
High Level Design

(SCOPE DOCUMENT)

for

<Ecommerce Dashboard>

Version 1.0

By

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SCOPE DOCUMENT REVISION HISTORY

No.	Comment	Action

Supervisor Signature

Date:

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Project Category: (Select all the major domains of proposed project)

A -Desktop Application/Information System	B -Web Application/Web Application based Information System
C - Problem Solving and Artificial Intelligence	D -Simulation and Modeling
F -Smartphone Game	G - Networks
H - Image Processing	E - Data Analytics
I -Other (specify category) _____	

Abstract

Data Analytics have gained popularity due to the flexibility they provide in statistical analysis. Statistical analysis and dashboards are important components of Data Analytics. We aim to build a dashboard for Ecommerce sales by doing some analysis on data and by creating some charts with the help of that analysis.

1. Introduction

We are going to design a Sales dashboard of an online Ecommerce company to analyze the sales based on various product categories. The main part of this project is to analyze the sale data to see the trends, patterns and correlations of data. And after analyzing data, do some statistical analysis and at the end build dashboard by creating some charts.

2. Problem Statement

E-commerce (electronic commerce) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer or consumer-to-business. The Analytics team of an Online E-Commerce Company wants to design a Sales dashboard to analyze the sales based on various product categories.

3. Problem Solution for Proposed System

We build a sales dashboard to analyze the sales based on various product categories and also make that dashboard user control for product category, so users can select a category and can see the trend month-wise and product-wise accordingly. The Analytics team also wants to create a histogram to analyze number of shipping days. The company's database keeps track of the following data fields:

Brand Name, Company Name, Disease Medical Use, Invoice date, Company code, Ship-to-Country, Ship-to-Country Full Name, Sold-to party- Code, Sold-to party Country, Sold-to party Country Full Name, Delivery Plant, Payment terms, External Agent, Sales quantity, Price TC /Kg, Revenue, External commissions, Month.

4. Tools

Microsoft Excel

Microsoft excel is used for:

- Analyze data
- Visualize data
- Build dashboard

5. Design Details

5.1 Optimization

Your data strategy drives performance

- Minimize the number of fields
- Minimize the number of records
- Optimize extracts to speed up future queries by materializing calculations, removing columns and the use of accelerated views

Reduce the marks (data points) in your view

- Practice guided analytics. There's no need to fit everything you plan to show in a single view. Compile related views and connect them with action filters to travel from overview to highly-granular views at the speed of thought.
- Remove unneeded dimensions from the detail shelf.
- Explore. Try displaying your data in different types of views.

Limit your filters by number and type

- Reduce the number of filters in use. Excessive filters on a view will create a more complex query, which takes longer to return results. Double-check your filters and remove any that aren't necessary.
- Use an include filter. Exclude filters load the entire domain of a dimension, while include filters do not. An include filter runs much faster than an exclude filter, especially for dimensions with many members.
- Use a continuous date filter. Continuous date filters (relative and range-of-date filters) can take advantage of the indexing properties in your database and are faster than discrete date filters.
- Use Boolean or numeric filters. Computers process integers and Booleans (t/f) much faster than strings.
- Use parameters and action filters. These reduce the query load (and work across data sources).

Optimize and materialize your calculations

- Perform calculations in the database
- Reduce the number of nested calculations.
- Reduce the granularity of LOD or table calculations in the view. The more granular the calculation, the longer it takes.
- Where possible, use MIN or MAX instead of AVG. AVG requires more processing than MIN or MAX. Often rows will be duplicated and display the same result with MIN, MAX, or AVG.

6. KPIs

Dashboards will be implemented to display and indicate certain KPIs and relevant indicators for the sales. As and when, the system starts to capture the historical/periodic data for a user, the dashboards will be included to display charts over time with progress on various indicators or factors.

Key indicators displaying a summary of the Ecommerce and its relationship with different metrics:

1. Sales based on various product categories
2. Add user control for product category to see the trends
3. Sales based on month-wise
4. Sales based on product-wise
5. Create a histogram to analyze number of shipping days

7. Project Stakeholders and Roles

Write down the project stakeholders and their roles.

Table 1 Project Stakeholders

Project Sponsor	iNeuron
Stakeholder	Waqar Aftab : Data Analyst

8. Data Gathering Approach

Brainstorming

For this project idea, we opted the approach of brainstorming. Planned brainstorming generates a few imaginative ideas around a specific key demand or territory. At the point when the brain is utilized to storm ingenious trouble by daringly going up against the comparative target, this is brainstorming. It is a technique, which encourages preoccupation kind of understanding.

This requirements elicitation technique includes idea creation and idea refinement both. Multiple voting methods are applied to prioritize ideas. It is a highly practical requirements elicitation method as various innovative and creative notions come from apparently irrelative ideas. The

idea refinement level supports in clipping the opinions that are not deserving of further consideration and arranging the same ideas collectively.

9. Concepts

Data Analyzing, Data Visualization, Data Analysis.

10. Conclusion

Data Analytics is essential to see trends and patterns of data and nowadays, it's so important because of data is everywhere and if you want to pick some important analytics then there comes data analysis. So, we build a dashboard to analyze the sales based on various product categories. And add user control for product category, so users can select a category and can see the trend month-wise and product-wise.