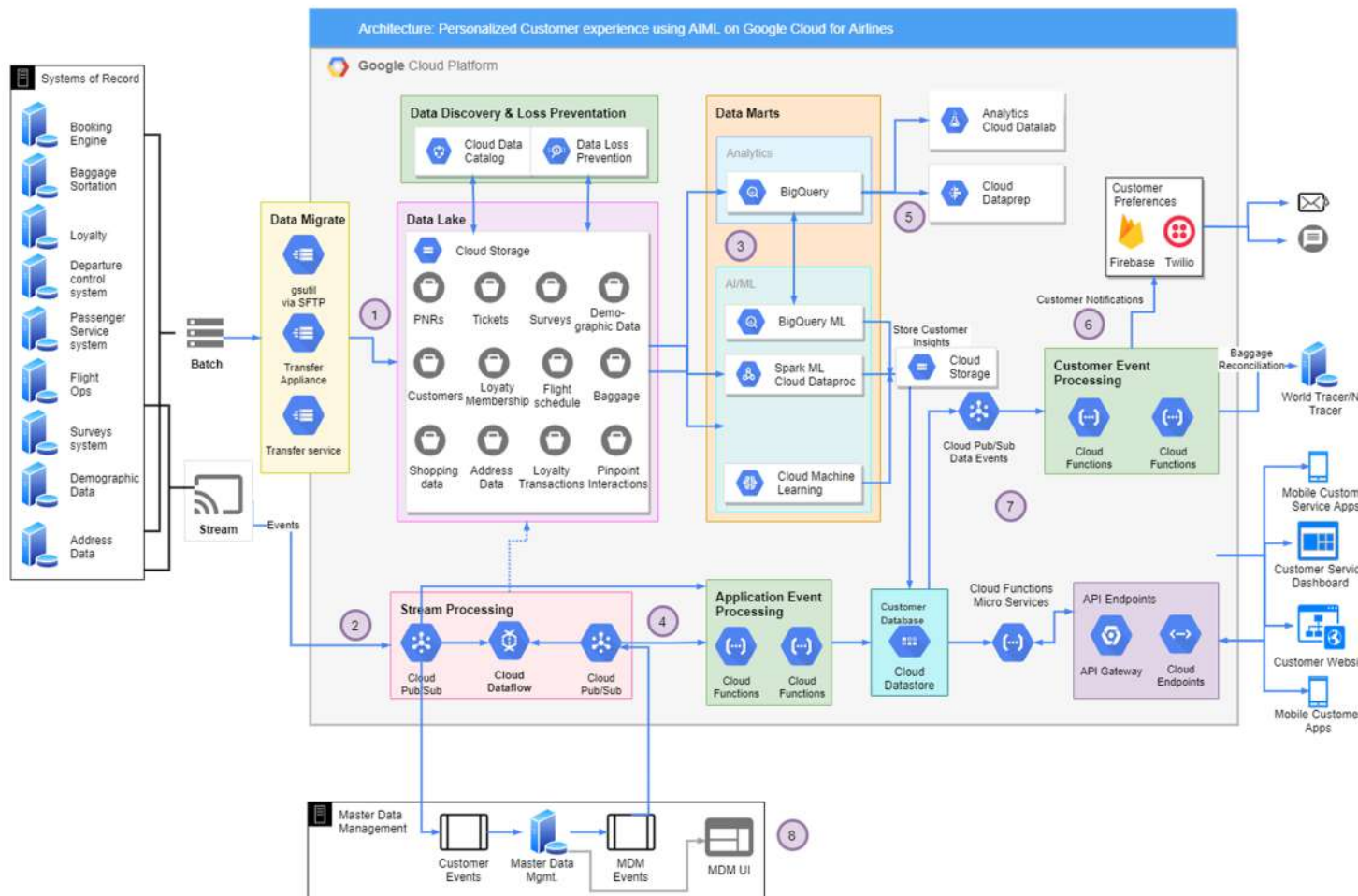


# Reference Data Platform on Google Cloud for the Airline Industry

Reference Architecture of Cloud Native Data Platform coupled with Analytics & Machine

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Leverage cloud native components including AI/ML, Data and Analytics services for personalization and enhancing customer experience :

*This reference architecture uses Data Platform for Airlines as a foundation and offers personalization with artificial intelligence and machine learning services for typical use cases such as baggage reconciliation, customer insights, etc.*

- 1 Batch Process:** Airline customers can extend the capability by migrating additional domains and system records like shopping data, baggage sortation, and baggage reconciliation.
- 2 Stream Process:** Create message workflows that reduce customer pain points like automatic baggage lost notifications, baggage tracking, surveys, service interruption-based interactions and baggage reconciliation.
- 3 Use Big Query ML:** Create segmentations, target lists, and personalized offers by analyzing the data in data lakes.
- 4 Customer Event Processing:** Create new AI/ML models for customer lifetime value, segmentation, and specialized offers by using machine learning capabilities on raw and curated data readily available in the data lakes.
- 5 Analytics on Data Prep/Data lab:** Airline customers can fine tune survey questions and interactions based on service disruptions
- 6 Use Google Firebase:** Reliably deliver operational and notification communications across email, SMS, voice, and push to apps by considering customer preferences and systematically store all interactions along with delivery status for tracking.
- 7 Cloud Functions:** Use functions for refining the offers and deliver to the customers based on customers preferences.
- 8 MDM:** Improve the effectiveness of the personalization by using master data management (MDM) integration.

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This is a reference architecture only and any client specific requirements will need further elaboration.