CASE 2 - Solid Waste Management (SWM)

1. How do I find best scheduling for the pickup?
   [PN] Learn various operating models and map to RealTime usage
2. Did all my pickup points get serviced as per SLA?
   [PN] Mandate & incentivize stakeholders
3. Which vehicle was supposed to service the XYZ pickup point? Where is it right now?
   [PN] Pre-book/Schedule beforehand, increase predictability, use GPS/5G location tech
4. What is the published SLA for a particular pickup point? Are we going to complete it within that? How soon can I know if I am going to miss it?
   [PN] Conduct trainings/mock drills for SLA compliance & adherence.
   Check impact of delay as non-compliance should not be encouraged
5. What are my options then? Can I divert a truck from another route to service this pickup point?
   [PN] Use fleet management amongst other proximity solutions for the same.

   There are lots of usecases. A few are dealt with in the interest of time with short answers below prefixed with initials [PN].

Pivot Strategy
1. Technology - Try to use location services, citizen feedback, citizen & worker/vendor trainings
2. Dignity of labor & incentives - Ensure workers are treated well & protected well with their health
3. Predictability - Incentivize & reduce unpredictability
4. Cost - Use electric/solar powered vehicles

Stakeholders:
1. ULB
2. Vendors
3. Collection teams
4. Transport teams
5. Processing & Segregation
6. Disposal
7. Citizens

1. Define the problem and how you would validate it
[PN] Problems are aplenty at each stage/with stakeholders. Validation has to be with a healthy mix of technology & manual intervention

2. Develop a roadmap for a digital product that addresses the problem
[PN] Below requirements are good, later on a rolling roadmap can be included

3. Outline your process of getting it built by documenting high-level requirements and key features and functionalities

1. Ward/area/road/zone based implementation
2. Use of tech for fleet management/location/man-management
3. Increase predictability with incentives & points

4. Provide a basic visual design (or wireframes)
[PN] Please check mockups

5. Mention what metrics you would track, and why
[PN] Please check mockups. Why - to improve work performance/efficiency, costs, citizens & workers engagement quotients

6. Describe what success would look like and how would we get there
[PN] Encouraging people positively, dignity of labor, best practices of human-management, feedbacks from all quarters, make a working eco-system.

MockUPs

Swacchha Bengaluru

Vyaapti	Alerts	Profile

🏠 **Trips & Navigation** ⌃

Scheduled Pickups 200/300

Scheduled Pickups 200/300

Cancellations & options

Ward SLAs

✉️ **Notifications & Alerts** ⌃

Area alert1

Stand-in alert area250

👤 **Administration** ⌃

Add/Modify/Import Area

Add/Modify/Import Road

Add/Modify/Import Gaadi

Add/Modify/Import team/personnel

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Vyaapti	Alerts	Profile

⌂ Requests ⌃

Large quantity request

Reschedule request

Reroute request

⌂ Trips & Navigation ⌃

Book pickup

Book dropoff

Cancel pickup

Cancel dropoff

Swacchha Bengaluru

Vyaapti	Alerts	Profile

Team ⌄

Add member

Add/Modify Vehicle

Raise material request

Reports ⌄

SLA compliance

Team reports

Vehicle reports

Material requests

Payment/Salary