openSAP

TOUCH IOT WITH SAP LEONARDO
PROTOTYPE CHALLENGE

360-DEGREE
FLEET MANAGEMENT SOLUTION

Template Description
This is a template that can be used for the Prototype Challenge included as part of the openSAP course “Touch IoT with SAP Leonardo.”
The fleet manager of a biggest logistics provider in the world need to take care of different dimensional information for the logistic solution of his organization. Regardless of the service he provides, he need to keep an eye on every vehicle’s maintenance & Break down to keep their fleet in optimal conditions. Moreover, he also considers different aspect of the fleet, like Drivers’ health, bad weather, landslide, heavy traffic etc, on the predefine route, to ensure on time delivery.

The fleet manager is more interested to know following information well in advance, so that he can trigger Proactive measures to ensure delivery, and update the stake holders (i.e. Management, customer) accordingly.

- Predict when there is a high chance of vehicle breakdown in between a consignment delivery so that he need to create PO for an un planed vehicle maintenance at nearest workshop. Also, he can be informed Management & customer accordingly about the delayed of delivery of the consignment, well in advance.
- Predict, if there is a chance of driver’s health problem, so that he need to arrange an alternative driver.
- Predict if there is any unlikely situation, like Bad weather, landslide, heavy traffic in regular route, so that he can think for an alternative route considering different aspect to avoid delay in delivery.
Persona

Explain the needs, goals, and pain points addressed

Markus
Manager – Logistic & Transport

“I would like to be foresee about the upcoming problems, and solve them proactively, because sometimes I have got so many problems together to do that I would need multiple clone of myself.”

About

• 39, single, 12 years’ experience in fleet management
• I am one of the persons who is responsible for on time delivery of the goods to our valuable customers to gain customer satisfaction, and get more business
• I am responsible for keep the vehicle ready and in optimal conditions, periodic planned & ad-hoc unplanned maintenance and Drivers health & safety.
• We lose a lot of money (in forms of penalty or late delivery charges) due to slippage of delivery timeline, if one of the vehicles break down in between a consignment or due to illness of driver or bad weather & road condition.
• I work with the Management, Drivers, Maintenance Staff and Customers
Responsibilities

- I am responsible for multiple shipment projects per week and each project is tied to a specific client with multiple consignment across the continent.
- I am responsible for timely delivering for our customers along with maintenance schedule (Planed & Unplanned) of the vehicles and other related issues.
- I spend half of my time talking to the drivers and mechanics, and the other half manually updating the information on the system.
- I track all the consignment very closely, along with the health of the driver, vehicle condition, maintenance and delivery timeline.

Main Goals

- Better management of shipments to be delivered as and when requested by and committed to the customers
- Minimize delay in delivery for mechanical breakdown, illness of driver or bad weather.
- Better coordination among Drivers, workshop and delivery time line.
- Gain customer satisfaction, and get more business

Needs

- Need to track all shipments and assets in real time and predict delays if any and act on the corrective measure immediate basis
- Need to predict if there is any chance of vehicle breakdown, or other situation, which may cause delay in delivery.
- Need to get notified immediately if a shipment gets on delay track so that changes can be done to prioritize it and bring back on right time delivery track.
- Need to update different stakeholders accordingly, time to time basis

Pain Points

- Extremely difficult to predict vehicle breakdown (mechanical failure) in future
- Extremely difficult to predict Driver illness in future
- Can’t ask the drivers to update the information frequently enough, they don’t have the time
- Can’t entirely trust information updated manually or by a person.
Point of View

As a fleet manager and SPOC of a biggest logistics provider

I need a way to track shipments real time and need to predict upcoming risk & failure,

So that I can trigger some Proactive measures to mitigate those risk and can update stakeholders accordingly.
### UX Journey

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINDSET</th>
<th>TOUCH POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider a shipment / Consignment which is showing as RED in the report (Delivery time line cannot be achieve)</td>
<td>Where is the actual problem for delay in delivery? Can I do something so that we can meet the delivery timeline!!</td>
<td>- Report dash board for all information - Agreement of the delivery.</td>
</tr>
<tr>
<td>Drill down into the report and Identify the actual issue (Whether engine has some issue or driver is not well or having heavy traffic affront)</td>
<td>Engine is consuming more oil than expected and emitting more CO than normal condition. So, there is definite Engine issue. This need to fix urgently.</td>
<td>-Delivery report -website of the workshop</td>
</tr>
<tr>
<td>Checking the Drivers health parameter from dash board</td>
<td>Driver’s Pulse rate is high and having 99 F temperature. Oxygen saturation level is low, So driver is also fully well. I need a alternative driver ASAP</td>
<td>-Delivery Report -Web portal of the workshop</td>
</tr>
<tr>
<td>Strat creating PO for Engine service at nearest work shop. Also</td>
<td>Its required an immediate engine servicing. Otherwise the vehicle may breakdown any time which may delayed 2 days</td>
<td>-website of the workshop</td>
</tr>
<tr>
<td>Start creating service request for an alternative driver at nearest Agency</td>
<td>Need a alternative supporting driver immediately. Otherwise driver may fail sick and shipment may have delayed by couple of days</td>
<td>-Web portal of the agency</td>
</tr>
<tr>
<td>Engine Servicing done at workshop. Now all parameter related to engine is fine</td>
<td>It’s done in 4 hours. Shipment May be delay an hour or two, but it saves couple of days delay.</td>
<td>- Report dash board for all information</td>
</tr>
<tr>
<td>Got a Supporting Driver from agency</td>
<td>Alternative driver is there. So He can drove the vehicle. So there is no chance of delay due to driver’s sickness</td>
<td>- Report dash board for all information</td>
</tr>
<tr>
<td>Shipment received by the customer on that day but only 2 hours delay. Customer is happy</td>
<td>Ohhh.. Customer is really happy. My Proactive measures saved 3-4 days delay in delivery.</td>
<td>- Agreement of the delivery.</td>
</tr>
</tbody>
</table>
Prototype

This is a 360 degree solution for Fleet Management with IoT implementation.

IOT help the fleet manager to run the process more quickly & smoothly and will help him to avoid any risk on time.

Prototype Link
https://standard.build.me/prototype-editors/api/public/v1/snapshots/347294190cbae79b0e1dda0e/artifacts/latest/index.html#/application_start

Video Link
https://www.youtube.com/watch?v=nqH4AxlogVM&feature=youtu.be

This Application will be available on his Tab / PDA or in his desktop to monitor all of his / Her consignment.

Now he can select any one option to navigate as per the application

It will show all the available consignment as per their geographic position, Along with the status of the consignment. High Risk will be displayed with red color and low risk as tallow.

If he selected any delivery truck, all the status related to that truck along with driver health information and Road traffic will be displayed. He can check the problem area like Engine.
The Same way, He monitor the Truck information or He can see the Driver health information

The Manager can create a Service maintenance order for the Truck engine at nearest workshop / service center form this application. He can also arrange a new driver or request for a new driver from this application.

The Same way Manager can change the route or propose a new route, if pre define route has more traffic or if road condition is not good.

The same way, He can segregate the consignment in geographical position. Same way the he can segregation can be done on customer as well.