
REPORTING SYSTEM

"DHARA FASHION" involves in ecommerce business which has sales through various channels of platforms and revenue sources worldwide.

Develop a reporting system where users can measure & analyze platform sales and marketing efforts.

Reporting system must be comprises of following features:

1. Insert/delete records.
 - a. Revenue and expense records will be inserted in .csv format with proper validation of data and pre decided format in file.
 - b. Give date range selection & choice of data source to insert/delete records.
 - c. Same record needs to be overwritten in the database while inserting.

2. Show records in Tabular form with
 - a. Date range selection
 - b. Filters/dropdown (Platform, Country, Source)
 - c. give selection of all fields so, user can select/unselect fields that will hide/unhide fields from the table.

Here are the some table views base on selected fields

- d. Default view: (date, platform, product page impression, product order rate, RPM, Earnings, Cost , Profit/Loss, ROI, Cost/conv.)
- e. Country wise data (platform, country, product page impression, product order rate, RPM, Earnings, Cost , Profit/Loss, ROI, Cost/conv.)
- f. Revenue data (all fields)
- g. Expense data (all fields)

Some fields are runtime calculated on the basis on fetched records are

- Product page visibility(%)
- Product order rate
- RPM (revenue per thousand)impression
- Profit/Loss
- ROI
- Cost/conv
- Imp. CTR

***Notes :**

1. Expense data in INR and Revenue data in USD form, need to convert expense data INR to USD while calculation and showing in the reports.
2. To calculate and show the cost of a particular platform, we need to aggregate the cost of the campaigns i.e, campaign name need to matches with platform name

Platform	Campaign Name
Etsy store	Etsy store - xxx-xxx
Marketplace	Marketplace - xxx-xxx
Shopify store	Shopify store - xxx-xxx



Terminology

Revenue data

- Platform : Business engaging with multiple platforms where orders will be placed.
- Date
- Source : It is a type of revenue from different sources.
- Country
- Earnings (USD): It is revenue from order
- Product Impressions : It denotes number of times product appearance in multiple places of the platform.
- Product page Impressions: It denotes number of times product appearance clicks that redirect to product detail page.
- Order : It denotes the number of orders placed by the user from the product page..
- Calculated fields at runtime:
 - Product page visibility(%): it is the percentage of number times product page impression redirected from product impression.
Calculated as: $(\text{product page impression}/\text{product impression})*100\%$
 - Product order rate(%) : It is the percentage of order placed from product page impressions.
Calculated as $(\text{Order}/\text{product page impressions})*100\%$
 - RPM (revenue per thousand)impression: it is value in currency of per thousand product page impression's revenue
Calculated as: $(\text{Earnings (USD)} / \text{product page impression})*1000$

Expense data

- Date
- Campaign ID : It uniquely identifies the campaign name
- Campaign : Name of the campaign
- Country/Territory (Matched) :
- Bid : It denotes how much amount given to campaign to place order
- Currency code: It is type of code decided to show ads data
- Cost : it is the cost of campaigns.
- Conversions : It denotes the number of orders placed after clicking ads.
- Impr. : It is the number of times ad shown to users.
- Clicks : It is the number of times a user clicks an ad.
- Calculated fields at runtime:
 - Cost/conv : it is amount of order placed from ad
Calculated as $(\text{cost}/\text{conversions})$
 - Impr. CTR : it click rate from impression of ads
Calculated as $(\text{clicks}/\text{Impr.}) * 100\%$

Calculated field that will use both data source:

- Profit/Loss : Earning - Cost
- ROI(%) : $(\text{Net Profit}/\text{Cost}) * 100\%$

