Story
Waste-Manager-App

Summary

The "Waste Manager" for a big industrial enterprise needs a solution to monitor, control and optimize the waste disposal coming from manufacturing processes.

Storyline

The "Waste Manager" is interested in any information about the waste in the different garbage cans scattered all over the area. He/she needs to know where the cans are and which of them are full (or will be full soon) and have to be dumped to keep the manufacturing process running without any disruption. Additionally he/she needs to optimize the waste process to minimize the truck loadings for financial reasons. If the "Waste Manager" is aware of the waste quantity all over the area and could be alerted in real time, he/she could react quickly or anticipatory.
Persona

Bob Busy
“The Waste Manager”

“I need to keep the production facilities running! Crowded garbage cans are my enemies!”

About
- 39, married, 15 years of waste management experience.
- Team leader for division “Waste Management”.
- Being the person who makes the decisions when the waste has to be dumped and fetched by external companies.
- Very mobile, moving from area to area to check the garbage cans.
- I work with my team, Production Managers and external companies.

Responsibilities
- I am responsible for the waste disposal which occurs in manufacturing processes.
- I am responsible to synchronize waste disposal with external companies.
- I have to know the waste levels all over the different areas.

Needs
- I always need to know the level of the different garbage cans.
- I need to know what kind of waste is in the different cans.
- I need to know manufacturing peaks to optimize the waste disposal process.
- I need to consider the load capacity of the garbage trucks to optimize the waste disposal process with external companies.
- I need to know exactly where every can is located.

Main Goals
- Being the person who decides the right point in time for the waste disposal.
- Being the person who times the external company to optimize the waste disposal process.

Pain Points
- No automated signal for filling level in garbage cans. Check has to be done manually.
- Optimization of waste disposal has to be done with tools like Microsoft Excel.
- High costs of waste disposal when external company has to come immediately to fetch the waste.
- Sometimes garbage cans have to be searched because someone moved them.
Point of View

As a “Waste Manager”

I need a way to optimize the waste disposal process so that I can guarantee the manufacturing process can go on full speed.
### User Experience Journey – Waste Manager (Case: Alert from Garbage can)

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINDSET</th>
<th>FEELING</th>
<th>TOUCH POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>➤ Open the “Waste-Manager-App because of an alert (alert from filled can)</td>
<td>➤ Let’s see what’s the reason for the alert.</td>
<td>😊</td>
<td>➤ Colleagues in office iPad</td>
</tr>
<tr>
<td>➤ Take care of the alert. Checking status of garbage cans</td>
<td>➤ Let’s get this done</td>
<td>😌</td>
<td>➤ Colleagues in office iPad</td>
</tr>
<tr>
<td>➤ Decide which of them have to be dumped</td>
<td>➤ Oh, that’s a bit challenging... There’s full use of capacity planned in the next days</td>
<td>😣</td>
<td>➤ Colleagues in office iPad</td>
</tr>
<tr>
<td>➤ Assemble the garbage cans for the garbage truck</td>
<td>➤ What?! Who moved the residual can in area Hall 2??</td>
<td>😢</td>
<td>➤ iPad Colleague on phone to tell him where to find the can and where to locate it again</td>
</tr>
<tr>
<td>➤ Consider the stored shift schedule within the “Waste-Manager-App”</td>
<td>➤ We have to correct the position of the can for the garbage truck!</td>
<td>😢</td>
<td>➤ iPad Order-Mail to external company</td>
</tr>
<tr>
<td>➤ Let’s check the location of the cans. Is every can on the correct position?</td>
<td>➤ Ok, all is organized</td>
<td>😥</td>
<td>➤ iPad Mail to production managers (if they want to be informed)</td>
</tr>
<tr>
<td>➤ Ok, let’s order the external company to pick the waste up in the next 2 days.</td>
<td>➤ No extra costs for immediately disposal.</td>
<td>😥</td>
<td>➤ iPad</td>
</tr>
<tr>
<td>➤ Report the cans and locations for the external garbage truck</td>
<td>➤ Ok, manufacturing can work at full speed. No danger of stopping the process because of full cans!</td>
<td>😥</td>
<td>➤ iPad Colleagues in kitchen</td>
</tr>
<tr>
<td>➤ Inform the production managers via mail about the disposal action.</td>
<td>➤ Ok, work is done for the moment.</td>
<td>😤</td>
<td></td>
</tr>
<tr>
<td>➤ Close the “Waste.Manager-App” for the moment.</td>
<td>➤ Let’s wait for the next alert or make the next routine check in one hour.</td>
<td>😤</td>
<td></td>
</tr>
</tbody>
</table>
Waste-Manager-App mockup(s):

**Master/Detail-Views**

- Starting app after alert from can “Residual_2”.
- Chance to create a new order for a certain Company.

- Now add the garbage can to the newly created order or add it to an existing and still open order.
• The new or extended order can now be sent to the provided mail-address of the chosen waste company.

• To be sure the can is still on the designated location you can check it and react.
Waste-Manager-App mockup(s):

**Settings-Views**

- Settings-Views to manage and extend the registered cans.
- Sensor-IDs coming from registered devices in HCP (Internet of Things Services).
- Possibility to change or delete managed cans.
- Delete operation only for cans which are not scheduled.