openSAP

TOUCH IOT
WITH SAP LEONARDO
PROTOTYPE CHALLENGE
This IoT prototype should be used by pool service companies. During the pool summer operations a lot of information about pool water and pool technical equipment should be collected in advance to preserve clean water during the whole summer.

Pool owners often don’t want to do the sanitation - check water parameters - temperature, PH, chlorine, salinity and so, but they still want to have clean and healthy water. Especially the high temperature of the water (over 30 degrees) may lead to water parameters moving to unhealthy levels.

Pool service companies using this IoT system will be able to check all water information in advance to preserve the clean water. In addition, technical information about water pumps and filter systems, salt systems, chlorinators, heaters, PH systems and so can be collected in advance to prevent the technical failure.
Jane
Customer service specialist at a pool service company

“I want to have everything perfect and as a mother of two young children I understand every pool must be clean and healthy.”

About
• 40, married, mother of two children.
• Employee responsible for checking customer pools and taking the care of them
• Desires to have perfect overview of all technical and chemical status of each pool installed and serviced by her company
• Works with pool owners, usually only via phone

Responsibilities
• I am responsible for checking technical status of all pool components
• I am also responsible for chemical status of pool water, checking all relevant water properties
• I spend all my time at the office, making calls with pool owners
• Once per month I am creating “pool statuses”

Main Goals
• Keeping pool water healthy
  Ensure customers – pool owners – have their pool water’s parameter within the healthy criteria range at any time by pre-warning them in the case the parameters get out of acceptable levels
• Prevention of pool equipment technical failures
  Ensure technical support is informed about necessary maintenance to prevent technical failures of pool equipment – pump and filter systems, salt systems/chlorinators, heaters, PH systems and so

Needs
• I need to know all relevant information about our pools and the water within in advance to preserve dangerous quality of the water
• I need to have access to all pool information history to compare pools in the same location
• As a mother of two young children, I need to remain flexible – often I work from home

Pain Points
• No access to information about all pools
• Water parameters are collected often too late which leads to e.g. algae in the pool
• Pool technical equipment often fails because of lack of control and missing predictive maintenance
Point of View

As a customer service specialist

I need a way to check water parameters and technical status of pool equipment in advance

so that pool water will remain clean and healthy and our customers stay satisfied with their pools.
<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINDSET</th>
<th>FEELING</th>
<th>TOUCH POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Open map dashboard with all pools</td>
<td>&quot;Is there any red light?&quot;</td>
<td>😊</td>
<td>- IoT map dashboard</td>
</tr>
<tr>
<td>- Check weather forecast</td>
<td>&quot;Is this fully automated pool?&quot;</td>
<td>😊</td>
<td>- Weather forecast</td>
</tr>
<tr>
<td>- Click on selected pool with the red light</td>
<td>&quot;Are all technical systems working without any issues?&quot;</td>
<td>😊</td>
<td>- Technical status</td>
</tr>
<tr>
<td>- Check water temperature, PH, salinity, chlorine</td>
<td>&quot;Aaahhh, PH is above 7.3 and water temperature is above 32 degrees&quot;</td>
<td>😊</td>
<td>- Pool description</td>
</tr>
<tr>
<td>- Get pool and customer details</td>
<td>&quot;As this is not a fully automated pool, I need to immediately warn the customer.&quot;</td>
<td>😊</td>
<td>- Water parameters</td>
</tr>
<tr>
<td>- Make a call with the customer</td>
<td>&quot;Pool is small, only 30 m³ of water&quot;</td>
<td>😎</td>
<td>- Customer description</td>
</tr>
<tr>
<td>- Wait for the confirmation from customer side</td>
<td>&quot;Please add 2 liters of PH-liquid to the skimmer right now&quot;</td>
<td>😎</td>
<td>- Mobile phone</td>
</tr>
<tr>
<td></td>
<td>&quot;OK, he is adding PH-liquid to the pool and all other parameters are fine&quot;</td>
<td>😎</td>
<td>- Mobile phone</td>
</tr>
</tbody>
</table>

User Experience Journey - checking water parameters in not fully automated pool
Prototype

Prototype screens for an IoT application to solve your PoV
Chlorine Pool

SWP-725-Ford

Water Temperature
27.5/28°C
July 1st, 2017

Temperature (in °C)

Upper pool & Bottom pool

PH

Upper pool & Bottom pool

Chlorine (in mg/l)

Upper pool & Bottom pool

Water pump flow (in m³/h)

Notifications (2)
Chlorine in upper pool is too low - 0.1
Water pump 3 flow is too low - 15m³/h

July 1st, 2017

Contact Person
Ford, Harrison
310-273-6700

Build.me prototype: