

Monday 5/1 - Meeting with General Manager of Air Traffic Management at Delta Air Lines and Former OCC Digital Technology Manager at Delta Air Lines

Agenda

- Introduction to Project
 - **Goal:** Understand how airlines fit into TFMS applications
 - If we were to design an airline view, what would we include?
- Asking what TFMS Applications are used in their workflow
 - What different TFMS applications/interfaces do you work with related to AFPs?
 - How does the FAA send you EDCT info?
 - What do you like/dislike about how that information is communicated/formatted?
 - What aspects, if any, of TFMS do you have limited/restricted access to that you wish you could access in FMDS?
 - When evaluating an AFP, what helps you determine its impact on DL flights?
- Communication
 - Thoughts on voice / chat feature?
 - Show wireframes
 - User permissions (“Behind the glass”) -> How often are you communicating with people who don’t have access to TFMS applications?
 - What applications are you (as an airline) restricted from?
 - Can you view NTML?
 - What are helpful for post-event review?

Notes

- What different TFMS applications/interfaces do you work with related to AFPs?
 - Times, and how “we” are moving around in the system
 - Volume that “we” create at airports is managed by the FAA
 - We know in general what capacity they have at these airports
 - When capacity exceeds, they anticipate it will be dealt with in some way
 - FSM: primarily with volume by airspace
 - Application they use the most
 - Air Traffic Coordinator positions, typically the ones who manage airports, they all have this information in front of them
 - Hourly demand (arrival and departure)
 - Can fine-tune for different initiatives (miles-in-trail, TBFM restrictions)
 - What they value about FSM
 - Visualization of the demand at an airport
 - The status of that demand
 - Can see where flights are coming from
 - Route Structure and Requirements to fly certain routes
 - Conveyed through TFMS
 - TSD and FSM Volume Boards

- Used to generate advisories
- How they inform the user community of what their intentions are and what they are planning to do/have already done
- Need to first understand the scheduled saturation of airspace
 - Able to look throughout the day to see what normal saturation would be, where air traffic has their sector volume set, and where they would exceed the sector volume
 - The reason behind why a sector was saturated
 - Seasonal volume, daily volume to a large airport and the pref-routes that are being used, etc.
- Tool to understand the route structure set in place
- Airlines cause use TSD to see the saturated sectors have been de-saturated
- Want to be able to understand an airspace issue (rocket launch, weather, etc.)
- **Need to understand cause and effect from an airline standpoint, and understanding the FAA's restrictions are key**
 - This would address the experience issue, where more experienced users have more knowledge compared to new users
- FSM connected to SWIM
 - Would like to see volume greater than 24 hours
 - 3-4 days (being able to see at least three days out so on Friday you can make a plan for the weekend)
 - Limitation is that this would capture scheduled flights
 - On Thursdays, the next seven days of data are loaded from OAG (data platform for travel industry)
 - Need more than a 12-hour window
- TSD alerts users 6 to 8 hours in advance so airline can be ahead of Command Center when discussing playbook routes in the morning
 - Not being able to look in the future (to understand the saturation for them to then drop more volume) hinders the airlines workflow
 - Understanding cause and effect earlier on in the current workflow of TSD interactions between the FAA and airlines
- How does the FAA send you EDCT info?
 - Use commercial product to view information in relation to other flights
 - Can use FAA tool to view the flight list in FSM
 - Pay the commercial carrier to place information in a more readable format
 - May be out of scope (for airlines)
 - Automated algorithms for move-ups
 - They would know the "A Slot"
 - Are they meeting the "A Slot"? Is the AFP falling behind or is it meeting its slot time
 - What do you like/dislike about how that information is communicated/formatted?
 - May be out of scope (for airlines)

- Visualization of the effectiveness of an AFP could be worthwhile
 - Something that respects the more real-time aspects of the information
- Thoughts on voice / chat feature
 - Could be complicated because everyone is used to communicating via telephone
 - Use active Microsoft Teams currently (similar to our current decision)
 - Usually, individuals in these chats are so busy that they will either lose focus or have difficulty responding
 - Clearly there is a need, but the actual feasibility of this tool is difficult to finalize
 - Maybe creating a “To-Do List” or a Prioritization list for users
 - Chat could be centered around flight number or around sectors if it is a broad topic
 - Would be down to talk with professors from SI 429 for their opinion on what the best approach to this feature could be
- What would you revise/change about our mockups
 - More heavy on the TSD side