

# **PROJECT REPORT**

## **GLOBAL SALES DATA ANALYTICS**

<b>Team ID:</b>	PNT2022TMID53156	<b>Project ID:</b>	12502-1659452330
<b>Team Members:</b>	Aman Jain Vaishnavi Chellappa Mathanggi Ashwini Sridar Athreya	<b>Roll Numbers:</b>	SSNCE195001551 SSNCE195001120 SSNCE195001061 SSNCE195001024
<b>Industry Mentor(s):</b>	Shanawaz Anwar, Indra Prakash	<b>Faculty Mentor:</b>	A. Beulah

## **1. INTRODUCTION**

### **1.1. Project Overview**

Shopping online is currently the need of the hour. Due to the COVID-19 pandemic, it's not easy to walk in a store randomly and buy anything you want. Hence, an informative display of visualizations in an interactive dashboard would be of great use to the users interested in global sales as it would provide insightful information regarding the current trends.

### **1.2. Purpose**

The user-friendly interactive dashboard aims to provide effective business strategies that are not only functional and constructive but also realistic. It will be a one stop solution encompassing all the global sales data for anyone who wishes to analyze their organization's position in the market and make informed business decisions in accordance with the same.

## **2. LITERATURE SURVEY**

### **2.1. Existing problem**

We noticed that as the volume, variety, and velocity of data increases, confidence in the analytics process drops, and it becomes harder to separate valuable information from irrelevant, inaccurate, or incomplete data. Analyzing massive datasets requires advanced analytic tools that can apply AI techniques to weed out the noise and ensure fast, accurate results that support informed decision-making. The problem is, dealing with data at high volumes and high speeds which result in collecting a lot of great information including a

lot of noise that can obscure the insights that add the most value to your organization. This makes it difficult to develop a systematic process for finding, integrating, and interpreting insights. We noticed that our dataset presents an opportunity to collect rich insights that can create a complete picture of your customers and provide context for why sales are down or costs are going up.

## **2.2. References**

1. <https://www.zendesk.com/in/blog/guide-sales-analytics/>
2. <https://www.klipfolio.com/blog/sales-analytics-12-metrics>
3. <https://blog.close.com/sales-analysis/>
4. <https://www.salesken.ai/blog/sales-data-analysis>
5. <https://amplitude.com/blog/analytics-dashboard>
6. <https://www.tableau.com/learn/articles/sales-dashboards-examples-and-templates>
7. <https://www.glew.io/features/ecommerce-dashboard>
8. <https://www.qlik.com/us/dashboard-examples/sales-dashboards>

## **2.3. Problem Statement Definition**

Every company that sells a product/service needs to reach a particular goal in order to make their company profitable. As businesses become larger and there is considerable growth and evolution in the product sales, it becomes more and more important to make use of any data that we may lay our hands on, to optimise the sales. This may also help in tapping possible customer bases, analysing the performance of each product and to help set achievable, efficiency driven goals.

Doing this manually may require a lot of time and labour. It may also compromise on accuracy of possible predictions. In order to make the most use of any available data and gain insights, we can make use of data analytics. This can help us mitigate potential risks and losses, optimise customer retention, gauge future trends using a unified analytics platform.

Who does the problem affect?	Every business that has a sales process involved in any way (both product and services)
What is the problem?	Lack of optimisation of solutions despite pre-existing data.
When does the problem occur?	It is a recurrent issue after concerning every sale.
Where is the problem relevant?	Globally relevant.
Why is it important that we address this problem?	In order to make the most optimal growth trajectory for every company's sales sector.

### 3. IDEATION & PROPOSED SOLUTION

#### 3.1. Empathy Map Canvas



## 3.2. Ideation & Brainstorming



### Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes



#### Team gathering

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.



#### Set the goal

Think about the problem you'll be focusing on solving in the brainstorming session.



#### Learn how to use the facilitation tools

Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#) →



### Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes

PROBLEM

How might we [your problem statement]?



### Key rules of brainstorming

To run a smooth and productive session



Stay in topic.



Encourage wild ideas.



Defer judgment.



Listen to others.



Go for volume.



If possible, be visual.

2

### Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

#### Ashwini Athreya

Make a  
interactive  
user friendly  
dashboard

Insights  
about  
market  
scope

Key factors  
that affect  
profit and  
growth

Help  
formulate  
tangible  
goals

Lower  
customer  
acquisition  
cost

#### Vaishnavi Chellappa

Top  
competitors  
and how they  
compare

Average  
order size

Analyze  
consumer  
sentiment

Real time  
streaming  
and updates

Performance  
review  
process

#### Mathanggi

Revenue  
based on a  
geographical  
region

Aids  
company  
decisions

Incentives  
for  
consumer  
loyalty

Get  
actionable  
reports  
periodically

Customer  
segmentation  
based on  
preferences

#### Aman Jain

Sales year  
over year  
growth

Pricing to  
maximize  
customer  
base

Marketing  
techniques  
used for  
better reach

Strategic  
pricing based  
on supply  
and demand

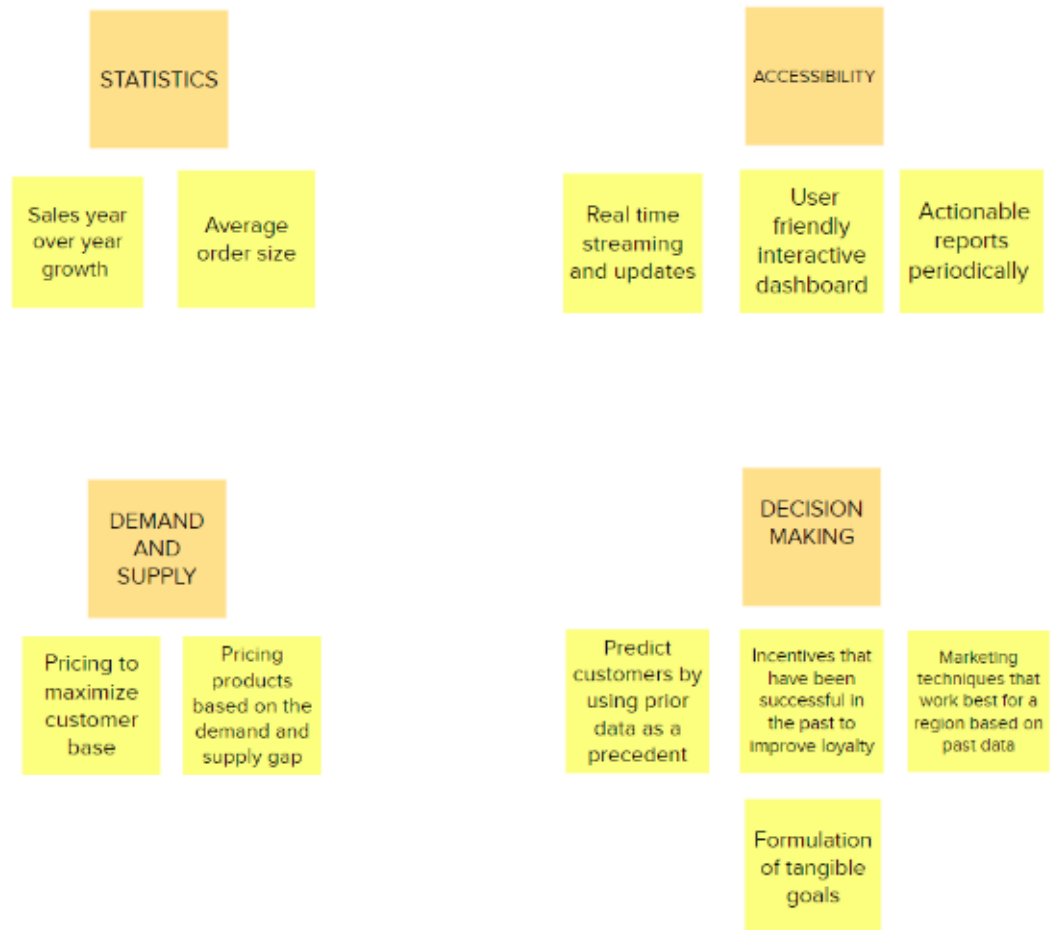
Revenue  
goals per  
area

3

### Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes



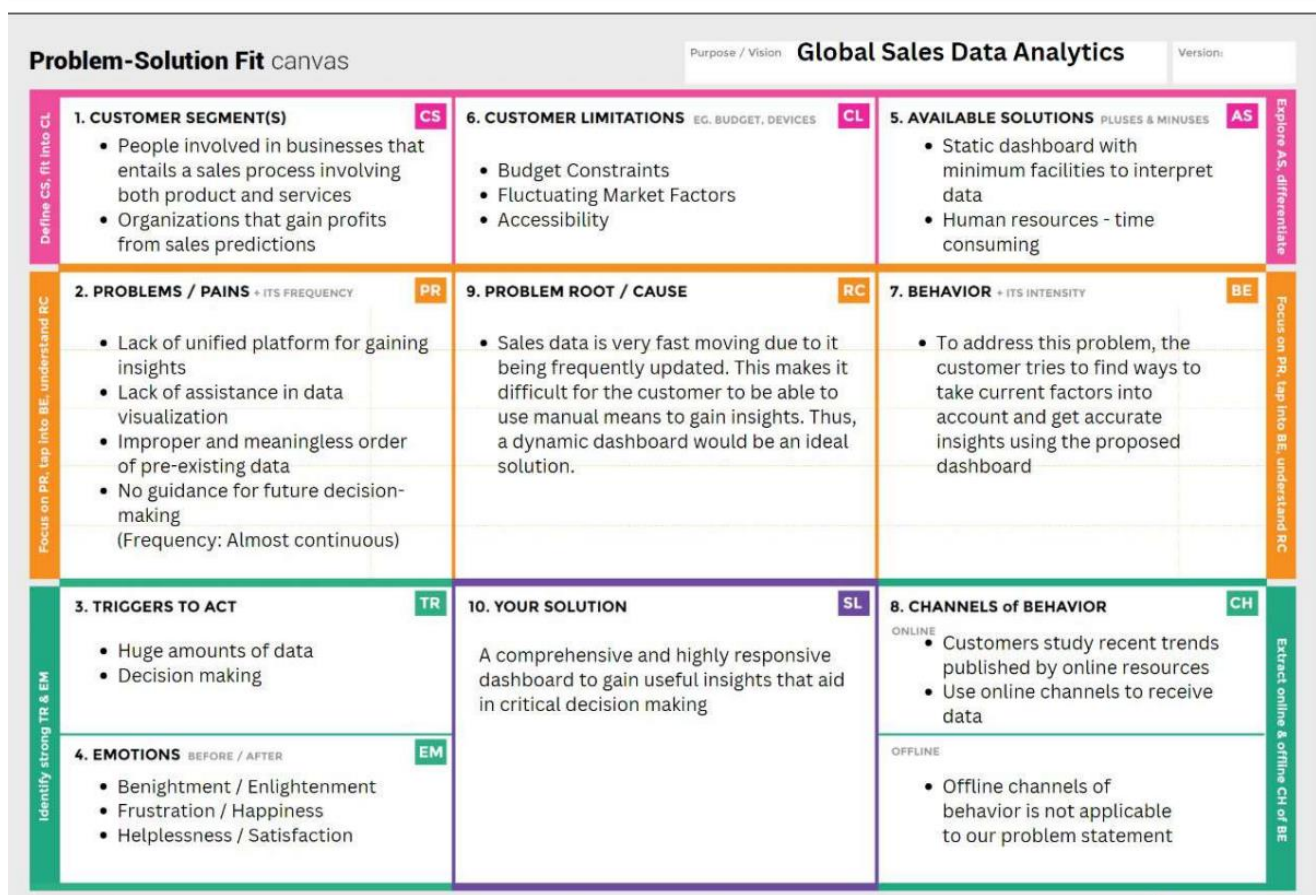
### 3.3. Proposed Solution

S. No.	Heading	Details
1.	<b>Problem Statement</b>	<p>Any company's end goal is to maximize finances acquired by selling their product or service. If this is done in an arbitrary, haphazard manner, it is very difficult to reach the maximum possible revenue and profit.</p> <p>Thus, it is important to make use of the data available from past sales to make inferences and come up with the best possible sales strategies.</p> <p>Doing this manually may be tedious, time consuming and inefficient. Making use of available technologies to visualize, analyze and observe underlying trends could be greatly helpful for the same.</p>
2.	<b>Proposed Solution/Idea</b>	<p>We aim to create an interactive dashboard using IBM Cognos Analytics. This will have the following features:</p> <ol style="list-style-type: none"><li>1. Users will be able to create multiple visualizations (graphs and charts).</li><li>2. Users will be able to view possible solutions and ideas.</li><li>3. Users will be able to make informed, strategic decisions based on past data.</li></ol>

