

USE CASE 2 - AIRPORT RAMP OPERATIONS – WATER UPLIFTING

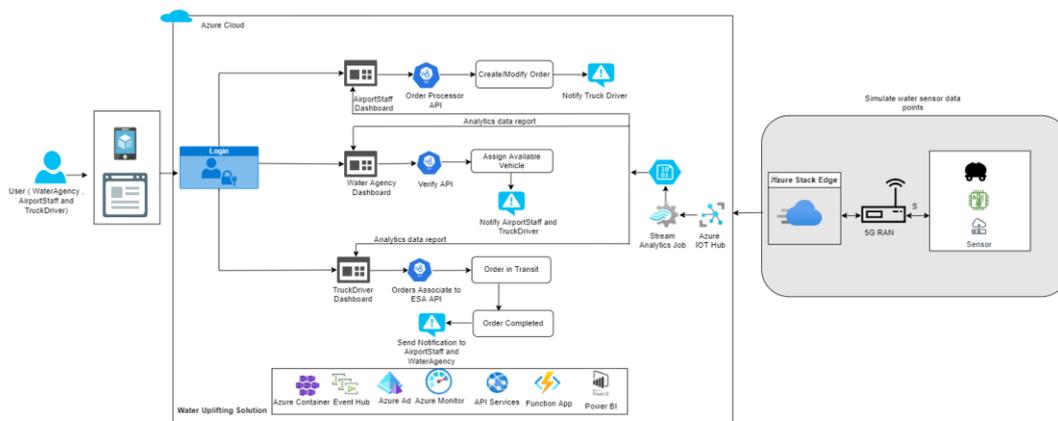
GATE TURNAROUND TIMES IMPACTED BY SLOW RAMP OPERATIONS

In aviation industry water uplifting is one of the ramp operation activities which will equally impact the turnaround time if not delivered within the defined time. As we know that we cannot check water quality of portable water truck in real time. If water truck delay to provide services in aircraft due to some technical glitch so turnaround time (TRT) of ramp operation will be increased which will impact the revenue of the airlines. Overall to save the time of ramp operations along with the accuracy and quality by using the latest technology stacks.

WATER UPLIFTING SOLUTION

The Water Uplifting Solution aims to leverage Azure Cloud and 5G to provide clean water, improve turnaround time (TRT) of Ramp operation and Make Portable Water Truck usage around the airport more efficient.

- Check water quality on basis of data points like PH etc. and set water truck status available if water quality is ok.
- Check water level of storage in the truck if it is less truck will not be available to provide services.
- Make Portable Water Truck usage around the airport more efficient.
- Provide clean water with the help of this pilot project.



VALUE PROPOSITION

- This pilot project will enable timely delivery of clean water across all of the airport sections with higher reliability and better quality.
- The proposition will reduce overall delay in the delivery process by ensuring availability of loaded water trucks.

Following 5G sensors will be use in Water Tankers:

- Conductivity value
- Turbidity value
- PH values
- Temperature value
- TDS value
- Water level

Network

- 5G RAN
- 5G Core

Azure Services:

- Azure Cloud
- Azure AD
- API Services
- Azure Monitor
- Azure Container
- Azure IOT Hub
- Stream Analytics Job
- Power BI