IBM NALAIYA THIRAN

KNOWLEGE INSTITUTE OF TECHNOGY

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CHAPTER – 1

INTRODUCTION

1.1 ROJECT OVERVIEW

Data is being generated very rapidly due to increase in information in everyday life. Huge amount of data gets accumulated from various organizations that is difficult to analyze and exploit. Processing, analyzing and communicating this data are a challenge. Analyzing and visualizing this data for understanding is a difficult task. Therefore, a system is required which will effectively analyze and visualize data. This paper focuses on a system which will visualize sales data which will help users in applying intelligence in business, revenue generation, and decision making, managing business operation and tracking progress of tasks. By using IBM Cognos Analytics and the global sales data we are going to identify patterns, relationships, connections using dataset, exploring relationship in the data, and visualizing the data and it will provide a guesswork of events and will help to find answers that can be sufficiently disguised for a particular problem to come up with an optimal conclusion and a convincing solution.

1.2 PURPOSE

Data analytics is a discipline focused on extracting insights from data. It comprises the processes, tools and techniques of data analysis and management, including the collection, organization, and storage of data. The chief aim of data analytics is to apply statistical analysis and technologies on data to find trends and solve problems. Data analytics has become increasingly important in the enterprise as a means for analyzing and shaping business processes and improving decision-making and business results.

CHAPTER – 2

LITERATURE SURVEY

Paper-1: Data mining with its role in marketing, sales support and customer identification data analysis [Mohammed Bin Ali Al Atif, Ahmed H. Shakir, et al, 2022]

In today's technologically advanced age, every company wants to equip its sales force with a sustainable sales force automation system to improve sales performance and customer relationship capabilities. This study examines the impact of big data analytics on the sales performance of the organizations. Current advances in information technology and the development trend of social networks have had changed the way salespeople perform their daily activities. Data related to customer buying behavior is being generated at an unprecedented rate due to the technological revolution and the advent of sources such as social networks. Sales performance helps to efficiently and effectively achieve sales process goals by looking at opportunities and improving close rates. The data analytics established in this study as a technology or system provides useful insights into customer behavior by uncovering hidden patterns in BD to aid in the development of effective strategies for sales. In the era of the big data revolution, the method of strategy formulation in sales has changed, and organizations need to use data analytics systems to meet their needs. Individual characteristics is said to be the individual perception of big data analytics. In order to improve the objectivity of the comparison results, companies can add other models to participate in the comparison, so as to obtain accurate data analysis results. Data analytics is of great significance in this era of data overflow, and can provide unforeseen insights and benefits to decision makers in various areas. If properly exploited and applied, big data analytics has the potential to provide a basis for advancement. By applying such analytics to the data, valuable information can be extracted and exploited to enhance decision making and support informed decisions

Paper-2: Impact of big data analytics on sales performance in pharmaceutical organizations: The role of customer relationship management capabilities

[Muhammad Shahbaz, Lili Zhai, et al, 2021]

The technique of studying raw data to conclude a specific piece of information is known as data analytics. It is employed to assist people and organizations in making sense of data. They are applied to the analysis of raw data to discover trends and insights. We can infer conclusions about the information they contain by looking at select datasets and identifying trends. Data analytics is carried out using specialized hardware and software. These tools and methods are frequently employed in a variety of commercial sectors to empower businesses to take wise business decisions. Additionally, the analytics give companies the ability to react quickly to changing market trends and acquire an advantage over rival companies. Various efforts can benefit from some of the components of this analytics process. A good data analytics initiative will give you a clear picture of where you are, where you have been, and where you should go by merging these elements. To improve corporate performance, however, is data analytics' ultimate objective. Depending on the specific application, the data that is evaluated may be made up of new data that has been processed for real-time analytics or historical records. For the most effective data manipulation, data analytics uses a variety of software tools, including spreadsheets, data visualization, and reporting tools, data mining software, or open-source programming languages. Inside the data analytics process, the data analytics applications involve more than just analyzing data, especially on advanced analytics projects. After the data are analyzed, it will produce charts and other infographics that can be designed to make findings easier to understand. Data visualizations often are incorporated into BI dashboard applications that display data on a single screen and can be updated in real-time as new information becomes available.

Paper-3: Data Analysis and Visualization of Sales Dataset using Power BI [Ms. Sarika Singh, Ms. Lavina Jadhav, 2022]

Data analytics enables organizations to analyze all of their data to identify patterns and generate insights to inform and, in some cases, automate decisions by relating Smart and actionable. Today's best solutions support end-to-end analytics, from accessing, preparing and analyzing data to operating analysis and monitoring results. When analyzing data, the main task is defined objects to analyze and separate data time period analyzed, to ensure the eccentricity of data analysis results. Data is useless if it cannot be analyzed, understood and applied in context. A picture is worth a thousand words, and business analytics can help create a picture by visualizing data to provide retailers with business insights. With this information, businesses can make meaningful changes to their future plans to maximize profits and success. Most raw data, especially large-scale databases, are worthless in their unprocessed state. We can extract valuable insights from this bit store using Power BI tools. The main goal here is to read and analyze the available data sets to generate business insights and overviews. The success of any organization, company or business depends on its business division as it is. The only part of the organization that earns revenue and money and delivers profits. The importance of selling is as follows: Sales data is a broad word that includes many types of metrics, but in general if you can measure something based on sales process is the actionable sales data. Through visualization, data analysis helps students understand concepts. Much technology is available to perform business data analysis, but Power BI visualization technique is the most popular techniques to learn the basics of data analysis. With the help of visualization techniques, data interpretation and data representation can be done quickly and easily. This strategy is useful for a more solid conceptual design.

