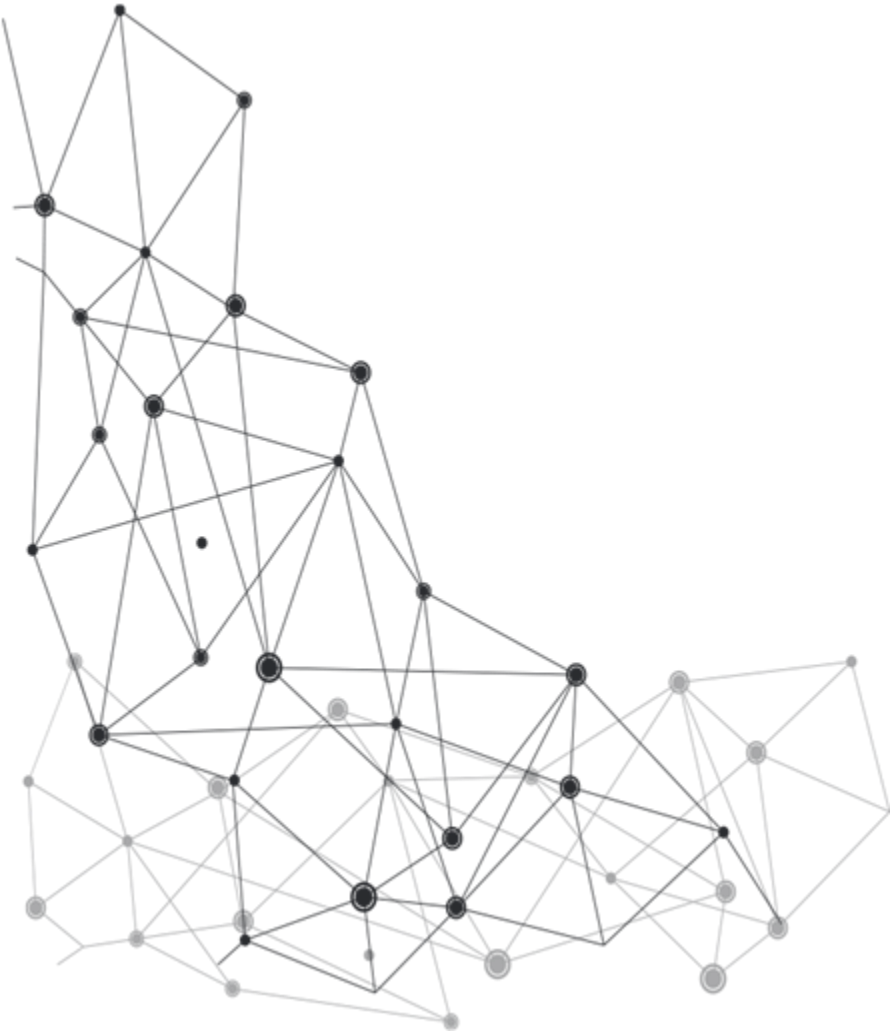


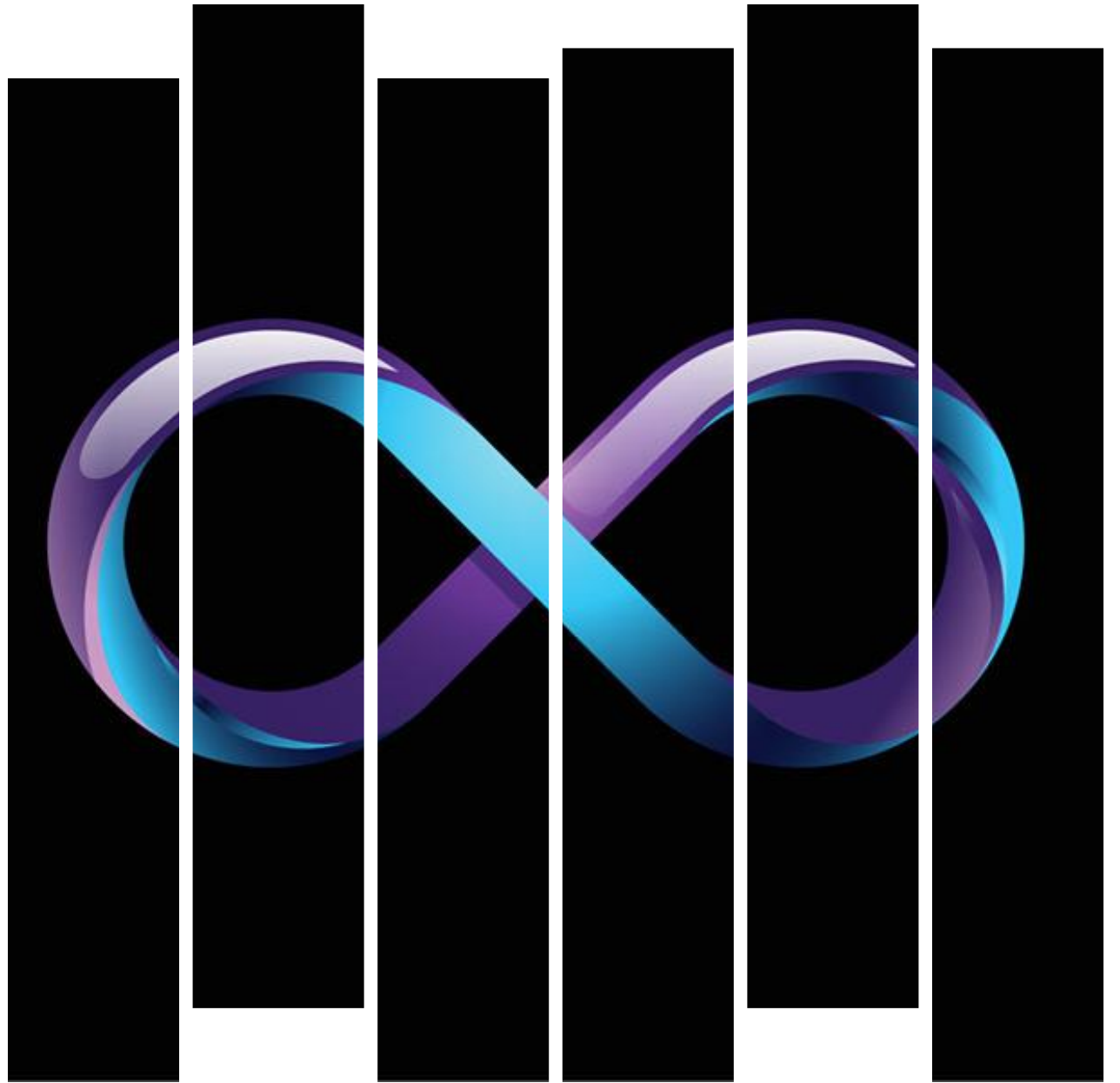
A Presentation by -
Atharva Kurumbhatte

JSPM NTC
Div: C
Roll.no : 03



HYPERLOOP

A giant leap forward into the
future of transportation

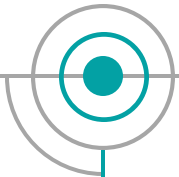


OVERVIEW

The civil engineering aspects

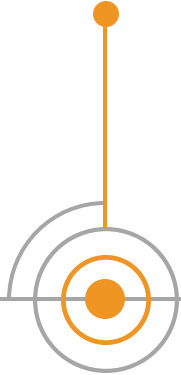
Advantages and Benefits

1

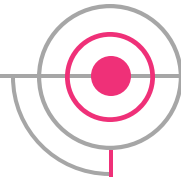


Idea and concept behind the
HYPERLOOP system

2

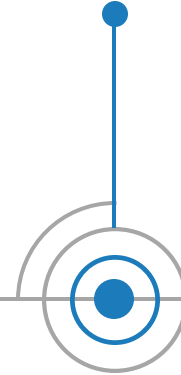


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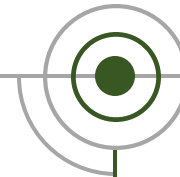


