Harnessing Data in Aviation: Insights from WAF Festival Asia Panel

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As airlines push to know their customer better, and personalize the travel journey they offer, the WAF Festival Asia served as a platform highlighting the evolution of data analytics within the industry.

Kat Morse, Senior Manager Innovation and Partnerships, moderated a panel session on the pivotal role of data in shaping the future of aviation, and shares her insights on how airlines leverage data both currently and in the future.

The shift to cloud-based platforms: a *'nice to have'* or a must?

The trend from the panellists, who included speakers from Emirates, OAG, Sri Lankan Airlines and Cebu Pacific Airlines, was that airlines are swiftly migrating to cloud-based platforms, recognizing their potential to transform operations. For the panellists, this transition is not merely a matter of convenience but a strategic move towards scalability, cost-efficiency, and enhanced security.

To Jek De Chavez-Hermida, Director of Data at Cebu Pacific Airlines, migrating to purpose-built cloud platforms is not just a choice but a necessity to stay ahead in the data-driven era. Companies often lack the computing power and scalability to handle the demands of complex models' training. Advanced applications like Generative AI and Language Learning Models (LLMs) must be supported by an IT infrastructure that allows for elastic processing power, sufficient storage capabilities, and effective resource allocation management.

The speakers agreed that by making the transition, airlines will be able to better handle the rapid growth of data accessibility the industry is witnessing, while ensuring reliable data protection and recovery. Cloud-based environments can also support quick deployments in a dynamic business context.

Evolving together – data sharing in aviation

The industry has been witnessing a positive trend in adopting collaborative data initiatives. However, Malith Rawatta, Business Intelligence and Analytics Manager at Sri Lankan Airlines believes that there are a few points airlines need to focus on when embracing future collaboration.

He sees regulatory requirements, practicality within the aviation domain, and potential risks around data security as the biggest challenges to consider in data sharing.

When asked about the evolution of data sharing and the question of federated models versus centralized players in the aviation ecosystem, the panellists prefer a hybrid approach where people can share a certain set of data in a secure and regulated environment. Examples include the likes of a 'data marketplace' or using blockchain technology.

The group believes this approach will minimize disadvantages that are brought on by both centralized and federated models. He sees limited flexibility as the main hinderance to a centralized approach, whereas standardization and complexity issues as an obstacle in implementing federated models.

Despite these challenges, the panellists agree that collaboration remains the cornerstone of innovation in the aviation sector, and stakeholders leverage collective expertise, best practices, and lessons learned to navigate complexities and unlock the full potential of an airline's data strategy.

Where does the industry see the most opportunity?

The evolution of data may very well hold the key to unlocking personalized experiences, operational efficiency, and enhanced safety within the industry. However, to accomplish these goals, the panellists made it clear that there are steps to be made to realize these benefits.

Most importantly, the panellists believe that data strategies require investments in 'people and tools'.

To Chavez-Hermida, AI and tech is only limited by the industry's imagination. Thus, investing in the right people who not only know how to use the tools but think about its future potential and what it can accomplish is essential. One way to achieve this is by upskilling the workforce.

The speakers also acknowledged that customer satisfaction surveys highlight the golden truth that passengers require personalized service. Therefore, the business requires personalized analytical inputs for continuous service improvements. An example of personalization, for Chavez-Hermida, include developing intelligent virtual assistants that not only automate customer support, but anticipate customer needs to improve their digital experience.

As for Ratwatta, he just as equally believes that customer personalization is crucial to the success of new data strategies. Specifically, the leveraging of data to provide customers with real-time insights.

There emerged a shared sentiment that by investing in data infrastructure and platforms, airlines will be able to better cater to both current and future demands. These modernization efforts can include migrating to a cloud-based platform. Most importantly, compliance with regulatory frameworks like GDPR is non-negotiable, and maintaining customer trust is imperative.

By prioritizing these areas, the panellists are confident that airlines can navigate the data landscape with confidence and integrity.