

How can we strike the right balance between human-centric and tech-based responses to disruptions?



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TAP AIR PORTUGAL
Embrace the World

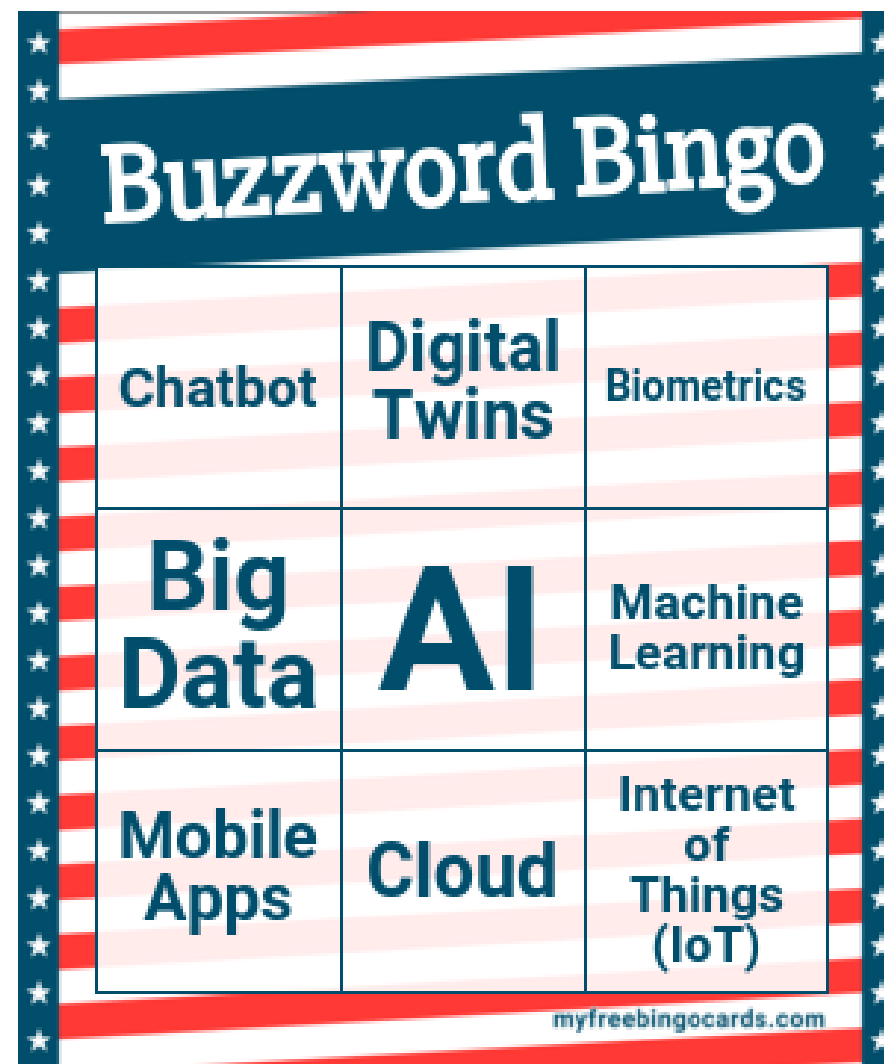
Welcome to WAF 2024

First things first!
Let's play a little game



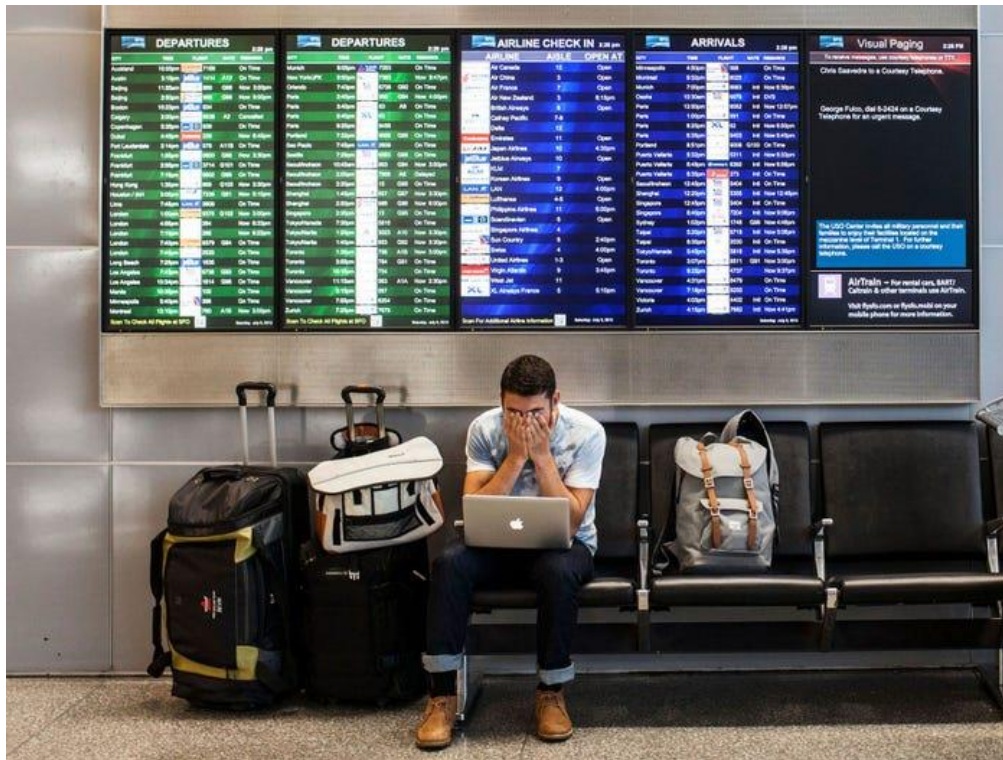
Do we need all this?