Working and various
components of the system

4



5

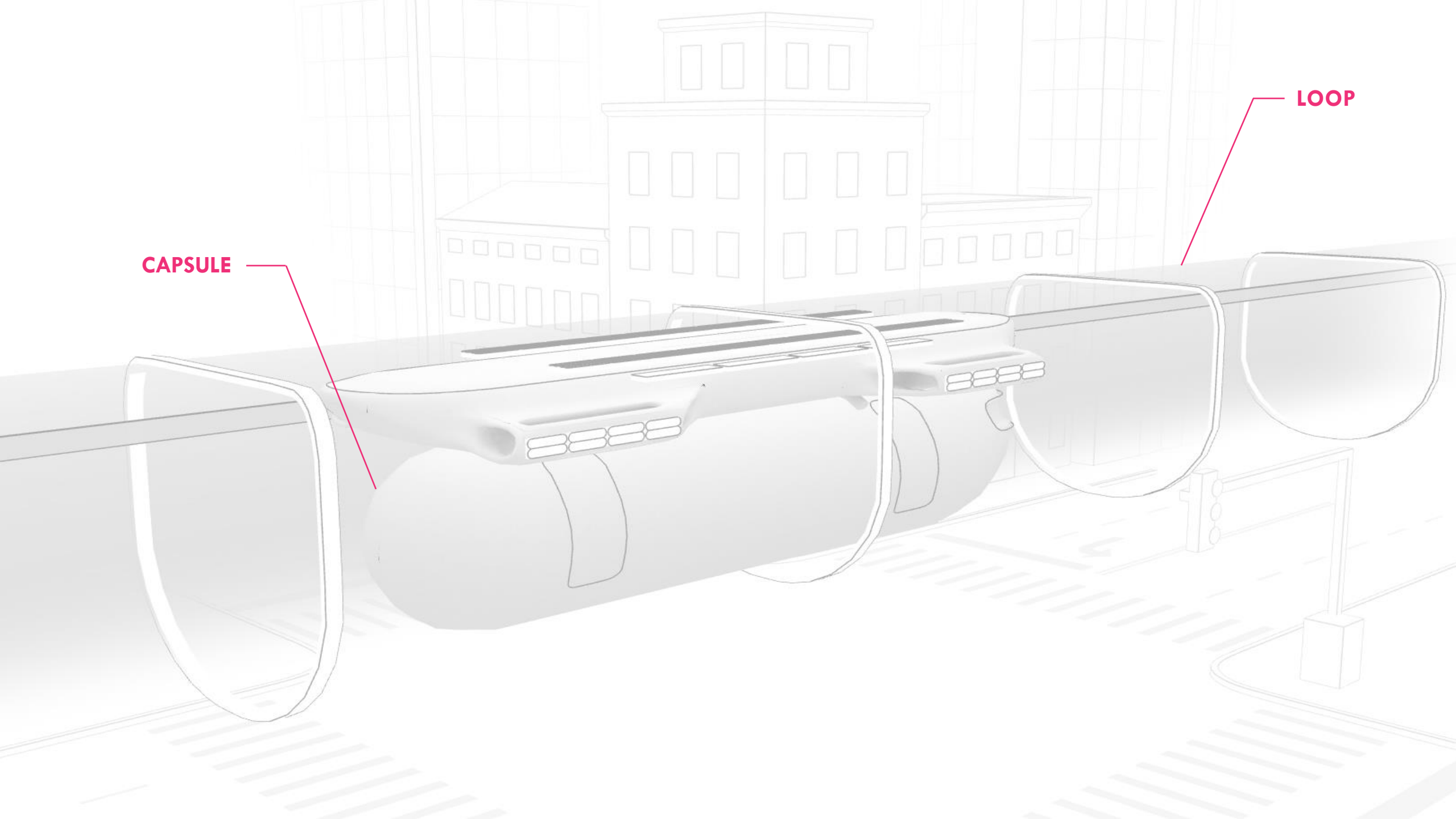


Limitations and Conclusion

MUSK'S VISION

The idea of HYPERLOOP was introduced
by Elon Musk in 2012





CAPSULE

LOOP

THE COMPANIES WORKING ON HYPERLOOP



THE
BORING
COMPANY

The logo for The Boring Company, featuring the word "THE" in a small, bold, sans-serif font above the word "BORING" in a large, bold, sans-serif font. The letter "O" in "BORING" is replaced by a solid black circle. Below "BORING" is the word "COMPANY" in a smaller, bold, sans-serif font. The entire logo is enclosed in a red L-shaped border.

Virgin hyperloop one

The logo for Virgin Hyperloop One, featuring the word "Virgin" in a red, cursive script font. To its right, the words "hyperloop one" are written in a lowercase, sans-serif font. The "o" in "hyperloop" is replaced by a blue infinity symbol. The entire logo is enclosed in an orange L-shaped border.

HYPERLOOP
TRANSPORTATION TECHNOLOGIES

The logo for Hyperloop Transportation Technologies, featuring the word "HYPERLOOP" in a large, bold, sans-serif font. Below it, the words "TRANSPORTATION TECHNOLOGIES" are written in a smaller, all-caps, sans-serif font. The entire logo is enclosed in a dark purple L-shaped border.

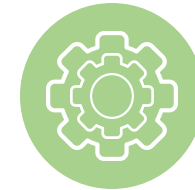
CIVIL ENGINEERING ASPECTS

Where do civil engineers come into the picture?



