High Level Design (HLD)

Airport Data analysis

By

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Abstract

Airport data analysis are an important reflection of the traveller count and busy route. To find the correct flight and the travellers' details. People are interested to get the tickets based on the route and schedule. The Project focus on finding the busiest route with distance. Data of traveller count. Its also focus on the numbers of flights per day and number of passengers on the particular day.

General Description

2.1 Product Perspective & Problem Statement

Airport data is at most important for are an important to reflect the details of the passengers which help to reflect the economy, and flights booking are of great interest for both travellers and sellers. In this project, busy routes and busy flights will be predicted given explanatory variables that cover many aspects of flight based on routes. The objective of the project is to perform data visualization techniques to understand the insight of the data. This project aims apply various Business Intelligence tools such as Tableau or excel to get a visual understanding of the data.

2.2 Tools used Business Intelligence tools and libraries works such as Excel, Tableau used to build the whole framework.

3. Design Details 3.1 Functional Architecture

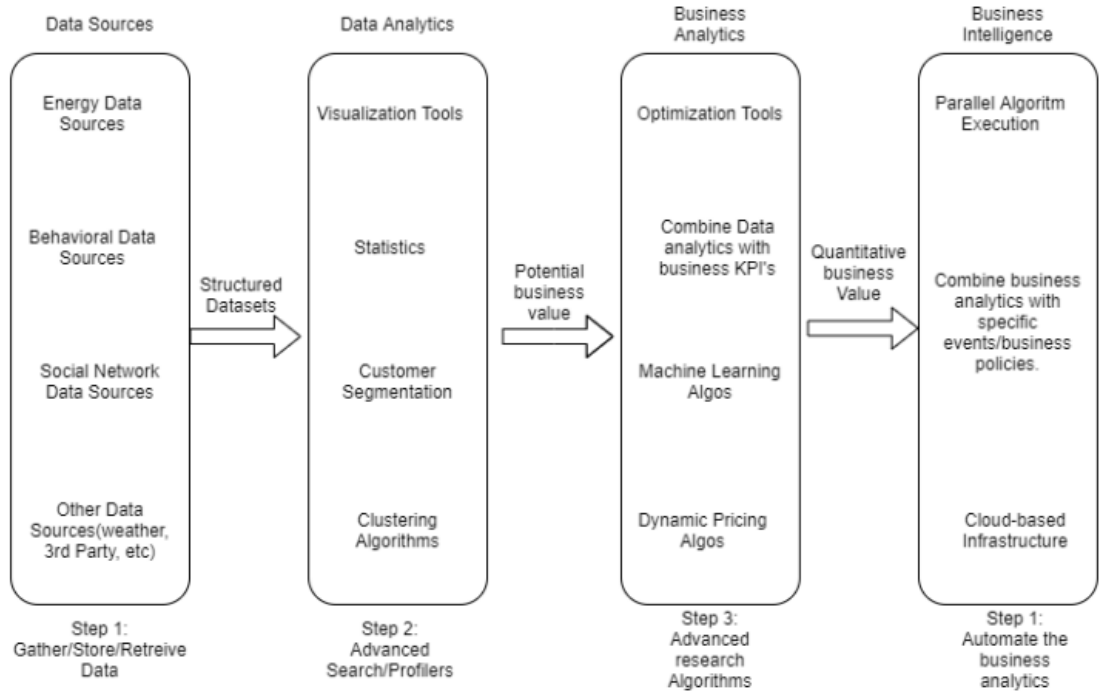

Figure 1: Functional Architecture of Business Intelligence

KPIs (Key Performance Indicators)

Key indicators displaying a summary of the Airport data analysis and its relationship with different metrics

1. Number of flights per day

2. Number of travellers on different flights

3. Most busy routes

4. distance from source to destination using different routes

5 Deployment

Prioritizing data and analytics couldn't come at a better time. Your company, no matter what size, is already collecting data and most likely analyzing just a portion of it to solve business problems, gain competitive advantages, and drive enterprise transformation. With the explosive growth of enterprise data, database technologies, and the high demand for analytical skills, today's most effective IT organizations have shifted their focus to enabling self-service by deploying and operating Tableau at scale, as well as organizing, orchestrating, and unifying disparate sources of data for business users and experts alike to author and consume content.

Tableau prioritizes choice in flexibility to fit, rather than dictate, your enterprise architecture. Tableau Server and Tableau Online leverage your existing technology investments and integrate into your IT infrastructure to provide a self-service, modern analytics platform for your users. With on-premises, cloud, and hosted options, there is a version of Tableau to match your requirements. Below is a comparison of the three types:

TYPE PROS CONS

Tableau Server - On Premises

• Full control of hardware and software

• Infrastructure and data remain behind your firewall

• Need dedicated administrators to manage hardware and software

• Additional infrastructure needed to access off-network (mobile, external) Tableau Server - Public Cloud (IaaS)

• Full control of software on managed hardware

• Puts infrastructure in same place as data (for migration to cloud)

• Flexibility to spin up/down hardware as needed

• Need dedicated administrators to manage software

• Additional infrastructure needed to access off-network (mobile, external)

Tableau Online (SaaS)

• Fully hosted solution (hardware, software upgrades)

• Fast to deploy

• Easy for external audience to access

• Single-site in multi-tenant environment

• Cubes are not supported

• No guest account access Depending on your organizational roles and responsibilities,

Tableau Server should be installed by a systems administrator and the designated

Tableau Server Administrator in coordination with the appropriate IT roles

For Tableau Online, you will integrate with your existing technology and configure the site settings. The Data & Analytics Survey, completed by business teams, identifies and prioritizes data use cases, audience size, and users. You will use the information collected in both surveys to plan your deployment strategy, including sizing, installation, and configuration of your Tableau Server or integration and configuration of Tableau Online. In addition to installing Tableau Server or configuring Tableau Online, administrators will also need to plan for the client software installation of Tableau Prep Builder, Tableau Desktop, Tableau Mobile, and Tableau Bridge for Tableau Online where applicable