**Supplement Sales Analysis**

**Description**

Your Client WOMart is a leading nutrition and supplement retail chain that offers a comprehensive range of products for all your wellness and fitness needs. WOMart follows a multi-channel distribution strategy with 350+ retail stores spread across 100+ cities. Effective forecasting for store sales gives essential insight into upcoming cash flow, meaning WOMart can more accurately plan the cashflow at the store level. Sales data for 18 months from 365 stores of WOMart is available along with information on Store Type, Location Type for each store, Region Code for every store, Discount provided by the store on every day, Number of Orders everyday etc.

**Data Profiling**

ID (String) : Order Unique Identity.

Store\_id (Integer) : Id to represent womart store entity.

Store\_Type (String) : Type of store based on womart business strategic.

Location\_Type (String) : Type of location of each store.

Region\_Code (String) : Id of region where each store located.

Date (String) : Day when transaction occurs on each store.

Holiday (Integer) : Is it holiday or not.

Discount (String) : it has a discount or not.

#Order (Integer) : Number of orders.

Sales (Float) : Total revenue of each order.

**Objectives**

1. Do data exploration analysis including data cleaning and data preprocessing if necessary.
2. Find actionable business insights.
3. Create interactive business dashboard.

**Dataset**

Source: <https://github.com/mmirzafahmi/python_ds_project/raw/master/data/train.csv.zip>

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Store\_id** | **Store\_Type** | **Location\_Type** | **Region\_Code** | **Date** | **Holiday** | **Discount** | **#Order** | **Sales** |
| T1000001 | 1 | S1 | L3 | R1 | 01/01/2018 | 1 | Yes | 9 | 7,01184E+15 |
| T1000002 | 253 | S4 | L2 | R1 | 01/01/2018 | 1 | Yes | 60 | 5178912 |
| T1000003 | 252 | S3 | L2 | R1 | 01/01/2018 | 1 | Yes | 42 | 368682 |
| T1000004 | 251 | S2 | L3 | R1 | 01/01/2018 | 1 | Yes | 23 | 1971516 |
| T1000005 | 250 | S2 | L3 | R4 | 01/01/2018 | 1 | Yes | 62 | 4561452 |
| T1000006 | 249 | S1 | L3 | R2 | 01/01/2018 | 1 | Yes | 39 | 3421122 |

ProTips:

If you use pandas, you can directly load into dataframe without download it into your storage,

df = pd.read\_csv(

filepath\_or\_buffer='https://github.com/mmirzafahmi/python\_ds\_project/raw/master/data/train.csv.zip',

compression='zip')

**Publish Your Work**

One of the most popular framework to create interactive dashboard is using Streamlit. To showcase your work, one option to publish your streamlit app into Streamlit Community Cloud. This platform lets you deploy your apps in just one click, and most apps will deploy in only a few minutes.

To learn more how to deploy your work, you can refer from this link:

1. Streamlit Documentation: [Deploy your app - Streamlit Docs](https://docs.streamlit.io/streamlit-community-cloud/deploy-your-app)
2. Youtube: [How to Deploy Your App to Streamlit Community Cloud - YouTube](https://www.youtube.com/watch?v=HKoOBiAaHGg)

However, feel free to used any other platform to showcase your work as long as public can access and interact with it.