STRUCTURAL ENGINEERING

Positioning and construction of the loop



GEOTECHNICAL ENGINEERING

To allow design and construction of stable structure



TRANSPORTATION ENGINEERING

HYPERLOOP is a safe and comfortable mode of transport

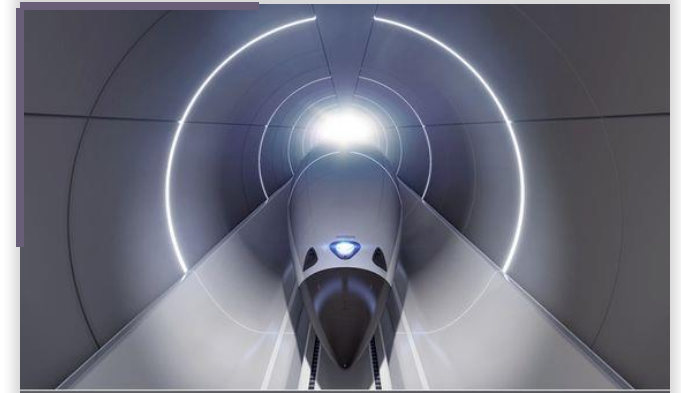


ENVIRONMENTAL ENGINEERING

This project will have a massive impact on the environment

WORKING

The system works on a combination of magnetic levitation and electric propulsion



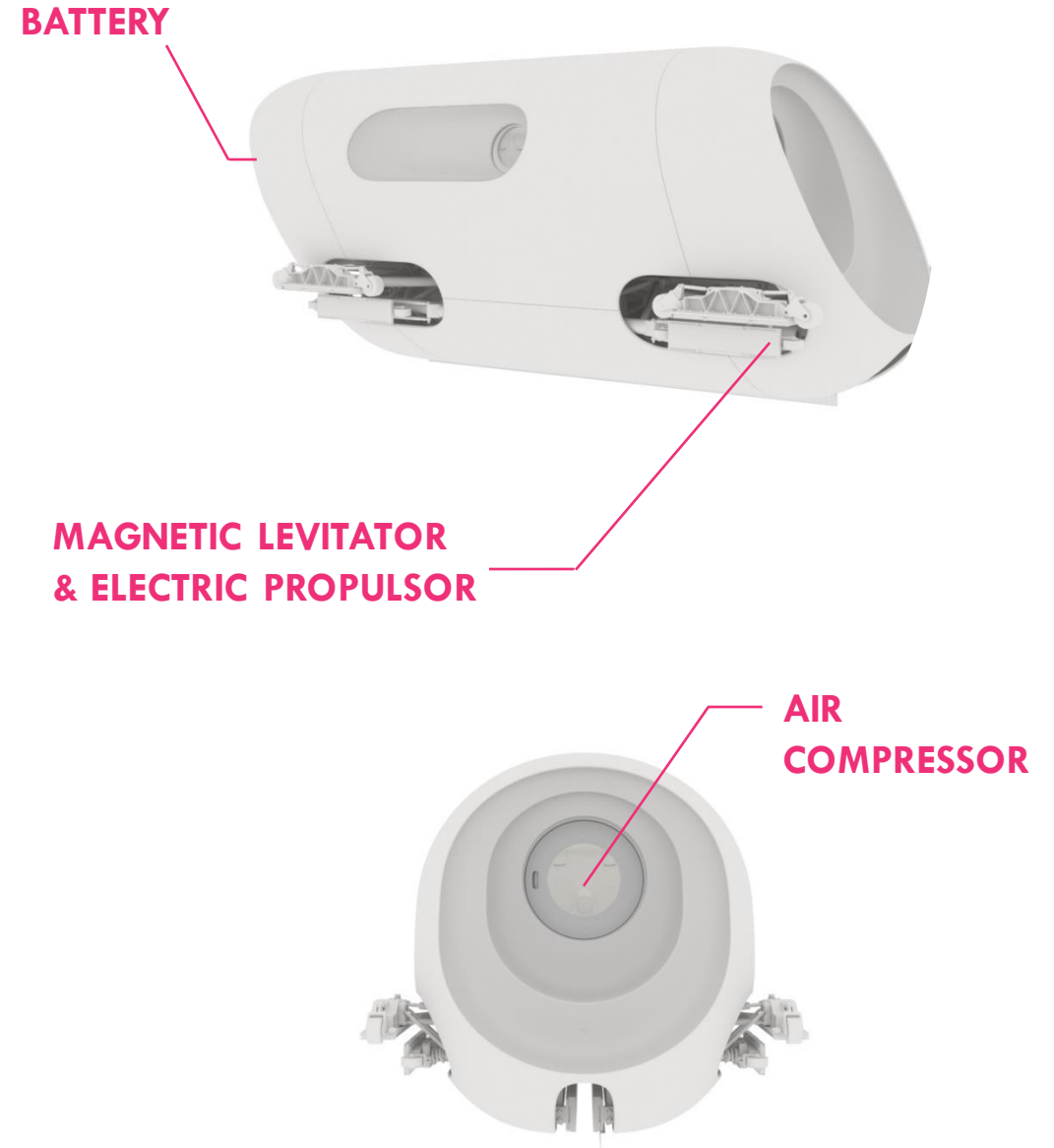
THE CAPSULE

Pods of various designs and dimensions are being manufactured in order to meet recent demands

