Story
Story

Background

The most stressful part about catching a flight is the waiting line at the airport for check in / security check. As air travel is continually on the rise and airports often have limited space to expand, the pressure on authorities to balance security with a good passenger experience grows. This leads to significant bottlenecks, with delays that frustrate travelers. Today, many airports still rely on manually made spreadsheets with generic inputs to forecast capacity and plan staffing resources. Typically, these spreadsheets do not take unexpected events, such as changes in the flight schedule, adjacent road traffic delays, weather changes or other operational obstacles, into account, which can seriously affect the operational plan. The uncertainty around how long airport processes, such as check-in, security, border control and immigration, weighs heavily on the mind of frequent travelers, particularly when the wait time in the queue is long. The passenger experience degrades especially during the long weekends when the rush at the airport increases resulting in increased wait times.

Storyline

The general aviation airport manager is interested in knowing the live forecasts of waiting times for the remaining hours of the day. Besides being able to provide passengers with wait times, this enables airport managers to adjust plans if expected wait times deviate from original forecasts, preventing queue build-up and avoiding potential KPI violations. The management could use this information to respond promptly and effectively to irregular operations and disruptions, ultimately reducing the processing times and resulting in positive passenger experience.
Persona

**DAVID**

Airport Manager

“For me, positive passenger experience matters the most as that reflects the efficiency of the airport operations.”

**About**

- 40, married with 2 kids – 8 & 5 years old.
- 11 years of airport manager experience; good organization skills.
- Since I am responsible for ensuring efficient operation of the airport on a daily basis, I’d like to have the current stats and the forecasts handy.
- Very mobile, moving from across terminal during the day.

**Responsibilities**

- I am responsible for managing the airport operations on a daily basis.
- I manage and supervise personnel, look after department safety & ensure compliance with regulations.
- I am generally on the move but I am at my desk between 12 PM-2 PM.

**Needs**

- I need to ensure safe and positive passenger experience.
- I need to know if there is a rise/drop in the passenger count to take certain actions like open/close more check in/security counters. Currently, I rely on manually made spreadsheets with generic inputs to forecast capacity and plan staffing resources.
- I need to take informed decisions based on the rush at the airport to ensure all KPIs are met.

**Main Goals**

- Since I am responsible for ensuring efficient operation of the airport on a daily basis, I’ve to strike a balance between routing airport processes and positive passenger experience.
- Better utilization of resources during rush hours.

**Pain Points**

- Can’t track current passenger count and wait time
- Can’t see airport KPIs vs passenger count graph to analyze further if KPIs are not met
As Airport Manager I need a way to be always informed about the passenger count and waiting times so that the airport operations can be managed better thereby enhancing the passenger experience.
UX Journey
### User Experience Journey Template

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINDSET</th>
<th>FEELING</th>
<th>TOUCH POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The airport manager, David, is looking through the airport KPI violations of last month.</td>
<td>“Ah! Why is there a day in security checks during this time?”</td>
<td>😞</td>
<td>Month KPI violation report</td>
</tr>
<tr>
<td>The airport operations are regularly delayed during early morning hours.</td>
<td>“Let me pull up the report assuming that the current passenger count at security queue is 60 &amp; we have 3 check points open.”</td>
<td>😞</td>
<td>Manual spreadsheet for capacity planning</td>
</tr>
<tr>
<td>David uses manually made spreadsheets with generic inputs to forecast capacity &amp; plan staffing resources.</td>
<td>“There are 24 flight with flying at approximately the same time. With additional counters, the delay should reduce.”</td>
<td>😞</td>
<td>Work order</td>
</tr>
<tr>
<td>David requests additional security checkpoints to be operational during early morning hours for the current month.</td>
<td>“I don’t want this to repeat. Let me document this somewhere.”</td>
<td>😞</td>
<td>Manual spreadsheet</td>
</tr>
<tr>
<td>David also looks at the number of flight operation during early morning hours</td>
<td></td>
<td>😞</td>
<td>Phone Call</td>
</tr>
<tr>
<td>David maintains the data about the wait time with additional security points in excel for future reference.</td>
<td></td>
<td>😞</td>
<td>Staff Resource Planning Worksheet</td>
</tr>
<tr>
<td>David receives a call about a flight time change due to bad weather conditions. He again uses the spreadsheet for capacity planning.</td>
<td></td>
<td>😞</td>
<td></td>
</tr>
<tr>
<td>David adds more security check staff for next day based on today’s stats.</td>
<td></td>
<td>😞</td>
<td></td>
</tr>
</tbody>
</table>
Prototype

I’ve used the build tool to create high fidelity mock ups as I was familiar with the tool and this appeared a faster prototyping approach. Here are the screenshots:

Master Page

Master Page will have list of airports and terminals. There will be quick view of the wait time & the Passenger Count. A wait time greater than 30 mins will be highlighted in red to indicate that the slow processing time.
Detail Page

Upon selection an airport & a terminal from master page, detail page will provide the following details:

1) Upcoming Departures at the Terminal and the status of Security Checkins.

2) Current operational & closed security counters at the airport.
3) Stats showing the wait time vs time status for today.
Build Link -
https://standard.build.me/api/projects/f532985da8fbd8ea0cd425dd/prototype/snapshot/latest/index.html#/14775310607391448_S0