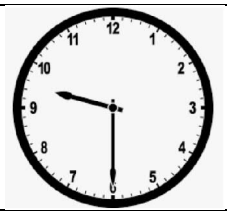
Transportation:
Smart Travel Time & Transport App

Time	Means of Transport	
		
		

1. Story:
Everybody travels at the same time leading to both congested streets and public transport costing cities millions of dollars

Using navigation systems showing which way is least congested people are optimizing the way they go to work, to meet customers, to go for shopping, to see family to meet friends…

Using navigation systems companies are optimizing the routes for their vehicles.

People are not yet optimizing their timing for making a specific trip based on data. Picking a specific time to travel they are lucky to arrive early on some days, while they are late on other days.

Cities are facing congestion on major routes on a daily basis at certain times, while the infrastructure is not fully used at other times:

1. Public transport is not fully utilized at times, while at other times it cannot cope with the amount of passengers.
   Overall not optimized usage, higher costs for less passengers
2. Increased and not fully predictable requirement of public personnel to cater for traffic incidents, deal with congestion and traffic security
3. More roads required to cater for peak times, while not fully utilized at other times
4. Impact of noise and pollution on environment, while cars are sitting in traffic jams

2. Intelligent Enterprise:
Create and App supporting the intelligent city to optimize infrastructure usage and save costs on dealing with over usage or insufficient usage

Create an app for people and businesses to use to plan the combination of optimized:

1. Time of the day for travel
2. way of transport (e.g. Car, Bus, Train,…)
3. route (car route, bus number, train line,…)

Input data for the app is:

1. Data that is already flowing into navigation systems
2. Data from phones on movement of people
3. Records from public transport
4. Information on special events (e.g. Rugby Game, visit of the Queen, road closure due to Marathon,…)
5. Constraints entered by the user (e.g. time window for required travel, potential times required to move from place a to b, availability of car)

Output for the end user:

1. Long term suggestions for planning travel at optimized time
2. If short term flexibility with increased reliability of data option to adjust decision on travel
3. Incentive for end user to use the app
    a. to save time for travel
    b. to save money for increase fuel consumption in traffic jams
    c. to travel more environmental friendly

Technologies used:

1. Sensors – data coming from phones and navigation systems
2. Sensors – smart travel cards on public transport
3. Data coming from public transport usage
4. Data transmission via phone data transfer, when using the app
5. Reporting & Analytic functionality on servers of city

3. Improved Business Outcomes: Cities will save costs on infrastructure and public personnel supporting the infrastructure while the usage gets more and more optimized.

Once People us those apps the cities will have the following benefits:

1. Public transport will be more profitable, as there will be less unprofitable journeys. There will be an improved funding for the costs of providing public transport.
2. Public personnel shifts can be planned in a more reliable way. Leading to better usage, while overall requiring less people, as planning is more predictable.
3. Roads will be better utilized overall, while there is less congestion.
4. Cost savings overall for infrastructure and public transport while better satisfying the population.
5. Less cost on dealing with environmental damage due to pollution.

Over time with usage of the app the iteration will need to more and more optimized usage, as the amount of peaks will decrease.

In addition planning of new infrastructure or public transport will be supported and used in an optimized way.

4. IoT Idea Category: Transport