01. Components

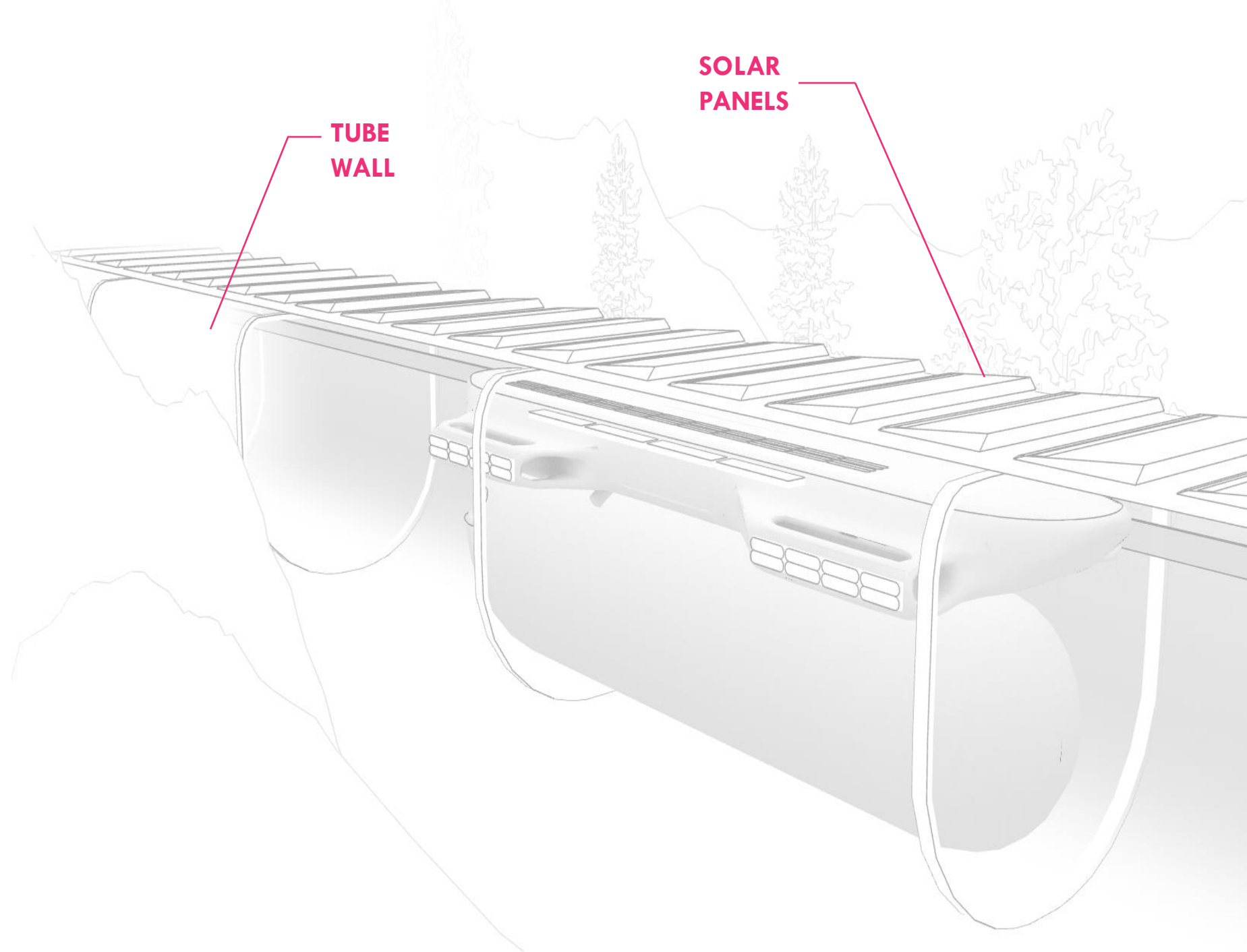
02. Passenger Capacity

03. Air Bearing



THE LOOP

The tubes are designed to reduce air resistance using a partial vacuum system



ADVANTAGES

The following key points put HYPERLOOP in a favorable and superior position as compared to other modes of transportation.



SPEED

Fast and efficient
system of
transportation



SAFETY

Free from the risk of
accident



COST

Economical and
inexpensive in the long
run



ENVIRONMENT

Pollution free and safe
system



ROUTES

CANADA

Toronto - Montreal

USA

Miami - Orlando
Chicago - Columbus -
Pittsburgh

MEXICO

Mexico City - Guadalajara

UK

Glasgow - Liverpool
Edinburgh - London

INDIA

Mumbai - Chennai
Bengaluru - Chennai



TECHNICAL CHALLENGES & THREATS

HYPERLOOP technology stands to transform transportation and urban living. With the ongoing developments for this technology, more hurdles and challenges start arising

High speed of the capsule

Initial cost of the system

Land use rights will be a concern

High risk factor in case of adversity

Limited space

Loading capacity



CONCLUSION



THANK YOU