High Level Design

Amazon Sales Data Analysis

**Overview:**

Amazon's global sales in 2021 were $468.78 billion. That is $64.34 billion more sales than in 2020, a 15.91% increase. Amazon's net income for the 12-month period ending on September 30, 2021, was $26.263 billion, a 51.14% year-over-year increase. Most of these sales come from the roughly 2 million active third-party sellers.

While the marketplace offers great potential, there’s a lot involved in choosing the right product to sell on Amazon. You need to find an item with a good amount of demand, a low level of competition, and solid profit margins. In addition to all of these things, your product should also sell consistently all year long.

**Objective:**

The objective of the project is to perform data visualization techniques to understand the insight of the dataset. This project aims apply various Business Intelligence tools such as

* Amazon AWS S3
* Snowflake
* Python
* Power BI
* Excel

to get a visual understanding of the data.

**Process:**

* Uploading the Dataset over Amazon AWS S3 bucket.
* Connecting the AWS with snowflake.
* Connecting Python with snowflake for EDA.
* Sending the Data from python to Power BI. [or] Directly sending the data from snowflake to Power BI.
* Creating the Story Line
* Excel Manipulation
* Creating Power BI Report 🡪 Dashboard

**Technology Used:**

* Amazon AWS S3 bucket
* Snowflake
* Python
  + Pandas
  + NumPy
  + Snowflake connector
* Power BI
  + M Language
  + Power Query
* Excel

**Functional Architecture:**

**Analysis / reading of dataset over excel**

**+**

**Creation Pivot Tables form better understanding**

**Dataset gathered from ineuron**

**+**

**Save Dataset to AWS**

**+**

**Connect AWS with Snowflake**

**Performing EDA over Python**

**+**

**Performing Statistical Analysis over python**

**+**

**Perform Observation over python**

**Perform various M-Language manipulation over Power BI**

**+**

**Building Dashboard over power BI**