3.	<b>Novelty/Uniqueness</b>	<p>We aim to provide effective business strategies that are not only functional and constructive but also realistic.</p> <p>It will be a one stop solution encompassing all the global sales data for anyone who wishes to analyze their own as well as their competitor's positions in the market and make informed business decisions in accordance with the same.</p>
4.	<b>Social Impact</b>	<p>Using this system would make analysis of data patterns and trends very simple for sales teams. It builds a unified platform for all the common data analytics processes.</p> <p>It can help visualize the relationships between various factors and gauge their impact on the profit of a company. It can also be extrapolated to check the performance of one company's sales as compared to their competitors in the market.</p>
5.	<b>Business Model</b>	<p><b>Product:</b> Unified Data Analytics Platform using IBM Cognos.</p> <p><b>Target Market:</b> Our target market would be the sales team of different companies.</p> <p><b>Anticipated Expenses:</b> Software updation, debugging of problems, maintenance of software, frequent updation of the dataset, cloud storage due to data streaming, manual correction of data.</p>
6.	<b>Scalability</b>	<p>Since our dashboard will be developed modularly and will be suited for dynamically updated datasets, it is a scalable one. IBM Cognos being a widely used software will ensure that this dashboard can be extensively deployable.</p>



### 3.4. Problem Solution fit



## 4. REQUIREMENT ANALYSIS

### 4.1. Functional requirement

S. No.	Functional Requirement	Sub-Requirement / Sub-task
1.	Viewing Dashboard	The user should be able to view the dashboard embedded in the website.
2.	Viewing Report	The user should be able to view the report embedded in the website.
3.	Viewing Story	The user should be able to view the story embedded in the website

4.	Interactive components	The components of the website namely dashboard, report and story should be interactive. This means that different filters can be applied by the user to filter out the visualizations based on preference.
5.	Subscription to newsletter / interaction with Data Analytics team.	<p>The clients need to be able to contact the team that created the visualizations in the case of any preferred customizations.</p> <p>They may subscribe to a newsletter that we may put out.</p>

#### 4.2. Non-Functional requirements

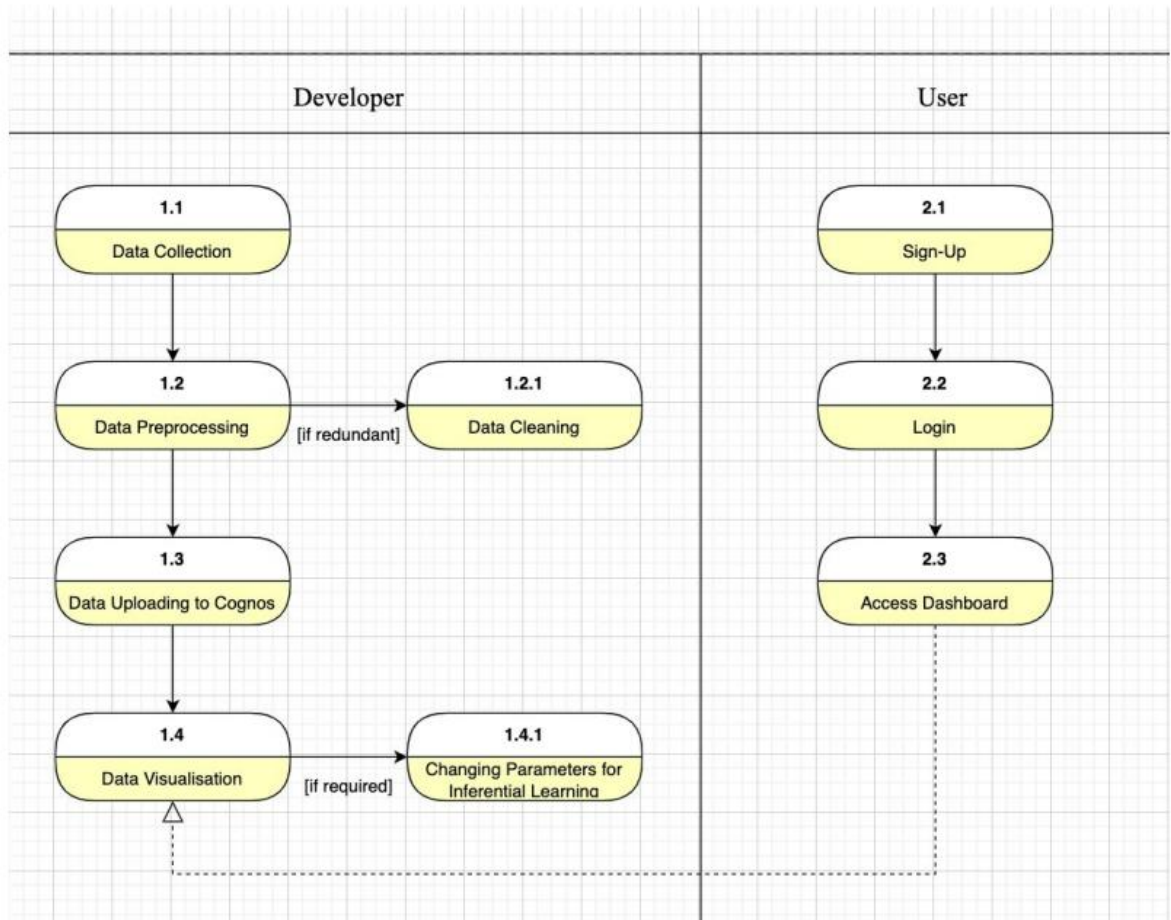
Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The dashboard is customer friendly and easy-to-navigate
NFR-2	Security	Since the dashboard is made using Cognos and because there is user authentication
NFR-3	Reliability	The data dashboard is made using careful analysis of data
NFR-4	Performance	Data integrity is maintained and rarely throws error
NFR-5	Availability	This system is accessible to the user at any given point in time
NFR-6	Scalability	Since the dashboard is made using IBM Cognos, a widely used platform, it is highly scalable

## 5. PROJECT DESIGN

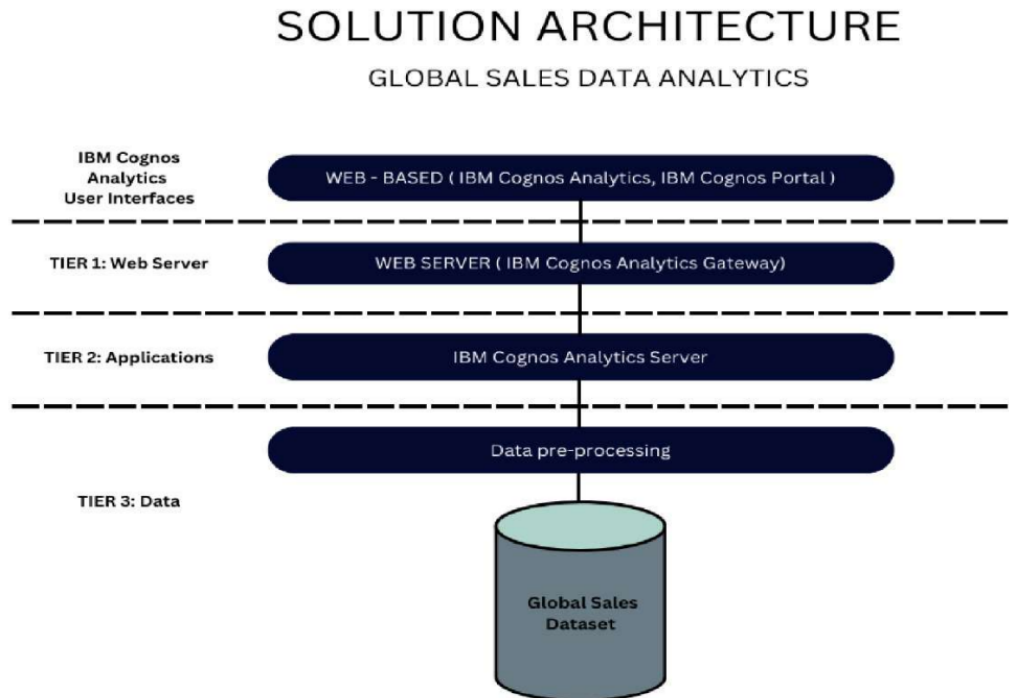
### 5.1. Data Flow Diagrams

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

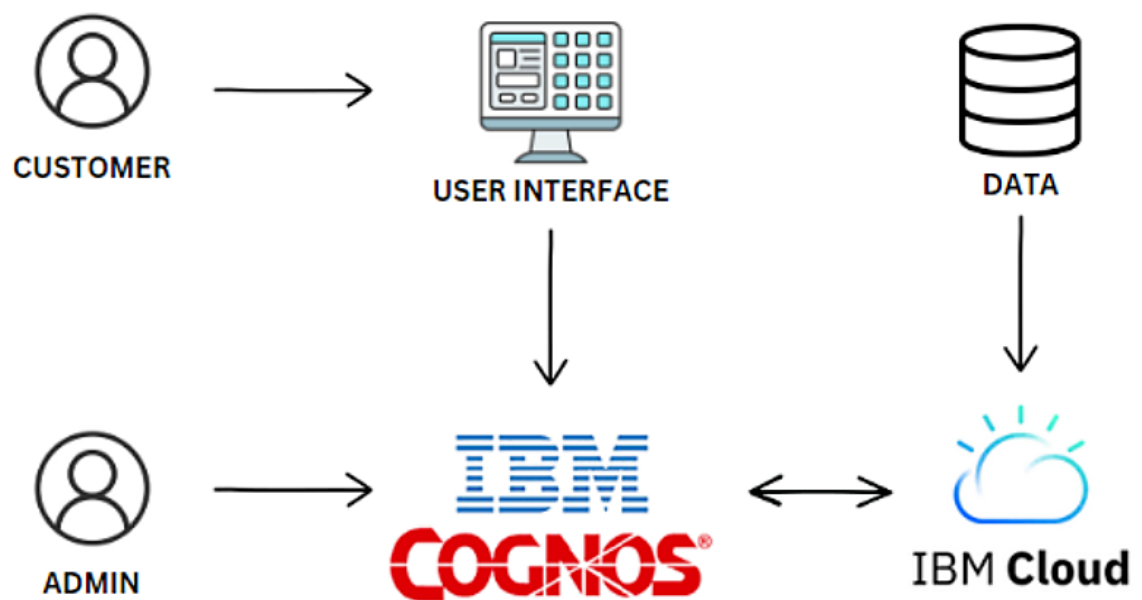


## 5.2. Solution & Technical Architecture

### Solution Architecture:



### Technical Architecture:



### Components & Technologies:

S. No.	Component	Description	Technology
1.	User Interface	The customer can view the services provided by us and details regarding the project.	HTML
2.	Data Collection	User gives the dataset on which the visualizations <u>have to</u> be performed.	Python
3.	Dashboard	Performs visualizations on the given <u>dataset and</u> perform filters to take insights from the dashboard.	IBM Cognos
4.	Report	The customer can view insights from the report and make decisions based on these.	IBM Cognos
5.	Story	This is to show the customers what we do and the services we provide them.	IBM Cognos
6.	Cloud database	Database services on cloud	IBM DB2
7.	External API-1	The dataset is extracted using the dataset's API Token.	Global Sales API
8.	Infrastructure (Server/Cloud)	Default	Local

**Application Characteristics:**

<b>S. No.</b>	<b>Component</b>	<b>Description</b>	<b>Technology</b>
1.	Visualizations	Visualizations are performed on the Global Sales Data to give insights to the customers on how to maximize profit.	IBM Cognos Analytics
2.	Availability	Decentralized storage and distribution along-with web application approach make the service highly available.	IBM Cloud
3.	Data	The Dataset contains all the features regarding the Global Sales and needs to be processed to get a proper understanding of the dataset.	Dataset
4.	Scalable Architecture	Since the application servers can be deployed on many machines. Also, the database does not make longer connections with every client – it only requires connections from a smaller number of application servers. It improves data integrity.	3-tier architecture

