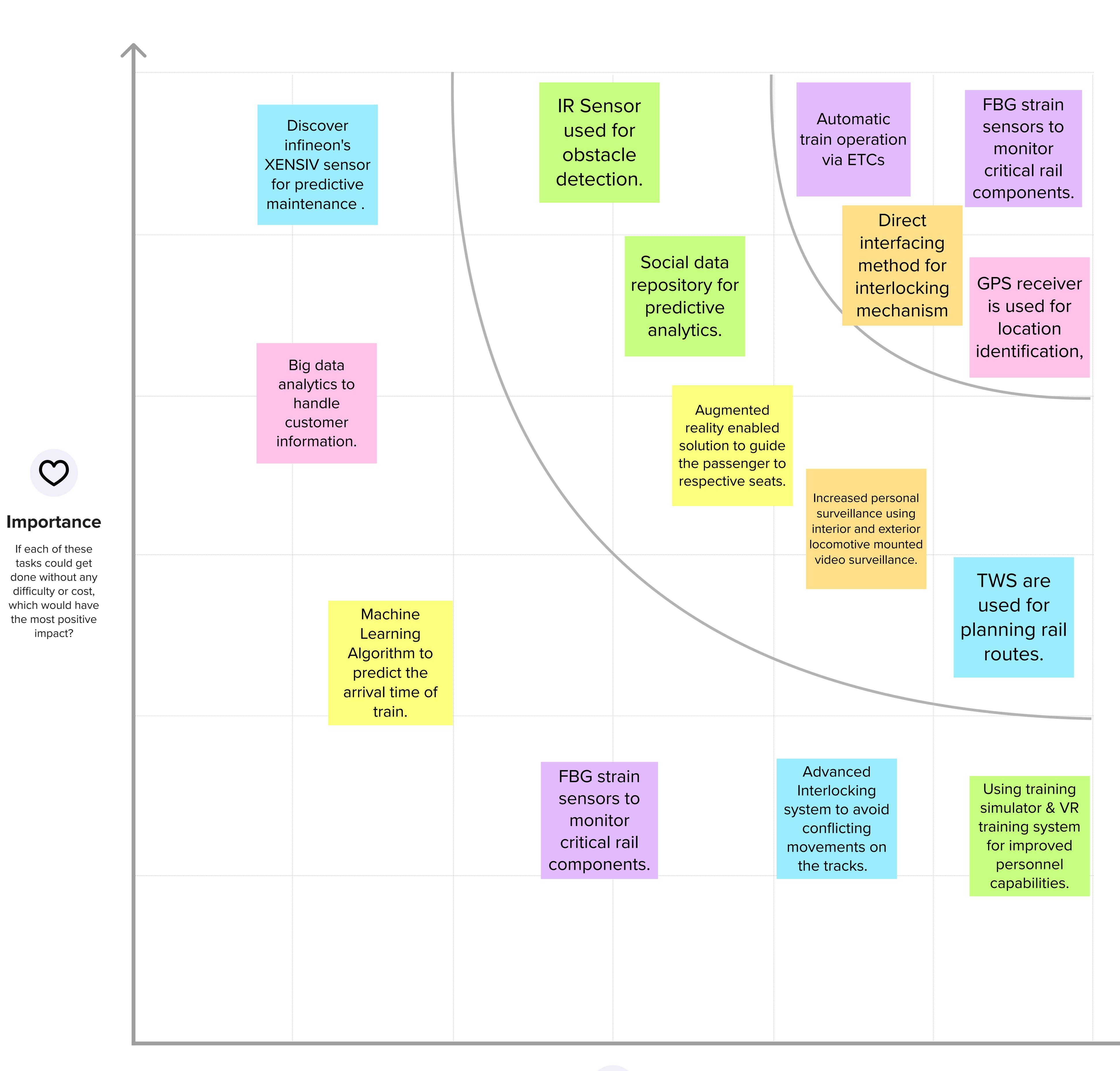
infineon's XENSIV sensor for predictive



Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

① 20 minutes





Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)