Low 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

**Story Lines covered throughout the project:**

1. Find YoY Sales Gross profit?
2. Find the margin amount?
3. Find Sales Quantity?
4. Represent area chart for representing YoY Sales price and List Price trend?
5. Find the Sales Discount trend?

**Technology Used:**

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