



open**SAP** |

TOUCH IOT WITH SAP LEONARDO PROTOTYPE CHALLENGE

CONNECTED MOTORBIKES/ SCOOTERS

Story

IoT Prototype: Connected Bikes/Scooters

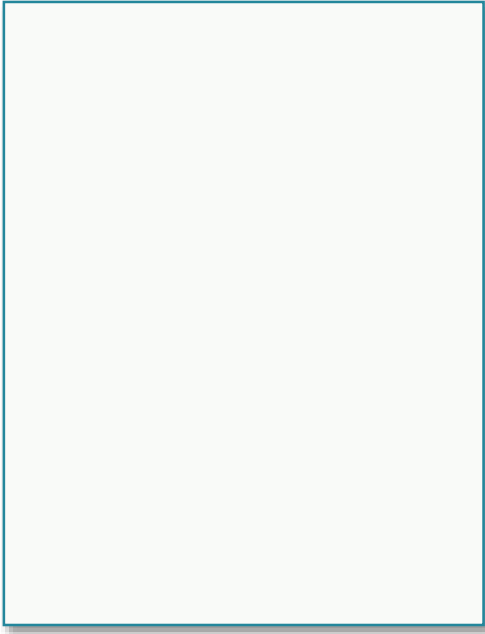
Millions of bikes/scooters are sold worldwide each year and it represents a thriving downstream market for servicing, spare parts, insurance etc. In context of *'after sales service'*, 2 wheeler manufacturers can immensely benefit from the capability to get information about each of their units sold e.g. they can get real time updates about the running condition of their bikes, its geographical location, number of miles covered till date, service history, breakdown information and much more.

Based on this information the bike/scooter manufacturers can perform predictive analytics and inform customers about upcoming service, nearest service center, parts to be replaced & its cost, approximate servicing time, approximate total cost and much more. All the information about part replacement (which part, date of replacement, next replacement due, warranty etc.) can be stored at a single place.

The 2-wheeler manufacturers may utilize the data about its bike such as avg. no of breakdowns, major issues that customers are facing (clutch plate abrasion, gas leak from shocker etc.), performance of its bike under various conditions, on-road efficiency to name a few. This data can then be used internally by 2-wheeler manufacturers to improve reliability, durability and efficiency of its 2-wheelers.

Target market for this IoT concept is Bike/Scooter Manufacturers, Service Centers and 2-wheeler owners.

Persona



Dave

Sr. Manager- Service (2-wheelers)

I need insights into each bike/scooter that come in my service center to enable me to offer effective solutions to riders issue and best customer experience

About

- 48, Married with 25 years' experience in after sales service domain.
- Manages a service center owned by global motorbike manufacturer
- Manages a team of 35 mechanics and technicians
- Risen amongst the ranks to his present position, knows the auto servicing industry inside out.

Responsibilities

- Oversee end-to-end service process for bikes/ scooters.
- Ensure any issues with vehicle are resolved to customer's satisfaction.
- Ensure that there is sufficient availability of spare parts.
- Provide high quality service at competitive price.

Needs

- I need to know the issues being faced by the rider so that I can check the vehicle accordingly.
- Need information about past services, breakdown, parts replaced in past performance of critical components/ assembly such as clutch plates, brake etc.
- Need a tool/app which could give me insight into health of bike/ scooter.

Main Goals

- Ensure each bike/scooter get a high quality service.
- Achieve high customer satisfaction and repeat business.
- Optimize the total servicing time per vehicle and maximize turnaround time.
- Increase customer base.

Pain Points

- Have to rely on customer review while finalizing the job card. Many times, reviews are inaccurate leading in unnecessary time to investigate the issue.
- Customers resist parts replacement and I wish I had analytical data to show to customer why I am recommending replacement of a particular part.
- Past service record not maintained by customers, therefore we do not know which parts were changed or whether parts are under warranty.
- 2-Wheelers do not have information on health of its critical parts (brakes, clutch plates etc.).



Point of View (PoV)

Point of View

As a Sr. Service Manager

I need a way to get vehicle's health related information about each bike/scooter that comes in my service center

so that I can use that information to diagnose issues with the vehicle, know which parts to replace, provide high quality service as per customer satisfaction. On the other hand, such vehicular insights will help me compress the total service time/vehicle thereby increasing the turnover of my service center.

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UX Journey


ACTIONS	Meet customer who has come to get his/her motorbike/scooter serviced	Take a test ride of the motorbike/scooter to assess any issues with bike.	Fill job card outlining the activities to be done, parts to be replaced, estimated time of delivery and approximate cost for service.	Allocate a mechanic to the bike. Handover the Job card to mechanic with brief him about any issues with vehicle.	Bike/Scooter serviced and ready.	Handover bike/scooter to customer
MINDSET	<p>“It will take a lot of questions to get relevant information from customer about vehicle issues.”</p> <p>“Let’s get it done quickly, I also have to attend other customers”</p>	<p>“With so many customers in the queue, this is going to take a long time.”</p> <p>“Another long day ahead”</p>	<p>“ now the hard part starts-convincing customer why replacement is needed”</p> <p>“why- why-why...ahhh..it’s so frustrating, why can’t they just trust me on this”</p>	<p>“ Some relief, customer is in waiting lounge now”</p> <p>“My team will take over from here”</p> <p>“Let’s goto the next customer”</p>	<p>“ team has done a good job”</p> <p>“call the customer for billing and delivery”</p>	<p>“ one down...many more to go “</p>
FEELING	😊					
TOUCH POINTS	Conversation with customer	Customer’s motorbike/scooter	Job Card Conversation with customer	Bike/Scooter Mechanics	Bike/ Scooter Phone	Customer Bike/ Scooter



Prototype

Connected Bike/ Scooter (Mockup)

SAP Connected Goods



ZIP RX650 [Track](#)

VIN: 129QWES464XCV Mazda Connected On [Stuart P. + Head \(Mechanic\)](#) [Call](#)

No. of KMs Done


30000 KM

Brake oil level low	7 days ago
Change Engine Oil	10 days ago
Rear Left Side Indicator Stopped	30 days ago
Battery Electrolyte Level Low	60 days ago


Owner: Jack Davis
-91 34557678 [Modify](#)

Make: ZIP
Model: RX650
Mfg. In: May 2013
Color: Black
No. of Service: 08
Last Service: Jan' 2017
Serviced At: Pune

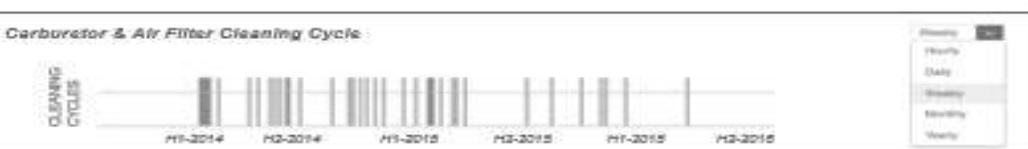
Average Distance Driven



Average Engine Temperature (°C)



Carburetor & Air Filter Cleaning Cycle



[Issue/ Problem Log](#) [Job Card](#) [Vehicle Status](#) [Notify/Call Customer](#)

[Last Service Detail](#) [Request Spares from Store](#) [Generate Invoice](#) [Feedback](#)