### 5.3. User Stories

User Type	Functional Requirement	User Story Number	User Story/Task	Acceptance Criteria	Priority	Release
Admin	Upload dataset	USN-1	The admin has to upload the dataset on to cloud	Dataset will be uploaded onto the cloud.	High	Sprint-1
	Create visualizations for dashboard	USN-2	The admin has to create appropriate visualizations for the dashboard based on the dataset.	The dashboard is created.	High	Sprint-1
	Create visualizations for report	USN-3	The admin has to create appropriate visualizations for the report so that the customers can get insights from it.	The report is created.	High	Sprint-1
	Create visualizations for story	USN-4	The admin has to create appropriate visualizations for the story to show the customers what we do.	The story is created.	High	Sprint-1
Customer	View Dashboard	USN-5	The customer can view the dashboard and filter based on their requirements.	The customer can access the dashboard and apply filters.	Low	Sprint-3
	View Report	USN-6	The customer can view the report and gain	The customer can access the report.	Medium	Sprint-2

			insights from them regarding their sales.			
	View story	USN-7	The customer can view the stories.	The customer is able to view the story.	High	Sprint-2
	Subscribe to our newsletter	USN-8	The customer can subscribe to our newsletter.	The customer has subscribed successfully.	High	Sprint-3

## 6. PROJECT PLANNING & SCHEDULING

### 6.1. Sprint Planning & Estimation

#### Product Backlog, Sprint Schedule and Estimation:

Sprint	Functional Requirement	User Story Number	User Story/Task	Story Points	Priority	Team Members
Sprint-1	Upload dataset	USN-1	The admin has to upload the dataset on to cloud	3	High	Aman Jain, Mathanggi
Sprint-1	Create visualizations for dashboard	USN-2	The admin has to create appropriate visualizations for the dashboard based on the dataset.	3	High	Ashwini Athreya, Vaishnavi Chellappa
Sprint-1	Create visualizations for report	USN-3	The admin has to create appropriate visualizations for the report so that the customers can get insights from it.	3	High	Ashwini Athreya, Vaishnavi Chellappa
Sprint-2	Create visualizations for story	USN-4	The admin has to create appropriate visualizations for the story to convey a	3	High	Aman Jain, Ashwini Athreya



			conclusion or recommendation.			
Sprint-3	View Dashboards	USN-5	The customer can view the dashboard and filter based on their requirements.	2	Medium	Ashwini Athreya, Mathanggi
Sprint-2	View Report	USN-6	The customer can view the report and get insights from them regarding their sales.	2	Medium	Aman Jain, Mathanggi
Sprint-4	View story	USN-7	The customer can view the stories..	2	Medium	Vaishnavi Chellappa
Sprint-4	Subscribe to our newsletter	USN-8	The customer can subscribe to our newsletter.	1	Low	Mathanggi

## 6.2. Sprint Delivery Schedule

### Project Tracker, Velocity & Burndown Chart:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed	Sprint Release Date (Actual)
Sprint-1	6	6 Days	24th Oct 2022	29th Oct 2022	-	29th Oct 2022
Sprint-2	6	6 Days	31st Oct 2022	5th Nov 2022	-	5th Nov 2022
Sprint-3	4	6 Days	7th Nov 2022	12th Nov 2022	-	12th Nov 2022
Sprint-4	3	6 Days	14th Nov 2022	19th Nov 2022	-	19th Nov 2022

## Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day),

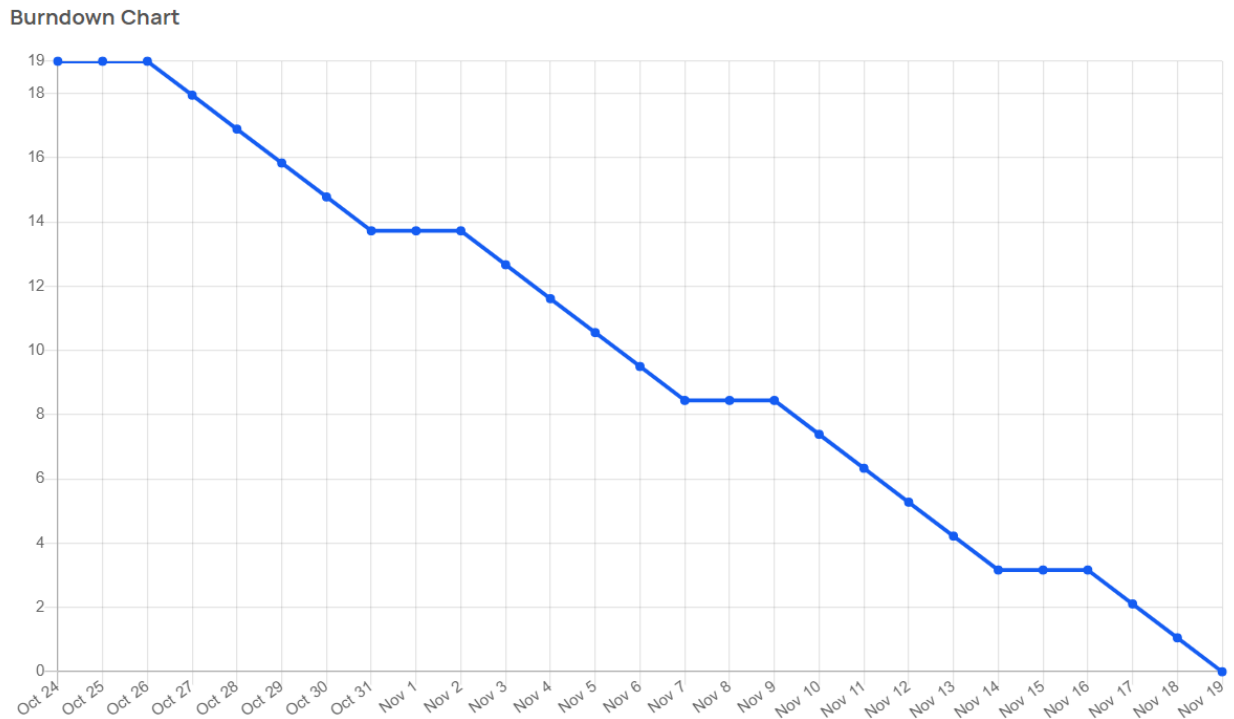
$$AV = \text{sprint duration/velocity} = 20/10 = 2$$

## Average velocity:

Average points per sprint =  $(6+6+4+3)/4 = (19)/4 = 4.75$

## Burndown Chart:

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.



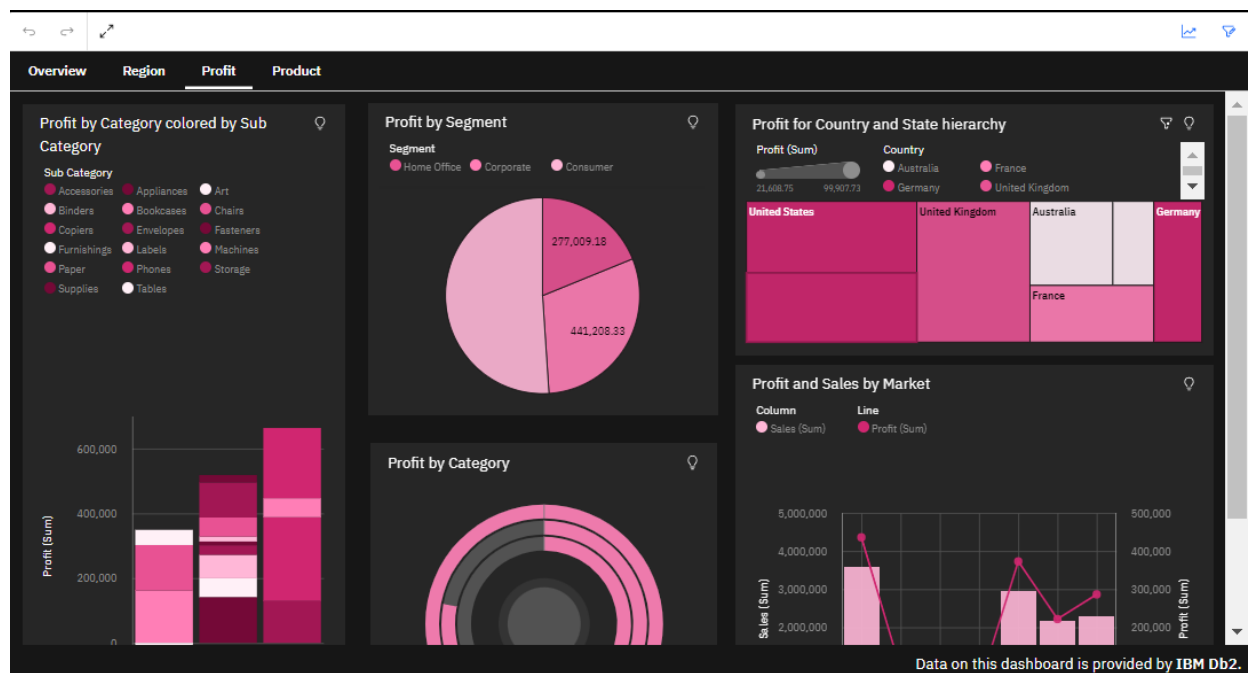
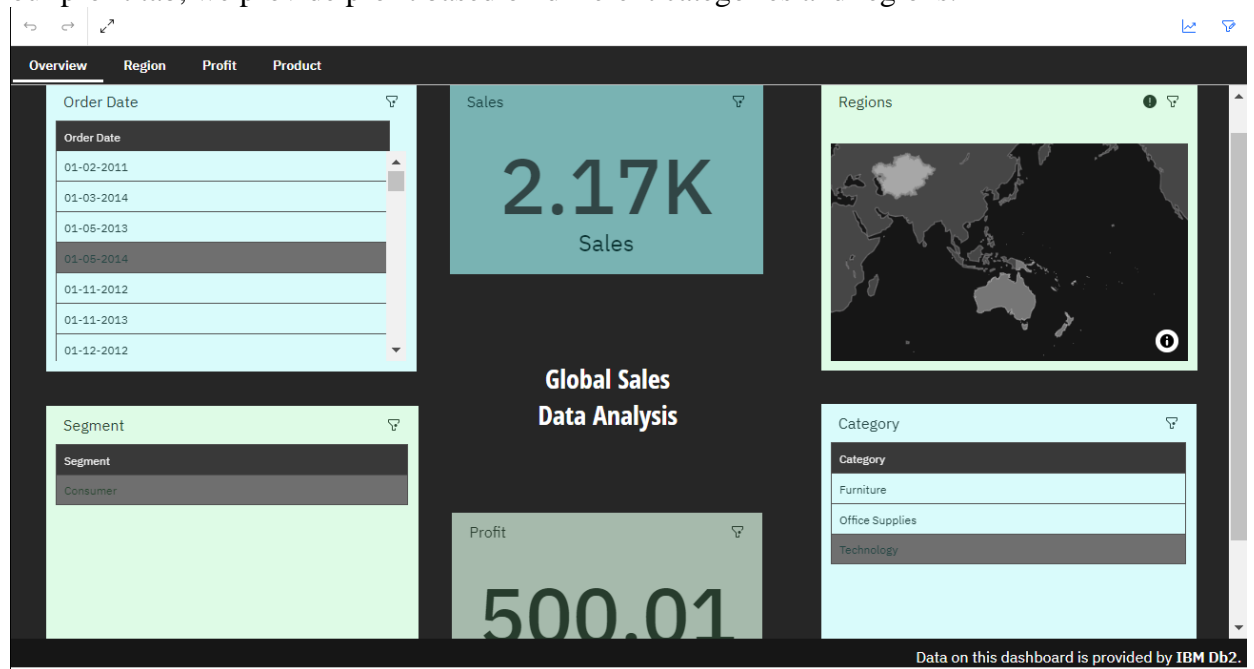
### 6.3. Reports from JIRA

			AUG	SEP	OCT	NOV
<div> <div> <div></div> <div>GSDA-4 Ideation Phase</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-2 Brainstorming</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-3 Empathy Map</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-4 Literature Survey</div> <div>DONE</div> </div> </div>						
<div> <div> <div></div> <div>GSDA-5 Project Design Phase-1</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-6 Problem Solution Fit</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-7 Proposed Solution</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-8 Solution Architecture</div> <div>DONE</div> </div> </div>						
<div> <div> <div></div> <div>GSDA-9 Project Design Phase-2</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-10 Customer Journey Map</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-11 Data Flow Diagram and User...</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-12 Functional and Non functional...</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-15 Technology Architecture</div> <div>DONE</div> </div> </div>						
<div> <div> <div></div> <div>GSDA-16 Project Planning</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-17 Milestone and Activity List</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-18 Sprint Delivery Plan</div> <div>DONE</div> </div> </div>						
<div> <div> <div></div> <div>GSDA-19 Sprint 1</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-20 Data Analysis</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-24 Data preprocessing</div> <div>DONE</div> </div> </div>						
<div> <div> <div></div> <div>GSDA-22 Sprint 2</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-23 Fetch Data from External API</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-24 IBM DB2 service creation</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-25 IBM DB2 connection with Cog...</div> <div>DONE</div> </div> </div>						
<div> <div> <div></div> <div>GSDA-26 Sprint 3</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-27 Create Data Module</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-28 EDA-Exploratory Data Analytics</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-29 Dashboard and Report</div> <div>DONE</div> </div> </div>						
<div> <div> <div></div> <div>GSDA-30 Sprint 4</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-34 Story Creation</div> <div>DONE</div> </div> <div> <div>✓</div> <div>GSDA-32 Embedding dashboard to web...</div> <div>DONE</div> </div> </div>						