Should we be focused
only on technology?



When do we usually think about IROPS?

A bit too late, right?



When should we deal with IROPS?

There are multiple opportunities, but the sooner, the better!

Schedule Design



Tactical day of ops



Post ops...



Avoid IROPS - Schedule design

Summer 2024 was planned with an IROPS avoidance mindset

We learned to live and plan in a real world:

- Our Hub **airport** won't change because we don't like it, but we can become the **best** flying from it.
- On most days, not everything goes wrong at the same time, **shared resources** are most efficient.
- We can have the shortest MCT on some connections, but not all. Learn to **choose** and **prioritize**.

And applied two golden rules:

- Network Planning: **improving our performance is mandatory**, find a way to tweak the schedule!
- Operations: you **shall not decrease revenue**, think of something else!



Avoid IROPS - Schedule design

Summer 2024 was planned with an IROPS avoidance mindset

Lessons learned:

- This is doable without **AI**...
- We didn't have a **schedule optimizer** (yet), but didn't do it by hand either,
- We have awesome **experienced teams**, both in Network Planning as in Operations,
- Who just needed a bit of **direction** and help in obtaining **data**,
- But above all, **must cooperate** with each other!!



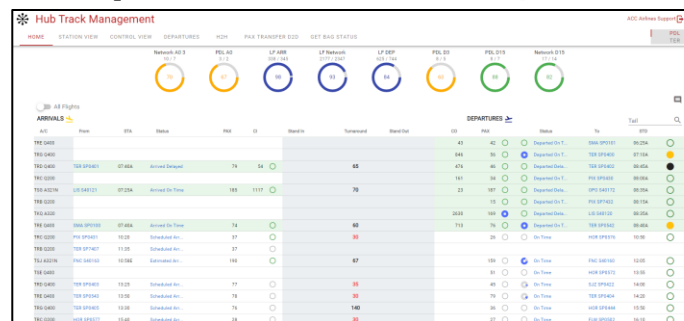
“We are communicating better ...
but we are still not out of the woods.”

Mitigate IROPS – Know, decide, implement

Ensure information is accessible, foster decision-making in IOC

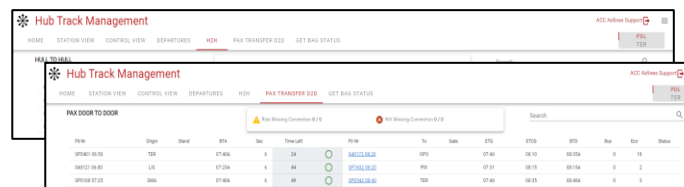
- Prioritise amid **OTP, connectivity or completion factor**.
- Create good situation awareness, accessible for **information** and problems spotting.
- Define **standards** for when certain go/nogo **decisions** should be made.
- **Align** processes, references and timings **between IOC and HUB**.
- Get the **customer** to IOC.

We partnered with ACC, a Portuguese startup, to implement HUBTM:



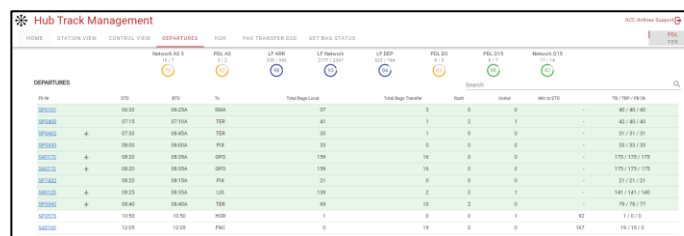
Full birds eye view:

Real time information on pax/bag for each **flight** and **hub connection**, quickly **accessible**, with inbound and outbound meshing



Predictive capabilities

Forecasting engines to predict each passenger and bag's **likelihood of connection**, Hull to Hull and Door to Door.



Event and alert monitor

View with all pax/bag alerts and predictions for every departing flight, allowing for **quick decisions**: delay flight vs generate misconnection

Mitigate IROPS – Know, decide, implement

Ensure information is accessible, foster decision-making in IOC



**Improved
On Time Performance**



**Reduced
Bag Left Behinds**



**Reduced
Pax Miss Connections**



**Better
Monitoring**



**Reduced Cost with
Compensations**



**Increased Customer
Satisfaction**

But we're not done with IROPS yet

There is still a long way to go!

- **Enhance and then automate passenger care**
 - **Proactively** prepare and assign hotel rooms, vouchers and compensation to disrupted passengers, even before they land.
 - Explore conversational bots, move from step-by-step interface towards **natural language**.
- **Expand HUB decision making to before flight landing**
 - Implement our own arrival flow management, adjusting cost indexes, to **sequence** flights on **arrival** to Lisbon, taking individual connecting passenger, bags and cargo information into consideration.
- **Continue developing our decision-making tools**
 - Finish implementation of fleet optimizer, followed by deployment of a tail optimizer.
 - **Experiment** with solvers and their (many) limitations.



So, back to the start, do we need all this?

For sure, yes please!

But...

first start by

enabling your team.

They'll already be delivering change, while you figure out the complicated technology details!



» **Thank You**

The TAP logo consists of the letters 'TAP' in a stylized font. The 'T' is green, the 'A' is yellow, and the 'P' is red.

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