Paper-4: Survey on Growth of Business using Data Analytics for Business Intelligence in Real-Time world [Madamanchi Brahmaiah, Talluri Sreekrishna, 2021]

Data analytics strategies can screen developments and metrics data might in any other case be misplaced withinside the mass of facts. These facts can then be used to optimize procedures to growth the overall performance of a commercial enterprise or system. Data analytics is the technology of studying uncooked records to make conclusions approximately that facts. Many of the strategies and procedures of records analytics has been automatic into mechanical procedures and algorithms that paintings over uncooked records for human consumption. Data analytics is the technology of reading uncooked statistics to make conclusions approximately data information. The strategies and approaches of statistics analytics were computerized into mechanical approaches and algorithms data paintings over uncooked statistics for human consumption. Data analytics assist a business optimize its performance. Companies everywhere in the international try and get the advantages from get entry to the statistics to improve their overall performance and boom their revenue, however processing heterogeneous varieties of information to extract the precious information is a massive hassle that many businesses try and solve. One of the most essential developments is “Big Data Analytics”, a generation for Storing, Processing, and analyzing the information, groups are Managing information to apply it in new ranges and direct decision-makers. Companies can use the insights they advantage from statistics analytics to tell their decisions, main to higher outcomes. Data analytics removes lots of the guesswork from planning marketing campaigns, selecting what content material to create, growing products, and more. Data analytics additionally offers you beneficial insights into how your campaigns are appearing so that you could fine-track them for top of the line outcomes. Data analytics offer you with extra insights into your customers, permitting you to tailor customer support to their needs, offer extra personalization, and construct more potent relationships with them.

2.2 Problem Statement

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Company	To make better business decisions to increase the sales.	There are some improper interpretations in the data.	There are lots of data available, but interpreting that data correctly is vital. We will be at an extreme disadvantage if we misinterpret facts and make decisions based on that.	Frustrated
PS-2	Marketing team	To create a marketing strategy for products.	There can be time constraint.	Market research involves a detailed process of collecting and analysing data, which is time-consuming.	Irate and falter
PS-3	Sales Team	To analyse the data	Lack of transparency in the data	We can't fully trust the data. According to a study, 70% of marketers admitted they have poor quality and inconsistent data.	Annoyed
PS-4	Product manager	To make better business decision	Lack of understanding of how to use data	The common challenges in marketing analytics management are a lack of understanding of how to read and use data to bring more growth to a business.	Doubtful
PS-5	Organization	Search for better analytical tool	Identify the best tool is hard	There might be hundreds of useful tools as a solution for analytics. Therefore, it creates a new challenge	Despair