## 7. CODING & SOLUTIONING

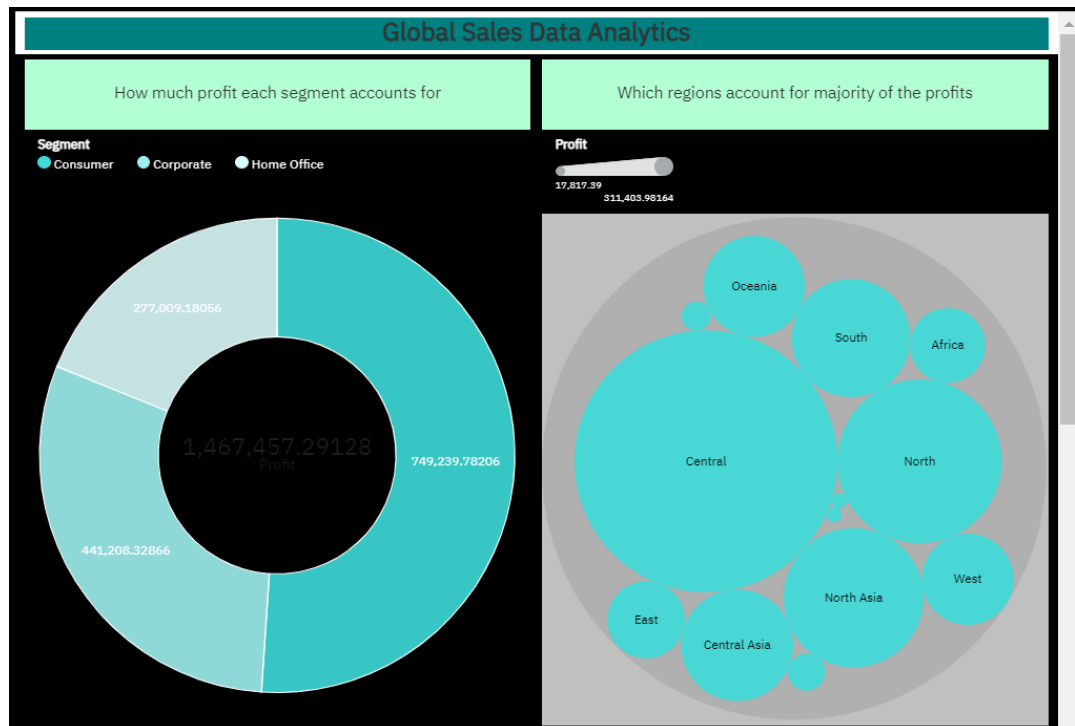
### 7.1. Feature 1 – Dashboard

We have made a highly interactive dashboard where the customer can filter based on their requirements. In our dashboard we have 4 tabs - Overview, Region, Profit ,Code. Our overview provides the customer to filter based on order\_date, region, category and segment. In our region tab, we provide the sales/profit based on regions and countries. In our profit tab, we provide profit based on different categories and regions.



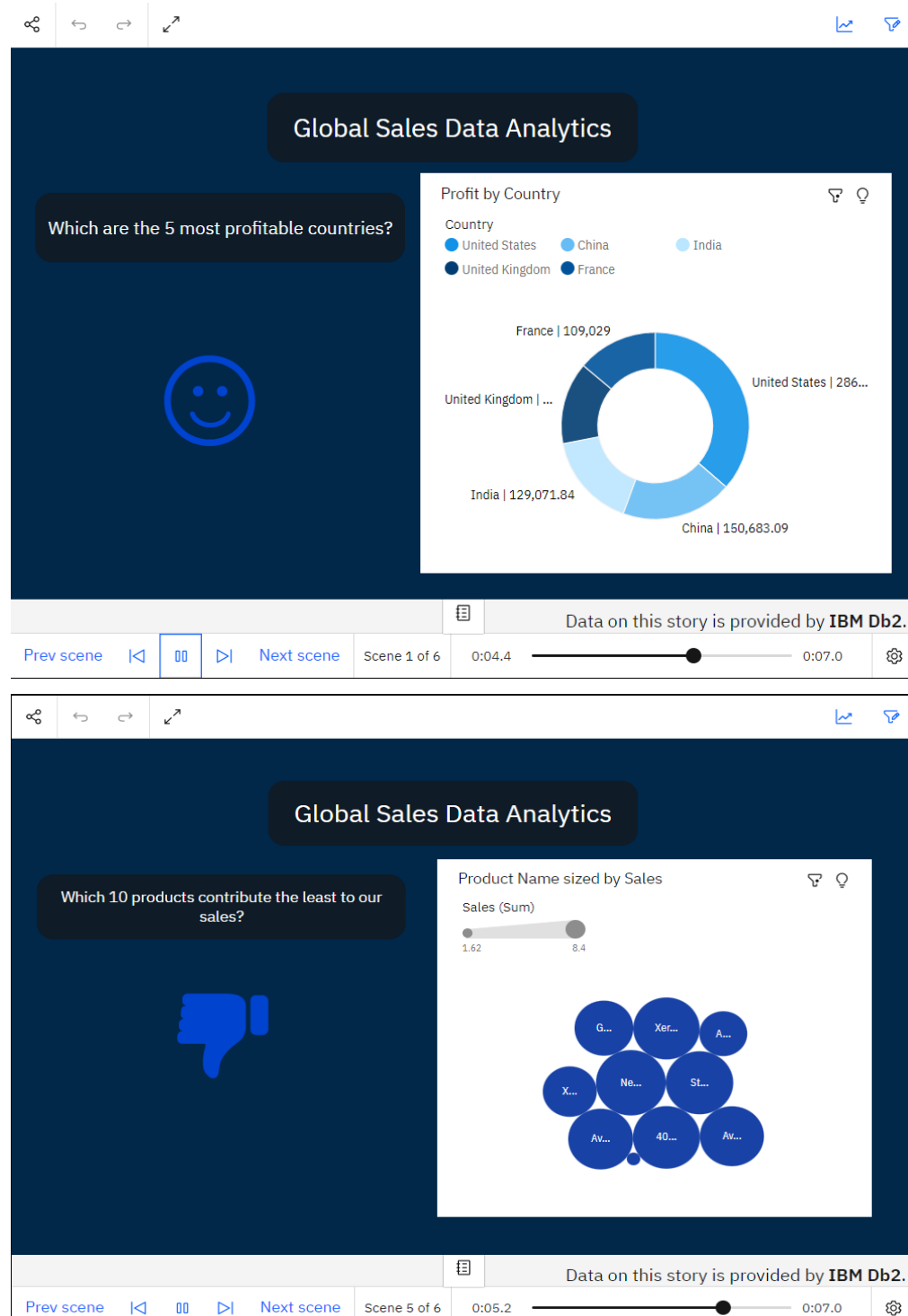
## 7.2. Feature 2 – Report

The report provides various insights regarding the global sales dataset. It gives a better understanding of the data to the customers. They can see where they gain the most profit, most sales, and many more.



### 7.3. Feature 3 – Story

The story is a small animation which provides customers a general idea about what our product does and why they need to use our product. It provides an over-time narrative and is used to convey a conclusion or recommendation. It is used to communicate the insights and analysis performed.



## 7.4. Database Schema

### Table definition



SALES

No statistics available.

Name	Data type	Nullable	Length	Scale	
ROW_ID	INTEGER	Y		0	👁
ORDER_ID	VARCHAR	Y	30	0	👁
ORDER_DATE	VARCHAR	Y	10	0	👁
SHIP_DATE	VARCHAR	Y	10	0	👁
SHIP_MODE	VARCHAR	Y	20	0	👁
CUSTOMER_ID	VARCHAR	Y	30	0	👁
CUSTOMER_NAME	VARCHAR	Y	30	0	👁

### Table definition



SALES

No statistics available.

Name	Data type	Nullable	Length	Scale	
SEGMENT	VARCHAR	Y	30	0	👁
CITY	VARCHAR	Y	30	0	👁
STATE	VARCHAR	Y	40	0	👁
COUNTRY	VARCHAR	Y	40	0	👁
POSTAL_CODE	INTEGER	Y		0	👁
MARKET	VARCHAR	Y	30	0	👁
REGION	VARCHAR	Y	30	0	👁

## Table definition



SALES

No statistics available.

Name	Data type	Nullable	Length	Scale	
PRODUCT_ID	VARCHAR	Y	30	0	👁
CATEGORY	VARCHAR	Y	30	0	👁
SUB_CATEGORY	VARCHAR	Y	30	0	👁
PRODUCT_NAME	VARCHAR	Y	200	0	👁
SALES	DECIMAL	Y	14	5	👁
QUANTITY	SMALLINT	Y		0	👁
DISCOUNT	DECIMAL	Y	7	3	👁
PROFIT	DECIMAL	Y	13	5	👁
SHIPPING_COST	DECIMAL	Y	7	2	👁
ORDER_PRIORITY	VARCHAR	Y	8	0	👁





## 8. TESTING

### 8.1. Test Cases

ID	Test Case Description	Test Steps	Test Data	Expected Outcome	Actual Outcome	Pass/Fail
TC1	Viewing Dashboard	<ol style="list-style-type: none"><li>1. Customer goes to our website</li><li>2. Goes to the services provided</li><li>3. Clicks the Dashboard service</li></ol>	The customer goes to the dashboard page and views the various tabs in the dashboard.	The customer successfully views the dashboard and can navigate through it.	As Expected	Pass
TC2	Applying filters to the dashboard	<ol style="list-style-type: none"><li>1. Customer goes to our website</li><li>2. Goes to the services provided</li><li>3. Clicks the Dashboard service</li></ol>	The customer applies various filters to the dashboard.	The filters are applied on the dashboard and the results are shown successfully.	As Expected	Pass
TC3	Viewing Report	<ol style="list-style-type: none"><li>1. Customer goes to our website</li><li>2. Goes to the services provided</li><li>3. Clicks the Report service</li></ol>	The customer goes to the report page and views the various pages in the report.	The customer successfully views the report and can navigate through it.	As Expected	Pass
TC4	Viewing Story	<ol style="list-style-type: none"><li>1. Customer goes to our website</li><li>2. Goes to the services provided</li><li>3. Clicks the Story service</li></ol>	The customer goes to the story page and views the stories and scenes.	The customer successfully views the story and can see all the scenes.	As Expected	Pass

## 8.2. User Acceptance Testing

Multiple users were asked to navigate through our website and view the dashboard, reports and stories. The users applied various filters on the dashboard and the results were shown successfully. The users also viewed the reports and were able to gain valuable insights from them. They also viewed the stories and got various conclusions from them. Based on the feedback we come to a conclusion about the acceptability of our system.

### Defect Analysis

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved.

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	10	4	2	3	20
Duplicate	0	2	0	0	2
External	1	3	1	0	5
Fixed	7	4	4	10	25
Not Reproduced	0	0	0	0	0
Skipped	0	0	0	0	0
Won't Fix	0	0	0	0	0
Totals	18	13	7	13	52

## 9. RESULTS

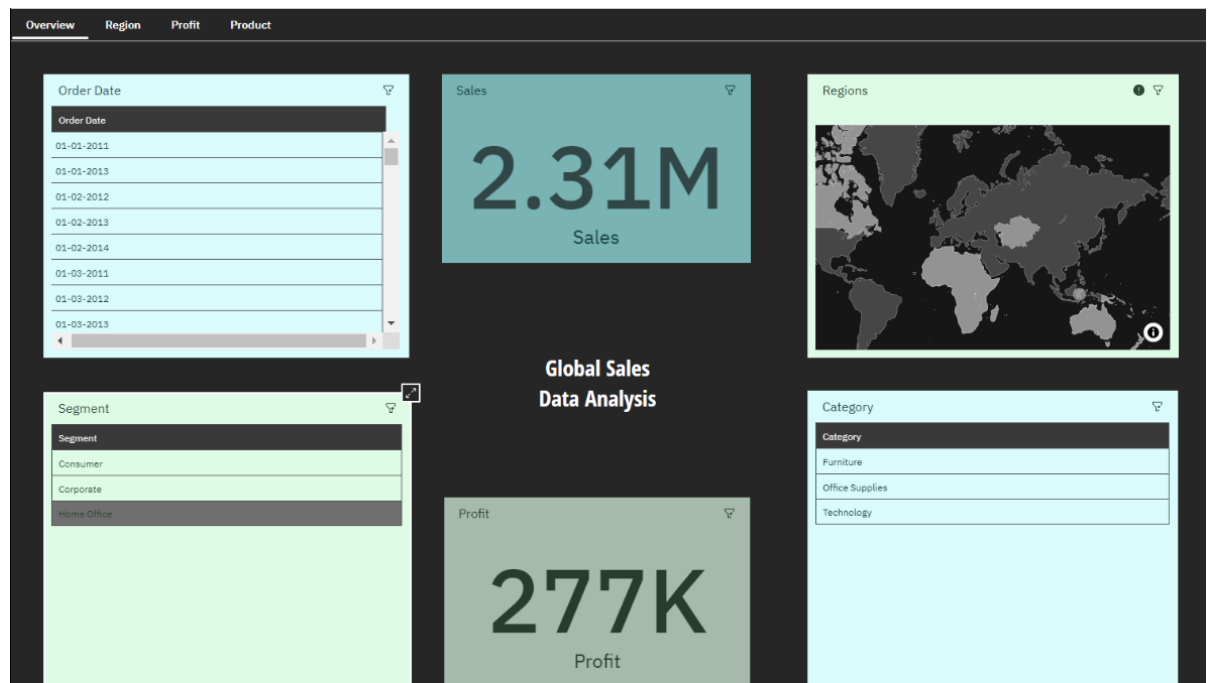
### 9.1. Performance Metrics

Verification of filter results:

We gauge the accuracy of the dashboard based on its similarity to the actual results. We use Microsoft Excel to verify the same.

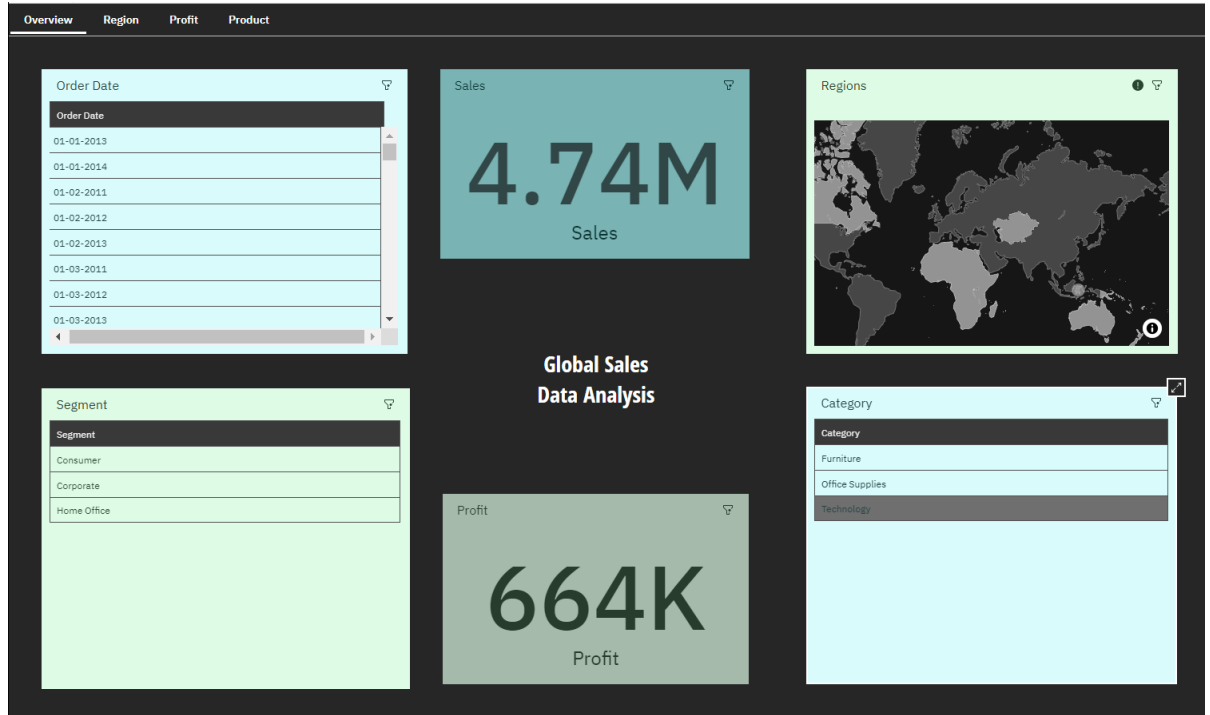
**Screenshots from the dashboard:**

## 1. Segment: Home office



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
	Row ID	Order ID	Order Date	Ship Date	Ship Method	Customer	Customer Segment	City	State	Country	Postal Code	Market	Region	Product Category	Sub Category	Product Name	Sales	Quantity	Discount	Profit	Shipping			
51218	42600	CG-2011-2	05-07-2011	11-07-2011	✚	Sort A to Z		Matadi	Bas-Congo	Democratic Republic		Africa	Africa	OFF-WIL-1	Office Sup Binders	Wilson Jor	3.99	1	0	0.42	0			
51233	1230	US-2011-1	06-08-2011	10-08-2011	✚	Sort Z to A		San Pedro	Cortés	Honduras		LATAM	Central	OFF-LA-10	Office Sup Labels	Avery Colc	21.264	4	0.4	-14.176	0			
51239	31783	CA-2014-1	11-06-2014	14-06-2014		Sort by Color		Los Angeles	California	United States	90045	US	West	TEC-PH-1C	Technology Phones	iHome FM	279.96	5	0.2	17.4975	0			
51261	39396	CA-2013-1	11-03-2013	14-03-2013		Sheet View		Los Angeles	California	United States	90045	US	West	TEC-AC-1C	Technology Accessories	Kingston D	26.85	3	0	5.1015	0			
51269	27081	ID-2012-3	10-08-2012	11-08-2012		Clear Filter From "Segment"		Pasig		National C	Philippines		APAC	Southeast	OFF-PA-10	Office Sup Paper	Enermax C	49.302	3	0.45	-18.828	0		
51270	34657	US-2012-1	04-06-2012	08-06-2012		Filter by Color		New York	New York	United States	10024	US	East	OFF-PA-10	Office Sup Paper	Wirebound	30.44	4	0	14.3068	0			
51276	9309	MX-2014-1	11-09-2014	12-09-2014		Text Filters		Vespasian	Minas Gerais	Brazil		LATAM	South	OFF-LA-10	Office Sup Labels	Novimex S	5.92	1	0	0.04	0			
51282	46582	TU-2014-6	29-11-2014	30-11-2014				Midyat	Mardin	Turkey		EMEA	EMEA	OFF-BOS-1	Office Sup Art	Boston Pei	34.128	6	0.6	-49.572	0			
51284	9922	MX-2012-1	28-12-2012	31-12-2012				Managua	Managua	Nicaragua		LATAM	Central	OFF-PA-10	Office Sup Paper	SanDisk M	18.64	1	0	0	8	0		
51286	24175	IN-2014-5	05-08-2014	10-08-2014				Townsville	Queensland	Australia		APAC	Oceania	OFF-BI-10	Office Sup Binders	Avery Bind	58.05	5	0.1	19.95	0			
51289	40470	US-2013-1	02-12-2013	02-12-2013				Oxnard	California	United States	93030	US	West	OFF-EN-1C	Office Sup Envelopes	#10-4 1/8	22.92	3	0	11.2308	0			
51290	9596	MX-2012-1	18-02-2012	22-02-2012				Valinhos	São Paulo	Brazil		LATAM	South	OFF-BI-10	Office Sup Binders	Acco Index	13.44	2	0	2.4	2309855			

## 2. Category: Technology



551270

A

X

f

30.44

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	Row ID	Order ID	Order Date	Ship Date	Ship Method	Customer	Segment	City	State	Country	Postal Code	Market	Region	Product	Category	Sub-Category	Product	Sales	Quantity	Discount	Profit	Shipping	
51023	32627	CA-2014-1	03-06-2014	07-06-2014	Standard	C AB-10255	Alejandro	Home Office	Lorain	Ohio	United States	44005	A Z	Sort A to Z		Phones	Cush Case	2.97	1	0.4	-0.6435		
51060	34566	CA-2011-1	15-07-2011	19-07-2011	Standard	C VW-21775	Victoria	Corporate	Sioux Falls	South Dakota	United States	57110	Z	Sort Z to A		Accessories	Maxell 4.7	2.97	3	0	1.3068		
51089	39287	US-2013-1	24-08-2013	30-08-2013	Standard	C MA-17560	Matt	Abel	Home Office	Sheboygan	Wisconsin	United States	53088			Accessories	Maxell 4.7	1.98	2	0	0.891		
51097	45007	KZ-2011-7	20-07-2011	20-07-2011	Same Day	MM-8055	Michelle	N	Consumer	Pavlodar	Pavlodar	Kazakhstan		Sort by Color	>	Accessories	Logitech N	31.077	1	0.7	-55.953		
51145	39197	CA-2014-1	14-08-2014	19-08-2014	Standard	C DC-12850	Dan	Camp	Consumer	Memphis	Tennessee	United States	3810	Sheet View	>	Accessories	Maxell 4.7	1.584	2	0.2	0.4752		
51153	43296	PL-2011-5	07-04-2011	09-04-2011	Second Class	DK-2910	Daniel	Byri	Home Office	Poznan	Greater Poland			Clear Filter from "Category"		Machines	Epson Photo	80.97	1	0	36.42		
51180	47992	SU-2014-3	02-01-2014	06-01-2014	Standard	C JM-5250	Janet	Mari	Consumer	Bur Sudan	Red Sea	Sudan			>	Phones	Motorola	173.46	1	0	50.28		
51221	35382	CA-2013-1	05-08-2013	07-08-2013	Second Class	LC-16930	Linda	Caza	Corporate	Sacramento	California	United States	9582	Filter by Color	>	Phones	Mitel 5320	302.384	2	0.2	30.2384		
51239	31783	CA-2014-1	11-06-2014	14-06-2014	First Class	MT-18070	Michelle	T	Home Office	Los Angeles	California	United States	9004	Text Filters	>	Phones	iHome FM	279.96	5	0.2	17.4975		
51261	39396	CA-2013-1	11-03-2013	14-03-2013	First Class	RH-19510	Rick	Huthv	Home Office	Los Angeles	California	United States	9004			Accessories	Kingston D	26.85	3	0	5.1015		
51292																		4737073					
51293																							
51294																							
51295																							
51296																							
51297																							
51298																							

Search

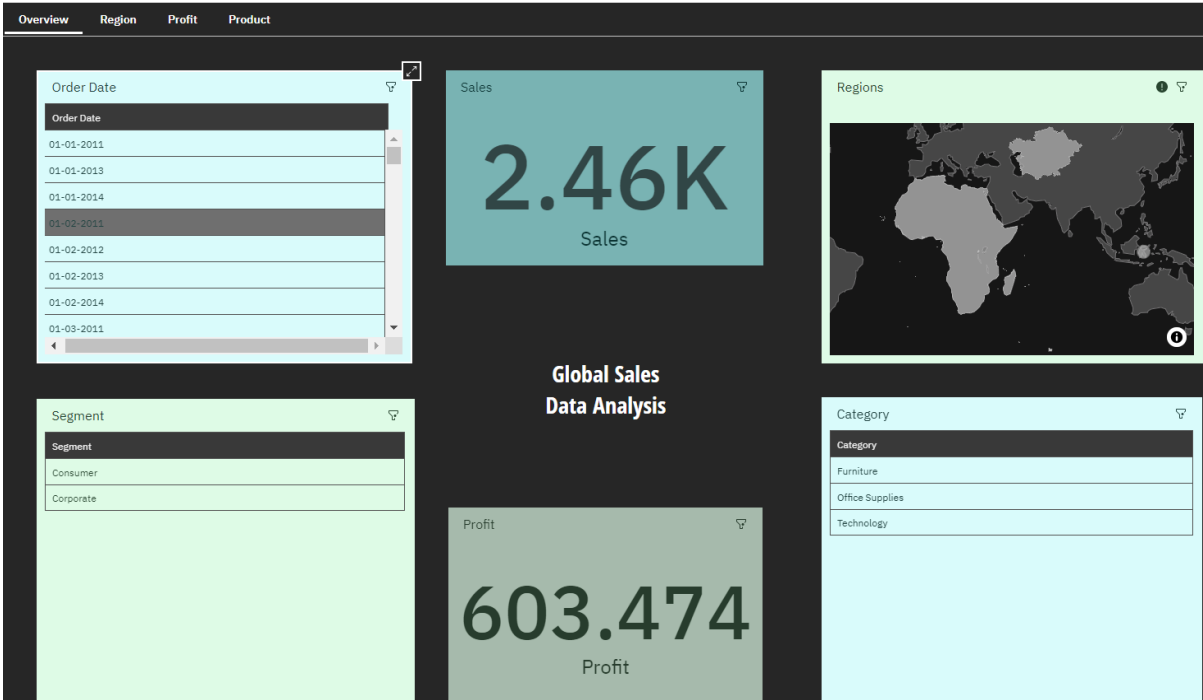
☒ (Select All)

☐ Furniture

☐ Office Supplies

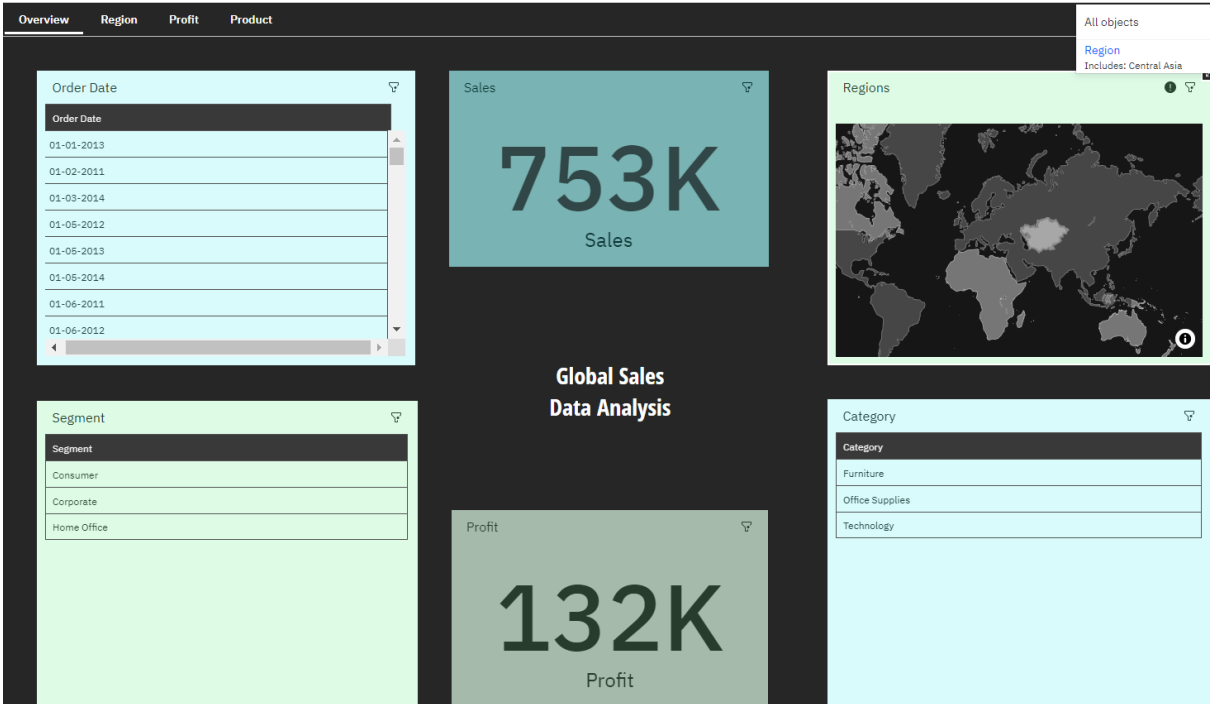
☒ Technology

**3. Order date: 01-02-2011**



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
	1	ID	Order ID	Order Date	Ship Date	Ship Method	Customer	Customer Segment	City	State	Country	Postal Code	Market	Region	Product	Category	Sub-Category	Product	Sales	Quantity	Discount	Profit	Shipping
Sort Oldest to Newest		2011	Second Class	PO-18865	Patrick O'Connell	Consumer	Dhaka		Dhaka		Bangladesh		APAC	Central Asia	TEC-CO-1C	Technology	Copiers	Brother P	285.78	2	0	71.4	57.3
Sort Newest to Oldest		2011	First Class	LC-17050	Liz Carlisle	Consumer	Mission Vie		California		United States	92691	US	West	FUR-BO-1I	Furniture	Bookcases	Sauder Fac	290.666	2	0.15	3.4196	54.64
Sort by Color		2011	Second Class	SP-20650	Stephanie	Corporate	Yingcheng		Hubei		China		APAC	North Asia	OFF-ST-10	Office Sup	Storage	Tenex Tra	162.72	3	0	68.31	44.36
Sheet View		2011	Second Class	CH-13150	David Keni	Corporate	Chongqing		Chongqing		China		APAC	North Asia	OFF-AP-10	Office Sup	Appliances	KitchenAid	352.35	5	0	137.4	33.15
Clear Filter from "Order Date"		2011	Standard Class	DH-13075	Dave Halls	Corporate	San Migue		Panama		Panama		LATAM	Central	OFF-AP-10	Office Sup	Appliances	Hamilton E	400.704	2	0.4	20.024	21.38
Filter by Color		2011	Standard Class	CP0-8850	Patrick O'Connell	Consumer	Mashhad		Razavi Khc		Iran		EMEA	EMEA	FUR-ADV-	Furniture	Furnishing	Advantus I	309.6	6	0	148.5	19.65
Date Filters		2011	Second Class	GH-14485	Gene Hale	Corporate	La Rochell		Poitou-Chi		France		EU	Central Asia	OFF-AR-1C	Office Sup	Art	Binney & S	139.65	5	0	15.3	19.23
		2011	Second Class	PO-18865	Patrick O'Connell	Consumer	Dhaka		Dhaka		Bangladesh		APAC	Central Asia	OFF-AP-10	Office Sup	Supplies	Kleencrui	40.68	3	0	11.79	6.21
		2011	Standard Class	DH-13075	Dave Halls	Corporate	San Migue		Panama		Panama		LATAM	Central	TEC-AC-1C	Technology	Accessories	Memorex	81.984	2	0.4	-19.136	6.13
		2011	Standard Class	CRR-19315	Ralph Ritte	Consumer	Parma		Emilia-Rom		Italy		EU	South	OFF-AR-1C	Office Sup	Art	Sanford Pe	78.3	3	0	20.34	6.03
		2011	Second Class	PO-18865	Patrick O'Connell	Consumer	Dhaka		Dhaka		Bangladesh		APAC	Central Asia	OFF-BI-10I	Office Sup	Binders	Wilson Jor	22.65	5	0	9.6	5.29
		2011	Second Class	PO-18865	Patrick O'Connell	Consumer	Dhaka		Dhaka		Bangladesh		APAC	Central Asia	OFF-LA-10	Office Sup	Labels	Smead File	20.34	3	0	9.9	3.78
		2011	Second Class	GH-14485	Gene Hale	Corporate	La Rochell		Poitou-Chi		France		EU	Central	OFF-EN-1I	Office Sup	Envelopes	GlobeWei	21.39	1	0	0	3.34
		2011	Standard Class	IM-15055	Ionia McG	Consumer	Halle		North Rhin		Germany		EU	Central	OFF-BI-10I	Office Sup	Binders	Acco Hole	21.06	3	0	10.53	1.86
		2011	Standard Class	IM-15055	Ionia McG	Consumer	Halle		North Rhin		Germany		EU	Central	OFF-BI-10I	Office Sup	Binders	Avery Hole	11.82	2	0	4.2	0.93
		2011	Standard Class	DH-13075	Dave Halls	Corporate	San Migue		Panama		Panama		LATAM	Central	OFF-BI-10I	Office Sup	Binders	Wilson Jor	9.576	6	0.4	-0.984	0.81
																			2455.67				

