Inputs		Outputs		H	Outcomes Impact
mputs	L)	Activities	Participation	Ц	
Time: one semester  Resources: articles, journals, books, lectures.  Assistance from professors	'	Write an Industrial Analysis Report:  Market analysis (all the companies and strategies that already exist)  Challenges  Technology analysis (the technological tools being used and that can be improved)  Transportation analysis  Law and Public policy  Social awareness	The team members Professor Teacher assistant Classmates		Efficient transportation - Improved traffic flow - Environment impact and reduction of CO2 emissions Reduce transportation cost.  Market – Economic - Develop the market of sharing transportation Help new companies to take better decisions and strategies.  Social Impact - Understand the behavior and practice of people sharing transportation  Policies - Development of policies in order to increase the users of sharing transportation Improve security in sharing transportation.

# Assumptions

External analysis report

Most part of statistics about sharing transportation will be based on USA's users.

## **External Factors**

Government program offering incentives

Public transportation

Price of energy

Security



# SOME RESEARCH AND RESOURCES

- MIT THESIS: REAL-TIME RIDESHARING.
- CENTALE LILLE: THESIS ABOUT AI IN CARPOOLING.
- STUDIES FROM ADEME.
- STATISTICS FROM INSEE.
- CERTU: CARPOOLING IN FRANCE AND EUROPE.



# Project presentation

#### WRITING AN INDUSTRY ANALYSIS REPORT TO STUDY CARPOOLING INDUSTRY

Carpooling is an option whether or not own or drive a car. If someone knows that he travels using the same route as a neighbor or co-worker, they can consider arranging to carpool or ride-share. Carpooling is seen as a more environmentally friendly and sustainable way to travel as sharing journeys reduces carbon emissions, traffic congestion on the roads, and the need for parking spaces. Authorities often encourage carpooling, especially during high pollution periods.

Carpool practicing is highly dependent on the several factors

which make people more or less attracted by this activity. This market is influenced by the price of energy, the law in the different countries and the culture of people, but not only. The development of new technologies is one of the most booster for the market. In this IAR we are going to analyze the impact of all these factors.





# READ ABOUT CARPOOLING

Access to Wikipedia page about carpooling by using this link or Layar app. http://en.wikipedia.org/wiki/Carpool



### VIDEO CARPOOLING CONCEPT

Access to this video made by Blablacar, a carpooling company by using this link or Layar app. https://m.youtube.com/watch?v=CTnev4fjsM



#### WEB PAGE

Access to the online IAR and the integrality of our data by using this link or Layar app.

# MyChe, an IAR about carpooling

#### A GROWING MARKET

The market of carpooling is much diversified. It include the individual user who shares his car with his colleagues, the student who user carpooling to have cheap travels and the one who use it to reduce his impact on environment. We can group these different actors in the following categories:

- Usage for daily travels.
- Usage for long travels.
- Carpooling organization inside a company.
- Business companies proposing carpooling.
- Institutional carpooling systems.

## REAL IMPACTS OF THE ENVIRONMENT

Even if this is not the first motivation of carpoolers, reducing the number cars on the road will reduce the pollution. By taking the decision to use carpooling, the users can contribute to the protection of the planet. This awareness regarding the environment is also a motivation for the companies to propose carpooling services for its employees and encourage them to reduce the CO2 emissions at their scale.

#### NEW TECHNOLOGIES

Dynamic carpooling consists on managing a continuous access to the carpooling available offers. A real time access is provided through a continuous updating of the offers and the demands. the popularization of smartphones, tablets, connected devices, free access to the Wifi, GPS, 3G, 4G... the 'in real time" became totally possible and accessible for all people. Then the implementation of decentralized systems like Multi-Agent Systems (MAS) or Blockchain will help the market to grow. The objective of these Agents is to successfully associate the different users through an optimization process subjected to several, complex and variable constraints.

## PUBLIC POLICY AND SOCIAL ASPECTS

The market is highly dependent on the public policy and the social awareness. If these two aspects could be an opportunity, some public politics are obstacles for the development of this kind of markets. Due to the high competition in the transportation industry, some countries prefer to protect the classic market from this kind of activities. This IAR will study the differences of Law and Culture in different countries to try to highlight the points that are going to help this market.