

Abstract

Delay Analysis of Airline XYZ in 2019

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The main objectives of this thesis are to identify the major cause of delay and to provide solution to eliminate or at least to reduce the delays for an anonymous airliner in Indonesia. The main cause of delay in 2019 for this airline is Reactionary Delay, which obtained from propagation delay. Reactionary Delay is delays that occurred because of the delay or late arrival from previous flights, and represented in IATA Delay Code as Aircraft Rotation (93). Assume that the Aircraft Rotation delays were not occurred in 2019, and then the On-Time Performance of this airline shall be about 88 percent. Another Delay Analysis were conducted to identify which routes, aircraft routing, and aircraft registration that heavily impacted by delays. To reduce the delay propagation in the airline network, author offers to add ground buffer time in flight scheduling. The ground buffer time allocation analysis is measured using the Probability Density Function (PDF) technique.

Keywords: airline operations, IATA Delay Codes, On-Time Performance, reactionary delays, buffer time, turnaround activities.