#### 4. Region: Central Asia

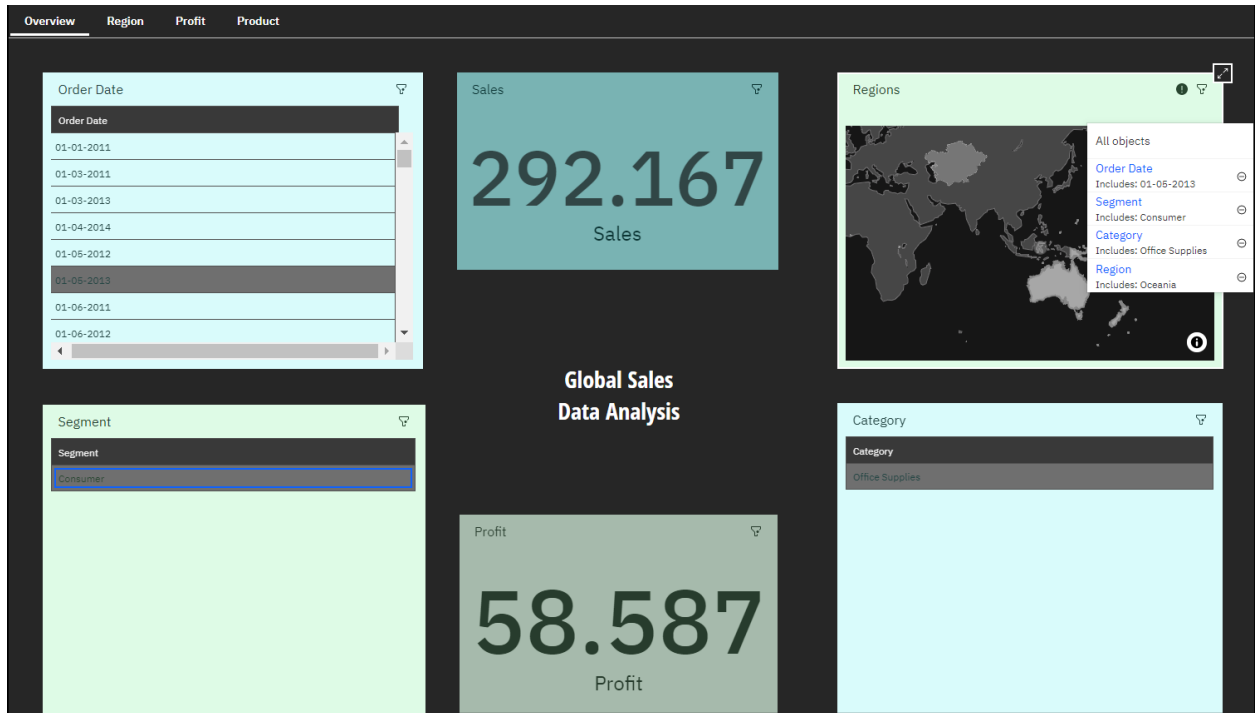


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	w ID	Order ID	Order Date	Ship Date	Ship City	Customer	Customer	Segment	City	State	Country	Postal Code	Market	Region	Product	Category	Sub-Cat	Product	Sales	Quantity	Discount	Profit	Shipping
49903	23325	IN-2014-7	26-09-2014	28-09-2014	First Class	RF-19840	Roy Franz	Consumer	Cuttack	Odisha	IN	751001	Sort A to Z		OFF-BI-10I Office Sup Binders	Acco Hole		8.16	1	0	1.95	0.38	
49954	20667	ID-2013-1	21-11-2013	25-11-2013	Standard C	CP-12340	Christine P	Corporate	Multan	Punjab	PK	28001	Sort Z to A		OFF-BI-10I Office Sup Binders	Cardinal B		8.01	3	0.5	-2.43	0.37	
49955	22574	IN-2012-4	11-05-2012	16-05-2012	Second Cl	RB-19360	Raymond I	Consumer	Bhopal	Madhya	IN	461001			OFF-BI-10I Office Sup Binders	Cardinal B		27.66	2	0	6.6	0.37	
50060	22663	ID-2011-2	12-12-2011	18-12-2011	Standard C	SJ-20125	Sanjit Jaco	Home Office	Islamabad	F.C.T.	PK	751001	Sort by Color	>	OFF-LA-10 Office Sup Labels	Hon Round		4.56	2	0.5	-1.5	0.35	
50064	28707	IN-2012-5	14-05-2012	17-05-2012	First Class	CC-12220	Chris Corti	Consumer	Khulna	Khulna	BD	22001	Sheet View	>	OFF-FN-10 Office Sup Envelopes	Kraft Clasp		22.8	2	0	0.42	0.35	
50131	30158	IN-2014-5	29-06-2014	30-06-2014	Same Day	DO-13435	Denny Ord	Consumer	Dhaka	Dhaka	BD	121001		>	OFF-PA-10 Office Sup Paper	Eaton Mess		61.47	3	0	25.74	0.34	
50391	20934	IN-2013-5	07-02-2013	11-02-2013	Standard C	LR-16915	Lena Radfi	Consumer	Gorakhpur	Haryana	IN	121001	Clear Filter From "Region"	>	OFF-BI-10I Office Sup Binders	Cardinal In		36.3	5	0	6.45	0.29	
50434	20514	IN-2013-1	06-02-2013	11-02-2013	Standard C	TC-21295	Toby Carli	Consumer	Huili	Karnataka	IN	751001	Filter by Color	>	OFF-FN-10 Office Sup Envelopes	Kraft Clasp		11.4	1	0	0.21	0.28	
50448	21147	ID-2011-5	12-09-2011	17-09-2011	Standard C	EM-13825	Elizabeth I	Corporate	Islamabad	F.C.T.	PK	751001	Text Filters	>	OFF-LA-10 Office Sup Labels	Smead Rost		4.8	2	0.5	-3.3	0.25	
50560	21468	IN-2011-2	30-12-2011	03-01-2012	Standard C	GT-14755	Guy Thorn	Consumer	Bilaspur	Uttar Pr	IN	201001	Search	>	OFF-FA-10 Office Sup Fasteners	Advantus S		8.31	1	0	0.57	0.25	
50561	23753	ID-2011-5	31-08-2011	04-09-2011	Standard C	BG-11740	Bruce Gelc	Consumer	Lahore	Punjab	PK	28001		>	FUR-TA-1C Furniture Tables	Chromcra		374.856	4	0.8	-1218.38	0.25	
50655	28771	IN-2011-3	02-09-2011	06-09-2011	Standard C	SC-20770	Stewart C	Corporate	Bhopal	Madhya	IN	461001	(Select All)	>	OFF-LA-10 Office Sup Labels	Harbour C		9.3	2	0	2.46	0.23	
50861	23443	IN-2014-4	17-06-2014	19-06-2014	First Class	JK-15625	Jim Karlssc	Consumer	Bokaro	Jharkhand	IN	201001	<input type="checkbox"/> Africa	>	OFF-FA-10 Office Sup Fasteners	Accos Pap		11.49	1	0	3.33	0.18	
50907	25811	IN-2012-6	16-08-2012	23-08-2012	Standard C	MG-17680	Maureen C	Home Office	Khulna	Khulna	BD	22001	<input type="checkbox"/> Canada	>	OFF-FN-10 Office Sup Envelopes	Jiffy Busin		47.88	3	0	9.09	0.17	
51020	21375	IN-2014-2	22-10-2014	28-10-2014	Standard C	MM-1792X	Michael M	Consumer	Bijapur	Karnataka	IN	751001	<input type="checkbox"/> Caribbean	>	OFF-BI-10I Office Sup Binders	Avery Hole		9.54	2	0	4.44	0.14	
51105	20407	IN-2014-1	03-11-2014	07-11-2014	Standard AC	10450	Amy Cox	Consumer	Chennai	Tamil Na	IN	751001	<input type="checkbox"/> Central	>	OFF-LA-10 Office Sup Labels	Novimex F		6.27	1	0	2.94	0.11	
51165	25350	IN-2011-2	14-12-2011	17-12-2011	Second Cl	SC-20770	Stewart C	Corporate	Bhivandi	Maharas	IN	401001	<input checked="" type="checkbox"/> Central Asia	>	OFF-AR-10 Office Sup Art	Boston Pe		58.44	2	0	19.26	0.09	
51237	24004	IN-2011-4	03-11-2011	05-11-2011	Second Cl	MV-17485	Mark Van	Consumer	Peshawar	Khyber P	PK	28001	<input type="checkbox"/> East	>	OFF-LA-10 Office Sup Labels	Novimex F		17.28	4	0.5	-13.92	0.05	
51255	29192	ID-2014-6	08-07-2014	13-07-2014	Standard C	JE-15610	Jim Epp	Corporate	Lahore	Punjab	PK	28001	<input type="checkbox"/> EMEA	>	OFF-PA-10 Office Sup Paper	Green Bar		18.36	2	0.5	-13.26	0.04	
51285	24105	IN-2014-7	30-05-2014	30-05-2014	Same Day	KH-16330	Katharine I	Corporate	Lucknow	Uttar Pr	IN	201001	<input type="checkbox"/> North	>	OFF-PA-10 Office Sup Paper	Eaton Parr		26.94	2	0	1.86	0.01	
51292													<input type="checkbox"/> South Asia										
51293																			75282.6				
													OK	Cancel									

**5. Composite filter:**

- a) Date: 01-05-2013**
- b) Segment: Consumer**
- c) Category: Office Supplies**
- d) Region: Oceania**

- a) **Date: 01-05-2013**
- b) **Segment: Consumer**
- c) **Category: Office Supplies**
- d) **Region: Oceania**

[illegible]

## 10. ADVANTAGES & DISADVANTAGES

### ❖ ADVANTAGES:

**a) Scalable System**

Our system is built on IBM Cognos Analytics and uses a csv file . A CSV file can hold a very large number of rows and since we are using IBM Cognos Analytics, a widely used tool, it is highly scalable.

**b) Usability**

Our system works on a web application with a very simple and usable interface making it easy to use for anyone, even without a tech background. The usage is very easy to navigate and data is presented in a clean and usable manner to the end user.

**c) Makes it easier for companies to make decisions**

The companies can get various insights from our application and can easily make decisions to maximize profit by using these reports based on the visualizations.

**d) Automates an otherwise tedious process**

The traditional method of global sales analysis involves multiple human employees and takes a long time to process the data. Our system cuts down the time to a few seconds and helps automate and fastens the process manifold.

**e) Does not require high level management involvement**

Our system does not require involvement of people from higher ranks in the company. Anyone can input data into the system and view the various visualizations. This saves time for the people in the sales industry.

**f) Highly Interactive dashboard.**

Our system is highly interactive and the users can apply various filters to the dashboard to get the data they require in a very fast and easy method.

### ❖ DISADVANTAGES:

**a) Continuous upgradation of dataset**

The disadvantage of this model is that the dataset cannot be updated dynamically and needs to be changed continuously.

**b) Complexity**

Another disadvantage is that the system, although easy to use, the code is complex for an average user to comprehend in case of any errors.

**c) Maintenance**

Updating the code to make use of new technologies and updating it in case of any errors can be considered as a disadvantage due to the complexity of the code.



## 11. CONCLUSION

A system that is used to provide analysis on global sales data was designed to eliminate the manual process which is predominant in the current scenario. The system was built using multiple tools and processes, Visualizations were done using IBM Cognos, web application was developed using HTML, CSS and JavaScript and the primary coding and integration was done using Bootstrap. This application can be used by the Global sales teams to gain various insights on their sales and make decisions to maximize profit. This system can be used by anyone owing to the simplicity and ease of access. It allows these teams to automate the analysis process and speed it up considerably to enhance the efficiency and effectiveness of understanding the data in the current scenario. The application was developed after a tremendous amount of research and understanding of the current data and how there was room for massive improvement. The final system is deployed on IBM Watson and is available for use by the global sales teams and other possible users who want to analyze their data and make decisions.

## 12. FUTURE SCOPE

The system built is a very scalable and deployable model. This broadens the scope of the project considerably. The system can be easily utilized by global sales teams and other companies to speed up their global sales data analysis and also reduce the error due to human negligence and bias. The dataset used can be constantly updated to make the analysis more accurate and dynamic and the system's scope is endless in this respect.

## 13. APPENDIX

### ❖ Source Code:

#### index.html

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta content="width=device-width, initial-scale=1.0" name="viewport">

  <title>Insights Today</title>
  <meta content="" name="description">
```

<meta content="" name="keywords">

<!-- Favicons -->

<link href="assets/img/favicon.png" rel="icon">

<link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">

<!-- Google Fonts -->

<link

href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Raleway:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i" rel="stylesheet">

<!-- Vendor CSS Files -->

<link href="assets/vendor/animate.css/animate.min.css" rel="stylesheet">

<link href="assets/vendor/aos/aos.css" rel="stylesheet">

<link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">

<link href="assets/vendor/bootstrap-icons/bootstrap-icons.css" rel="stylesheet">

<link href="assets/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">

<link href="assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">

<link href="assets/vendor/remixicon/remixicon.css" rel="stylesheet">

<link href="assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">

<!-- Template Main CSS File -->

<link href="assets/css/style.css" rel="stylesheet">

<!-- =====

\* Template Name: Multi - v4.9.1

\* Template URL: <https://bootstrapmade.com/multi-responsive-bootstrap-template/>

\* Author: BootstrapMade.com

\* License: <https://bootstrapmade.com/license/>

===== -->

</head>

```

<body>

<!-- ===== Header ===== -->
<header id="header" class="fixed-top">
  <div class="container d-flex align-items-center justify-content-between">

    <h1 class="logo"><a href="index.html">SSNCE</a></h1>
    <!-- Uncomment below if you prefer to use an image logo -->
    <!-- <a href="index.html" class="logo"></a>-->

    <nav id="navbar" class="navbar">
      <ul>
        <li><a class="nav-link scrollto active" href="#hero">Home</a></li>
        <li><a class="nav-link scrollto" href="#about">About</a></li>
        <li><a class="nav-link scrollto" href="#services">Services</a></li>
        <li><a class="nav-link scrollto" href="#team">Team</a></li>
        <li><a class="nav-link scrollto" href="#contact">Contact</a></li>
        <!-- <li><a class="getstarted scrollto" href="#about">Get Started</a></li> -->
      </ul>
      <i class="bi bi-list mobile-nav-toggle"></i>
    </nav><!-- .navbar -->
  </div>
</header><!-- End Header -->

<!-- ===== Hero Section ===== -->
<section id="hero">
  <div id="heroCarousel" data-bs-interval="5000" class="carousel slide carousel-
fade" data-bs-ride="carousel">

    <ol class="carousel-indicators" id="hero-carousel-indicators">
      </ol>

```

```

<div class="carousel-inner" role="listbox">

  <!-- Slide 1 -->
  <div class="carousel-item active" style="background-image:
url(assets/img/slide/slide-1.jpg)">
    <div class="carousel-container">
      <div class="container">
        <h2 class="animate__animated animate__fadeInDown">Welcome to
<span>Insights Today!</span></h2>
        <p class="animate__animated animate__fadeInUp">This is a project
undertaken as part of the IBM Nalaya Thiran Learning Program.
        We aspire to bring to you a world class dashboard giving you the best
insights on Global Sales Data. In addition to this, you
        will also find a report and a story.
      </p>
      <a href="#about" class="btn-get-started animate__animated
animate__fadeInUp scrollto">Read More</a>
    </div>
  </div>
</div>
</div>
</div>
</div>
</section>

<!-- End Hero -->

<main id="main">

  <!-- ===== About Section ===== -->
  <section id="about" class="about">
    <div class="container" data-aos="fade-up">

      <div class="section-title">
        <h2>About</h2>

```

```

        <p>About Us</p>
    </div>
    <div class="row content">
        <div class="col-lg-6">
            <p>
                We are a small team of four, aspiring to make a difference to the world with
                a combination of technical skills and business acumen.
            </p>
            <ul>
                <li><i class="ri-check-double-line"></i> We create dynamic dashboards to
                help companies make smarter business decisions.</li>
                <li><i class="ri-check-double-line"></i> We generate the best reports on
                sales in order to help our clients gain clarity and insights into their data!</li>
                <li><i class="ri-check-double-line"></i> We make story videos that are the
                best tool of representation to make data visualisations for our users easy-to-use and
                helpful.</li>
            </ul>
        </div>
        <div class="col-lg-6 pt-4 pt-lg-0">
            <a href="#" class="btn-learn-more">Learn More</a>
        </div>
    </div>
</div>
</section>

<!-- End About Section -->

<!-- ===== Counts Section ===== -->
<section id="counts" class="counts">
    <div class="container" data-aos="fade-up">

