TOUCH IOT WITH SAP LEONARDO
PROTOTYPE CHALLENGE

BUS LINE MANAGER
The user experience is always the key point for public services

A bus line manager is taking care of the passengers that uses the bus line services no matter what the frequency usage is (daily, weekly or monthly). It is also important for him to ensure that everything runs smoothly on his line: transport planning, minimize the fraud rate, and maintain a good mechanical condition of the buses.

A bus line manager has to handle around 50 to 60 buses, driving along the line. He cannot be everywhere at the same time. As a result he needs to have a clear cockpit to gather all the important information.

He wants to know:
- The bus fulfillment with real time metrics, in order to adjust the number of bus in service.
- If there is some delay, due to the traffic or other reason.
- Ensure a given bus will not break down due to a technical issue.

With all these KPIs, he will be able to take the good decisions to manage the bus line, improve the customer satisfaction by ensuring the bus availability and control the ticket sales profitability.
Persona

Peter Morgan, 38y
Bus Line Manager

I am a steady planner and problem solver who adapts easily to changes and emergencies. Furthermore, I am autonomous and able to handle multiple priorities in order to meet tight deadlines without lowering quality.

Responsibilities

- Coordinate the operations and maintenance orders with the public transport maintenance centre.
- Ensure the fluidity and harmony of the bus line traffic.
- Minimise disruption and resolve any unscheduled delays.
- Allocate and record resources and movements on the transport planning system.

Main Goals

- Make sure the transport operation meets its performance and safety targets.
- Maximize the passenger satisfaction.
- Identify existing and possible future transport problems, develop new transport models and routes.
- Minimize the fraud rate in order to maximize the bus line revenue.

Needs

- I need to find some way to identify the fraud rate in the bus.
- I need to collect information about the state of the bus in order to coordinate the maintenance activities.
- I need to have information about the filling rate of the bus in order to coordinate the traffic, allocate more resources or adjust the transport planning.
- I need to be able to measure the buses delays compared to the planning in order to learn and identify transport problems.

Pain Points

- When it comes to identifying the fraud rate, it is hard to have the information without ordering a physical control.
- Difficulties to collect insights about the real-time state of the bus in order to coordinate the maintenance activities efficiently.
- The filling rate of the bus is not communicated to the central management centre of the bus line. Furthermore, the bus driver cannot communicate this information for safety reasons.
- The bus delays are usually measured twice a year which is insufficient to define an optimized transport planning for the overall year.
As a bus line manager, working in the city headquarters,
I need a way to effectively monitor and manage the transport planning of the bus line.

So that bus arrival times are respected and the customers are satisfied with the service proposed.
As a result, the public transport network is working on an efficient way, decreasing the use of cars, thus less pollution.
UX Journey

**ACTIONS**
- Check emails to identify the buses that need maintenance.
  - Send the maintenance orders to public transport center
- Manage and coordinate emergencies regarding buses delays and incidents, through phone calls and e-mails.
- Perform detailed traffic analysis.
- Identify possible future problems, recommend new transport planning and routes.
- Check the day’s maintenance orders status
- Communicate the transport planning and optimized route for the next day

**MINDSET**
- “What’s going on”
- “Too much complaints, I hope I could’ve anticipated this”
- “Agh! Unstructured data from different sources”
- “Finally thanks to this data I can optimize the traffic tomorrow!!”
- “All the buses are ready for tomorrow! Yess!!”
- “End of the day with the wonderful team!!”

**FEELING**
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**TOUCH POINTS**
- Mail box and phone
- Mail box and phone
- Issues tracking system
- Excel
- Website & maps
- Mail box and phone
- Power point, excel, meeting room