CASE SUBMISSION BY
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TOUCH IOT
WITH SAP LEONARDO
PROTOTYPE CHALLENGE

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.”
According to the Reserve Bank of India, there are more than 200,000 ATMs of various Banks in the country as on April 2017. The climate in India being hot and humid in most regions throughout the year, all ATM units are equipped with Air Conditioners (at least one for every ATM unit) which are ON most of the time (24x7) causing both economical as well as ecological loss to respective banks and the nation as a whole.

However, switching OFF these Air Conditioners randomly (using sleep modes) also is not a feasible solution as it might cause annoyance to the Banks’ valued customers if they find the ATM unit room in an unsuitably warm condition and make them switch to use its competitor’s unit.

IoT can effectively address both the Banks’ as well as its Customers’ needs by making the ATM and its Air Conditioner “interact” with each other through sensors. By analyzing the ATM usage pattern cycles during the day, the AC can be kept either ON or OFF with a minimum ON-time threshold of say 30mins. This would help save Banks millions of dollars in Electricity charges and also save tons of CO2 emissions!
Persona

Explain the needs, goals, and pain points addressed

Rahul

Principal (Strategy and CSR)

Maintaining balance between Bank’s financial performance & its Social Responsibilities is my key focus.

About

- 43, Married, 18yrs in Banking incl. 6yrs in CSR activities
- I have to keep a healthy balance between my customers’ needs, my bank’s efficient financial performance and ecological needs.
- I work closely with Administration, Finance and CSR teams.

Responsibilities

- I am overall responsible for setting up company’s strategy in efficient expenditure mgmt., resource planning and CSR activities.
- I manage our Bank’s 11,500 ATM units in more than 85 cities across India.
- I am also member of Indian Banks’ Social Community where I present our Bank’s CSR report incl. ‘Responsibility towards Climate change’.

Needs

- Track location of all ATM units centrally (preferred mobile).
- Monitor each ATM usage.
- Monitor usage of corresponding Air Conditioners viz-a-viz its ATM usage.
- There should be no manual intervention in switching On/Off the ACs.

Main Goals

- Keep ATM units’ expenditure bill to a minimum without compromising on customer satisfaction.
- Maintain high respect for our Bank in the community with reduced Carbon footprint.

Pain Points

- Unable to track exact location of ATM units centrally.
- No mechanism to analyze usage of ATM units and its corresponding Air Conditioners.
- Manual intervention needed to switch the ACs On/Off causing overheads.
- Current decision-making is less data driven so less accurate.
As **Head of Strategy** I need a way to track location & monitor usage of ATMs and its Air Conditioners so that I can effectively control ATM resources and costs associated with them.
## UX Journey

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINDSET</th>
<th>FEELING</th>
<th>TOUCH POINTS</th>
</tr>
</thead>
</table>
| ▶ Get list of all ATMs  
▶ Get Electricity bills of each unit | “I know the Admin teams will take ages to give me this data!!”  
▶ “What?! You don’t know usage patterns of your ATMs?!”  
▶ “God, we have no track of our own resources!!” | 😞 😞 😞 | ▶ Admin team  
▶ Bills  
▶ ATM Monitors  
▶ Emails  
▶ Regional teams  
▶ Survey  
▶ CCTVs  
▶ MS Excel  
▶ MIS team  
▶ Report  
▶ MS Powerpoint  
▶ Board meeting |
| ▶ Wait ...  
▶ Check if there’s data for ATM usage and units consumed by its ACs | “Are we really digital?? This waiting is frustrating!”  
▶ “It has taken 2 months to get all this information!”  
▶ “Finally, some meaningful data to see!” | 😞 😞 😞 | ▶ Travel points  
▶ Financial data  
▶ Customer feedback  
▶ Internal reports  
▶ External reports |
| ▶ Issue order to Regional teams to find out avg. #customers using our ATMs  
▶ Wait ... | “Our strategy is not working as expected.” | 😞 😞 😞 | ▶ Administration  
▶ Analytics  
▶ Operation  
▶ Strategy  
▶ Planning |
| ▶ Analyze the usage patterns | “I hope next year we could see some improved performance!” | 😞 😞 😞 |
| ▶ Prepare final report  
▶ Make a list of poor performers  
▶ Take other decisions | | |
| ▶ Present performance report to company and community | | |
Prototype
Prototype screens for an IoT application to solve the PoV

I. PROTOTYPE SCREEN FOR ATM

Air India Road, Kalina, Mumbai 400029.
II. PROTOTYPE SCREEN FOR AIR CONDITIONER

GAC – SC4378 1.5 Ton

Usage

98% as on 16-Jun

Air India Road, Kalina, Mumbai 400029.

Average temperature °C

AC usage

Average CO₂ emission (gms)