



**ANALYTIX**LABS

**ALabs.AI**

**Digital Analytics**

**Hiring Case study**

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# ALabs.ai

- We are an AI & Analytics solutions & service provider led by alumni from McKinsey, ZS, Genpact, Citi, IIT, ISB & CMU.
- With extensive experience in Data Science, Data Engineering and Consulting, we can help companies at any stage, whether they are a new firm launching their first product or a global enterprise expanding into new international markets
- ALabs.AI's sister concern AnalytixLabs was established in 2011 with the vision of training effective resource pool in the field of Data Sciences. AnalytixLabs enjoys distinguished status and repute for its service excellence in the field of Data Science, AI, and machine learning courses.



# Hiring Case Study

## Goal of the case study:

Work with data sets using tools like Excel/Tableau/Power BI/any other BI Tools. You should be able to analyze data and answer key business questions by deriving insights from data. Also, you should document & communicate the insights and findings from the data

## Business Case:

Client has hired you as analyst and you are working for leading e-commerce client. The client asked you to create analytical dash boards below themes.

- Overview about various KPI's
- Pricing & Promotion
- Search & Recommendations
- etc.

While building dashboards, you are expected to clean the data if required. Once you clean the data, you need to answer below questions as part of the documentation

- a. What variables can be derived out of the data which can be helpful?
- b. Who can use this dashboard?
- c. What value would generated using this dashboard ?
- d. What additional data can be helpful to add more insights & value to the team?

## Final Deliverables:

- a. Analytics Dashboard using any of BI Tool (Excel/Tableau/Power BI/any other BI Tools).
- b. Detailed document summarizing the insights using any documentation tool like pptx/word.... (preferably pptx)

# Analyticslabs: Hiring Case Study

## About Data:

The below data sets were provided by our client (one of leading eCommerce company). This data is about customer behavior which contains data of multiple user events. The duration of the data for two months.

1. **Sales\_Data\_Ecommerce** : The entire customer behavior data
2. **Promotion**: This is promotion data set of special promotions for that day. One product will be promoted in first page of app/website. In addition to that there are many promotions running however the data is limited special promotion.

## Business Questions:

The below are few Sample business questions to be addressed as part of this analysis. However this is not exhaustive list and you can add as many as analysis to the dashboards.

1. How the price is varying by brand/category/time/channel?
  2. Is traffic varied by day/time/channel?
  3. Define & calculate high level metrics like (Revenue, potential revenue, products, categories etc...) by month, time, state, channel etc...
  4. What is Activity by Brand or category, brand preference, Brand activity by various parameters etc...?
  5. How is the search behavior like Brand Search by Category/Category search by Brand?
  6. What is effect of Special Promotions?
  7. How Pricing fluctuations effecting sales?
- Etc...

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## Data Dictionary:

### "Sales\_Data Ecommerce" Data Set:

user_id:	Unique id of customer
event_date:	Date of event
Day_of_Week:	Day of week of the event
Channel:	Which channel used (App/Browser)
event_time:	Time of event
event_hour:	Hour of event
event_timezone:	Time zone
event_type:	Type of event (view, cart, purchased)
product_id:	Unique id of product
category_id:	Unique id of category
category:	Category description
sub_category1:	Sub category description-level1
sub_category2:	Sub category description-level2
brand:	Brand name
price:	Price of product
user_session:	Unique id of user session
State:	State
User_Score:	Segmentation of customer

### "Promotions" Data Set:

Promotion Id:	Promotion Type
Date:	Date of promotion
Discount:	Discount%
ProductId:	Unique id of product