Intelligent Gate Allocation from Copenhagen Optimization and Assaia

Welcome to the Future of Stand and Gate Operations

Managing aircraft turnarounds and gate allocation is notoriously complex, requiring precise coordination to ensure efficient servicing, refueling, cleaning, and preparation of aircraft for on-time departures. This not only ensures safety but also allows optimized airport stand capacity and aircraft usage.

Accessing reliable real-time information about airport processes has long been challenging, making it difficult for stakeholders to coordinate and ensure efficient operations. Traditionally, stand and gate operations relied on static buffers between flights, irrespective of actual turnaround times, due to the lack of technology for dynamic, automated adjustments. But that's changing.

With the increasing collaboration and Artificial-Intelligence-enabled (AI) data gathering on turnarounds and prediction of aircraft off-block /ready times, an innovative solution for stand and gate allocation is now a reality. This breakthrough brings significant potential in reducing idle time at stands and gates, ultimately driving a higher number of turns per stand/gate per day. Together, Assaia and Copenhagen Optimization aim to bring Intelligent Buffer technology to airports globally.

Combined forces toward the Intelligent Turnaround

Assaia and Copenhagen Optimization have a shared vision of transforming how stand and gate operations are planned, tracked, and executed. By combining their powerful solutions, which are already helping airports improve efficiency, capacity, and passenger experience, new synergies can be created in stand and gate operations.

- **Assaia's ApronAI** sets new standards for optimizing the turnaround process and predicting off-block / ready times.
- **Copenhagen Optimization's Better Airport** raises the bar for planning and optimization at airports globally.

Intelligent Buffers with Real-time AI-enabled Optimization

While both solutions are robust individually, the data from ApronAI can unlock new options for forecasting and optimizing stand and gate operations within Better Airport.

This integration offers Intelligent Buffers, leading to better utilization of infrastructure, more robust operations, and a pathway to future growth.

Planning Phase

By predicting off-block times and turn durations, airports can move away from relying on static turn times and incorrect buffers derived from historical data. During the planning stage, airports can anticipate typical patterns in arrivals, departures, and turn durations. This proactive approach allows for a more accurate plan, reducing the need for last-minute adjustments and stand / gate changes on the day of operation. This translates to less work and fewer disruptions.

Real-Time Operations

During operations, unexpected situations can arise, impacting flight schedules. While Assaia ApronAI is designed to address turnaround issues and minimize their impact quickly, delays can still occur. The system's machine learning algorithm continuously monitors factors affecting departure times and updates the predicted off-block time in real time. This native integration to Better Airport ensures that gate allocations are automatically updated during operations, identifying potential conflicts early on. This means fewer arriving flights will face delays due to occupied gates from unexpected delays, and last-minute gate changes will be minimized.

Additionally, better predictability and stability in planning reduce the need for large buffers. This not only increases gate capacity but also optimizes the use of expensive and scarce airport resources.

Raising the Bar – Innovation through Partnership

Imagine a future where turnarounds are flawlessly executed, stand and gate assignments are optimized in real time, and potential delays are mitigated before they even occur. This is the future that the integration of ApronAI and Better Airport promises—a future where efficiency and resilience are not just goals, but realities.

Does this sound interesting? Change and innovation happen through partnership, so please reach out. We are always eager to discuss opportunities with others who share our passion for transforming airport operations.

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