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TOUCH IOT WITH SAP LEONARDO PROTOTYPE CHALLENGE

CONNECTED POST BOXES
**Story**

Make a case and tell your story.

**Summary:**

Head Post Master of a post office needs a solution to monitor IoT Connected Post Boxes, which replaces age old postal boxes.

**Storyline:**

City of Bangalore has seen unprecedented population growth in last decade; city is already identified to be developed as one of the Smart City in India. Smart City commission is ready to invest in the area of public welfare where the latest technology can ensure better services to public.

Postal Department has very high reputation for on time delivery and promptness, but in recent past public frequently comes up with the grievances about timely clearance of postal boxes, and over filling of postal boxes. There are reported incidents of vandalism/theft.

Head Post Master wants to know real time status and history of the postal boxes, optimize the post collection routes, post box clearance on need basis, communicate with staff, ensure every day clearance and identify any vandalism/theft and report to law enforcement quickly. Bring more transparency and public can access the postal clearance history, so they can be assured of delivery of mail.
Satya
Head Post Master

“I want to retain my department reputation among the public, and make sure on time delivery of mails”

About
- 52, 30 years of experience in postal department in various positions.
- I make sure postal services provide highest quality of services to public.
- I coordinate with public, law enforcement officers, department official on the matters of postal delivery.

Responsibilities
- Identify the staffing needs; ensure adequate number of staff for the routine work.
- Address the public grievances, take adequate action.
- Provide monthly report to higher authorities on issues with staff, delay, and any delivery issues.
- Plan, organize and manage staff, resources and budget.
- Order for enquiry in case of theft, misbehavior of staff etc.

Needs
- I need a way to communicate with public about post box clearance time, history.
- I need to know which staff member is assigned with which route.
- I need the ability to track what is happening in post box, identify any unauthorized access.
- Count how many letters/mails are currently in the box or how much of the box filled.
- Ability to notify concerned staff person to clear the post boxes.

Main Goals
- Ensure on time delivery of postal mails both incoming and outgoing.
- Reduce number of grievances, bring in transparency and accountability.
- Report vandalism/theft to law enforcement.
- Optimize the route, staff and resource.
- Ensure adequate staffing.

Pain Points
- Unable to ensure post boxes are cleared every day on time.
- Unable to know whether the post box is full.
- Need to know which staff member is on which route.
- Communicating with public on mail delivery.
- Ensuring correct number of posts are collected and forwarded to concern addresses.
Point of View (PoV)

User + need + insight/why

Point of View

As a Head Post Master

I need a way to monitor the post boxes in my area for prompt clearance, identify any vandalism/theft, and communicate to public on actual clearance timing.

so that posts are delivered on time without any delays and postal customers are satisfied with our services.
UX Journey

Describe Actions, Mindset, Feelings and Touchpoints

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINDSET</th>
<th>FEELING</th>
<th>TOUCH POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A customer visited my office with grievance. Post box near his house was full on Monday morning. He walked 2 Km in search of another post box. Identify who was on route to collect the post. Warn them if they have missed to clear the post box on Saturday. A staff member gets instruction on location to clear the post. Staff collects the mails and checks all other post boxes on his route. Comes back after 1 hour. Customer was informed about the action taken.</td>
<td>“We are sorry..!” “We will take care next time..!” “It was Monday morning; we don’t clear on Sundays…” “Buck stops here…, staff was on leave on Saturday…” “check clearance schedule” “quickly send someone to clear the post box” “What if we know the situation on Saturday” “Wasted time!” “Send out action taken form” “Need to make report to higher ups”</td>
<td>☹</td>
<td>In person / Phone /Letter. Post box clearance Schedule. Identify person assigned for that route. Fire Fighting In person Letter/Phone. Prescribed forms.</td>
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Prototype

IoT Connected Post Boxes Application

Summary:

Age old post boxes are replaced with IoT connected post boxes. These postal boxes can provide information about its capacity (% filament), clearance time, and image/video in front of the box. Boxes are connected to nearest post office Wi-Fi gate way. Information feed from boxes alerts and updates the specified dashboard status.

Build: https://standard.build.me/projects/9b82ccf7a830a1c90e1c3b22/home

Post Master Dashboard:

Post Master Dashboard shows the information about all the postal boxes status in a single dashboard. Alerts from boxes are shown on the top row alert panel. Same can also provide other alerts on number of staff available, on leave etc.
Post Box View:
Post Box view provides information about capacity, power connection, and signal strength. Dashboard also contains contact person servicing the box, a web cam view of the surrounding. It location is shown in map also. Notify button is linked to postal staff view, which notifies the concern person by an alert.

Public view & Postal Staff view:
Public can view the historic data about actual clearance timing per each location. Postal staff can view alerts from their mobile device and take action on field.