        <div class="row no-gutters">
            <div class="col-lg-3 col-md-6 d-md-flex align-items-md-stretch">
                <div class="count-box">

```

```
<i class="bi bi-emoji-smile"></i>
<span data-purecounter-start="0" data-purecounter-end="124" data-
purecounter-duration="1" class="purecounter"></span>
<p><strong>Happy Clients</strong></p>
<a href="#">Find out more &raquo;</a>
</div>
</div>
```

```
<div class="col-lg-3 col-md-6 d-md-flex align-items-md-stretch">
<div class="count-box">
<i class="bi bi-journal-richtext"></i>
<span data-purecounter-start="0" data-purecounter-end="124" data-
purecounter-duration="1" class="purecounter"></span>
<p><strong>Projects</strong></p>
<a href="#">Find out more &raquo;</a>
</div>
</div>
```

```
<div class="col-lg-3 col-md-6 d-md-flex align-items-md-stretch">
<div class="count-box">
<i class="bi bi-headset"></i>
<span data-purecounter-start="0" data-purecounter-end="780" data-
purecounter-duration="1" class="purecounter"></span>
<p><strong>Hours Of Support</strong></p>
<a href="#">Find out more &raquo;</a>
</div>
</div>
```

```
<div class="col-lg-3 col-md-6 d-md-flex align-items-md-stretch">
<div class="count-box">
<i class="bi bi-people"></i>
<span data-purecounter-start="0" data-purecounter-end="4" data-
purecounter-duration="1" class="purecounter"></span>
<p><strong>Hard Workers</strong></p>
```

```

        <a href="#">Find out more &raquo;</a>
    </div>
</div>
</div>
</div>
</section>
<!-- End Counts Section -->

<!-- ===== Services Section ===== -->
<section id="services" class="services">
    <div class="container" data-aos="fade-up">

        <div class="section-title">
            <h2>Services</h2>
            <p>Check our Services</p>
        </div>

        <div class="row">
            <div class="col-lg-4 col-md-6 d-flex align-items-stretch" data-aos="zoom-in"
data-aos-delay="100">
                <div class="icon-box">
                    <div class="icon"><i class="bx bxl-dribbble"></i></div>
                    <h4><a href="dashboard.html">Dashboard</a></h4>
                    <p>Click here to access our dashboard on Global Sales Data Analytics.</p>
                </div>
            </div>

            <div class="col-lg-4 col-md-6 d-flex align-items-stretch mt-4 mt-md-0" data-
aos="zoom-in" data-aos-delay="200">
                <div class="icon-box">
                    <div class="icon"><i class="bx bx-file"></i></div>
                    <h4><a href="report.html">Report</a></h4>
                    <p>Click here to access our report on Global Sales Data Analytics.</p>
                </div>
            </div>
        </div>
    </div>

```

</div>

</div>

<div class="col-lg-4 col-md-6 d-flex align-items-stretch mt-4 mt-lg-0" data-aos="zoom-in" data-aos-delay="300">

<div class="icon-box">

<div class="icon"><i class="bx bx-tachometer"></i></div>

<h4><a href="story.html">Story</a></h4>

<p>Click here to access our story on Global Sales Data Analytics.</p>

</div>

</div>

</div>

</section><!-- End Services Section -->

<!-- ===== Team Section ===== -->

<section id="team" class="team section-bg">

<div class="container" data-aos="fade-up">

<div class="section-title">

<h2>Team</h2>

<p>Check our Team - PNT2022TMID53156</p>

</div>

<div class="row">

<div class="col-xl-3 col-lg-4 col-md-6">

<div class="member" data-aos="zoom-in" data-aos-delay="100">



<div class="member-info">

<div class="member-info-content">

<h4>Aman Jain</h4>

<span>Team Leader</span>



```

    </div>
  </div>
</div>
</div>
<div class="col-xl-3 col-lg-4 col-md-6" data-wow-delay="0.1s">
  <div class="member" data-aos="zoom-in" data-aos-delay="200">
    
    <div class="member-info">
      <div class="member-info-content">
        <h4>Ashwini Sridar Athreya</h4>
        <span>Team Member</span>
      </div>
    </div>
  </div>
</div>
</div>
</div>
<div class="col-xl-3 col-lg-4 col-md-6" data-wow-delay="0.2s">
  <div class="member" data-aos="zoom-in" data-aos-delay="300">
    
    <div class="member-info">
      <div class="member-info-content">
        <h4>Mathanggi</h4>
        <span>Team Member</span>
      </div>
    </div>
  </div>
</div>
</div>
<div class="col-xl-3 col-lg-4 col-md-6" data-wow-delay="0.3s">
  <div class="member" data-aos="zoom-in" data-aos-delay="400">
    
    <div class="member-info">
      <div class="member-info-content">
        <h4>Vaishnavi Chellappa</h4>

```

```

        <span>Team Member</span>
    </div>
</div>
</div>
</div>
</div>
</div>
</section>
<!-- End Team Section -->

<!-- ===== Contact Section ===== -->
<section id="contact" class="contact section-bg">
    <div class="container" data-aos="fade-up">

        <div class="section-title">
            <h2>Contact</h2>
            <p>Contact Us</p>
        </div>

        <div class="row">

            <div class="col-lg-6">

                <div class="row">
                    <div class="col-md-12">
                        <div class="info-box">
                            <i class="bx bx-map"></i>
                            <h3>Our Address</h3>
                            <p>
                                SSN College of Engineering <br>
                                SH 49A, Kalavakkam, <br>
                                Tamil Nadu - 603110<br><br>
                            </p>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
</section>

```

```

    </div>
  </div>
  <div class="col-md-6">
    <div class="info-box mt-4">
      <i class="bx bx-envelope"></i>
      <h3>Email Us</h3>
      <p>T3156@insightstoday.in<br>support@insightstoday.in</p>
    </div>
  </div>
  <div class="col-md-6">
    <div class="info-box mt-4">
      <i class="bx bx-phone-call"></i>
      <h3>Call Us</h3>
      <p>+044 2746 9700<br>+044 2746 9701</p>
    </div>
  </div>
</div>
</div>
<div class="col-lg-6">
  <form action="forms/contact.php" method="post" role="form" class="php-email-form">
    <div class="row">
      <div class="col-md-6 form-group">
        <input type="text" name="name" class="form-control" id="name"
placeholder="Your Name" required>
      </div>
      <div class="col-md-6 form-group mt-3 mt-md-0">
        <input type="email" class="form-control" name="email" id="email"
placeholder="Your Email" required>
      </div>
    </div>
  </form>

```

```

    </div>
    <div class="form-group mt-3">

        <input type="text" class="form-control" name="subject" id="subject"
placeholder="Subject" required>
    </div>
    <div class="form-group mt-3">
        <textarea class="form-control" name="message" rows="5"
placeholder="Message" required></textarea>
    </div>
    <div class="my-3">
        <div class="loading">Loading</div>
        <div class="error-message"></div>
        <div class="sent-message">Your message has been sent. Thank you!</div>
    </div>
    <div class="text-center"><button type="submit">Send
Message</button></div>
    </form>
</div>
</div>
</div>
</section>
<!-- End Contact Section -->

</main>
<!-- End #main -->

<!-- ===== Footer ===== -->
<footer id="footer">
    <div class="footer-top">
        <div class="container">
            <div class="row">

```

```
<div class="col-lg-4 col-md-6">
  <div class="footer-info">
    <h3>Insights Today</h3>
    <p class="pb-3"><em>To contact us:</em></p>
    <p>
      SSN College of Engineering <br>
      SH 49A, Kalavakkam, <br>
      Tamil Nadu - 603110<br><br>
      <strong>Phone:</strong> +91 8248731703<br>
      <strong>Email:</strong> T3156@cse.ssn.edu.in<br>
    </p>
    <div class="social-links mt-3">
      <a href="#" class="twitter"><i class="bx bxl-twitter"></i></a>
      <a href="#" class="facebook"><i class="bx bxl-facebook"></i></a>
      <a href="#" class="instagram"><i class="bx bxl-instagram"></i></a>
      <a href="#" class="google-plus"><i class="bx bxl-skype"></i></a>
      <a href="#" class="linkedin"><i class="bx bxl-linkedin"></i></a>
    </div>
  </div>
</div>
<div class="col-lg-4 col-md-6 footer-newsletter">
  <h4>Our Newsletter</h4>
  <p>To subscribe to our services, please type your email below.</p>
  <form action="" method="post">
    <input type="email" name="email"><input type="submit"
value="Subscribe">
  </form>

</div>
</div>
</div>
</div>
```

```
<div class="container">
  <div class="copyright">
    &copy; Copyright <strong><span>Insights Today</span></strong>. All Rights
Reserved
  </div>
  <div class="credits">
    Designed by SSNCE team - 3156
  </div>
</div>
</footer>
<!-- End Footer -->

<div id="preloader"></div>

<a href="#" class="back-to-top d-flex align-items-center justify-content-center"><i
class="bi bi-arrow-up-short"></i></a>

<!-- Vendor JS Files -->
<script src="assets/vendor/purecounter/purecounter_vanilla.js"></script>
<script src="assets/vendor/aos/aos.js"></script>
<script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<script src="assets/vendor/glightbox/js/glightbox.min.js"></script>
<script src="assets/vendor/isotope-layout/isotope.pkgd.min.js"></script>
<script src="assets/vendor/swiper/swiper-bundle.min.js"></script>
<script src="assets/vendor/php-email-form/validate.js"></script>

<!-- Template Main JS File -->
<script src="assets/js/main.js"></script>

</body>

</html>
```

## dashboard.html

```
<html>
<body style="background-color:black;">
<br>
<br>
<title>Dashboard</title>
<a href="index.html">

    <button style="background-color: rgb(227, 97, 62); border-radius:4px;margin-left:
50px; font-size: 25px; font-family: 'Times New Roman', Times, serif;">
        Home
    </button>

</a>

<center><h1 style="color:grey;font-size:45;font-family: 'Times New Roman';text-
align:center">Dashboard</center></h1>
<br>
<br>
<br>
<center>
<iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my
_folders%2FGlobal%2BSales%2BData%2BAnalytics%2B-
%2BDeliverables%2FSales%2BDashboard&closeWindowOnLastView=true&a
mp;ui_appbar=false&ui_navbar=false&shareMode=embedded&action
=view&mode=dashboard&subView=model1000001847fb9ce82_000000000"
width="1500" height="1000" frameborder="0" gesture="media" allow="encrypted-
media" allowfullscreen=""></iframe>

</center>>
</body>
</html>
```

## Report.html

```
<html>
<body style="background-color:black;">
<br>
<br>
<title>Report</title>
<a href="index.html">

    <button style="background-color: rgb(227, 97, 62); border-radius:4px;margin-left:
50px; font-size: 25px; font-family: 'Times New Roman', Times, serif;">
        Home
    </button>
</a>

<center><h1 style="color:grey;font-size:45;font-family: 'Times New Roman';text-
align:center">Report</center></h1>

<br>
<br>
<br>

<center>
    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FGlobal%2BSales
%2BData%2BAnalytics%2B-
%2BDeliverables%2FSales%2BReport%2BFinal&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&
action=edit" width="900" height="700" frameborder="0" gesture="media"
allow="encrypted-media" allowfullscreen=""></iframe>

</center>
</body>
</html>
```



## Story.html

```
<html>

<body style="background-color:black;">

<br>

<br>

<title>Story</title>

<a href="index.html">

    <button style="background-color: rgb(227, 97, 62); border-radius:4px;margin-left:
50px; font-size: 25px; font-family: 'Times New Roman', Times, serif;">
        Home
    </button>

</a>

<center><h1 style="color:grey;font-size:45;font-family: 'Times New Roman';text-
align:center">Story</center></h1>

<br>

<center>

    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_fold
ers%2FGlobal%2BSales%2BData%2BAnalytics%2B-
%2BDeliverables%2FSales%2BStory&closeWindowOnLastView=true&ui
_appbar=false&ui_navbar=false&shareMode=embedded&action=vie
w&sceneId=model00000184819d52db_00000003&sceneTime=1150"
width="800" height="600" frameborder="0" gesture="media" allow="encrypted-
media" allowfullscreen=""></iframe>

</center>

<br>

<br>

</body>

</html>
```

## ❖ **GitHub & Project Demo Link**

**GitHub link:**

<https://github.com/IBM-EPBL/IBM-Project-12502-1659452330>

**Project Demo link:**

<https://drive.google.com/file/d/1dmZD9airlw6gFgWZQAVCWqoUoZOXnfR-/view>