CHAPTER – 3

IDEATION & PROPOSED SOLUTION

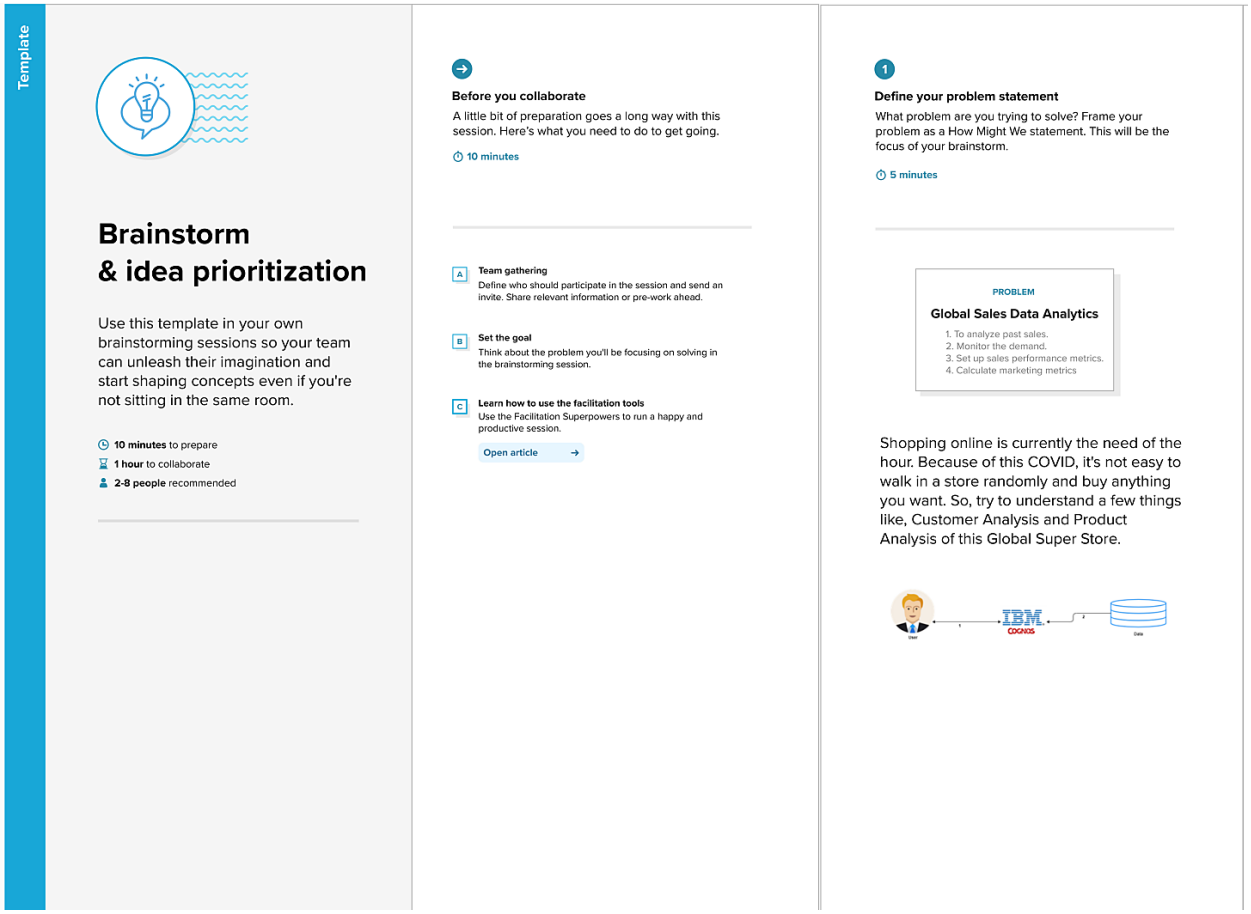
3.1 Empathy Map Canvas

We have listed out our thoughts based on various factors like advantages and disadvantages, places to be improved, what are the difficulties faced and the difficulties which are eased.

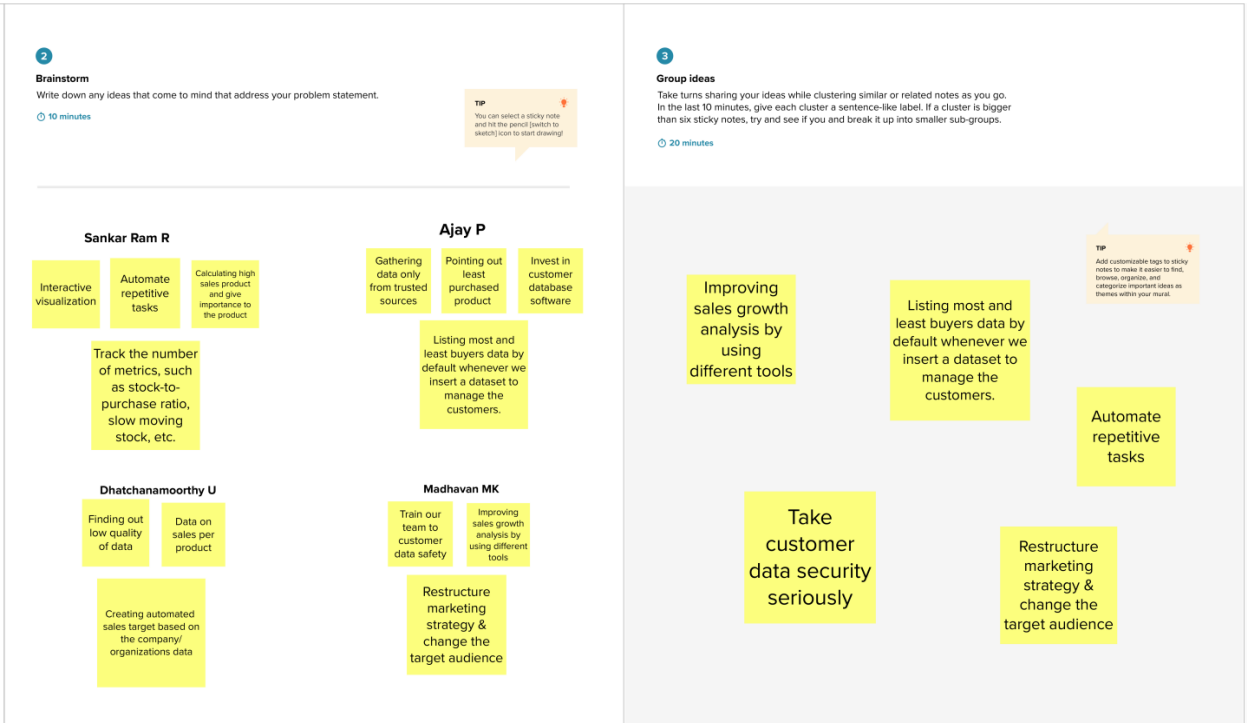
3.2 Ideation & Brainstorming

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem-solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich number of creative solutions.

Step-1: Team Gathering, Collaboration and Select the Problem Statement



Step-2: Brainstorm, Idea Listing and Grouping



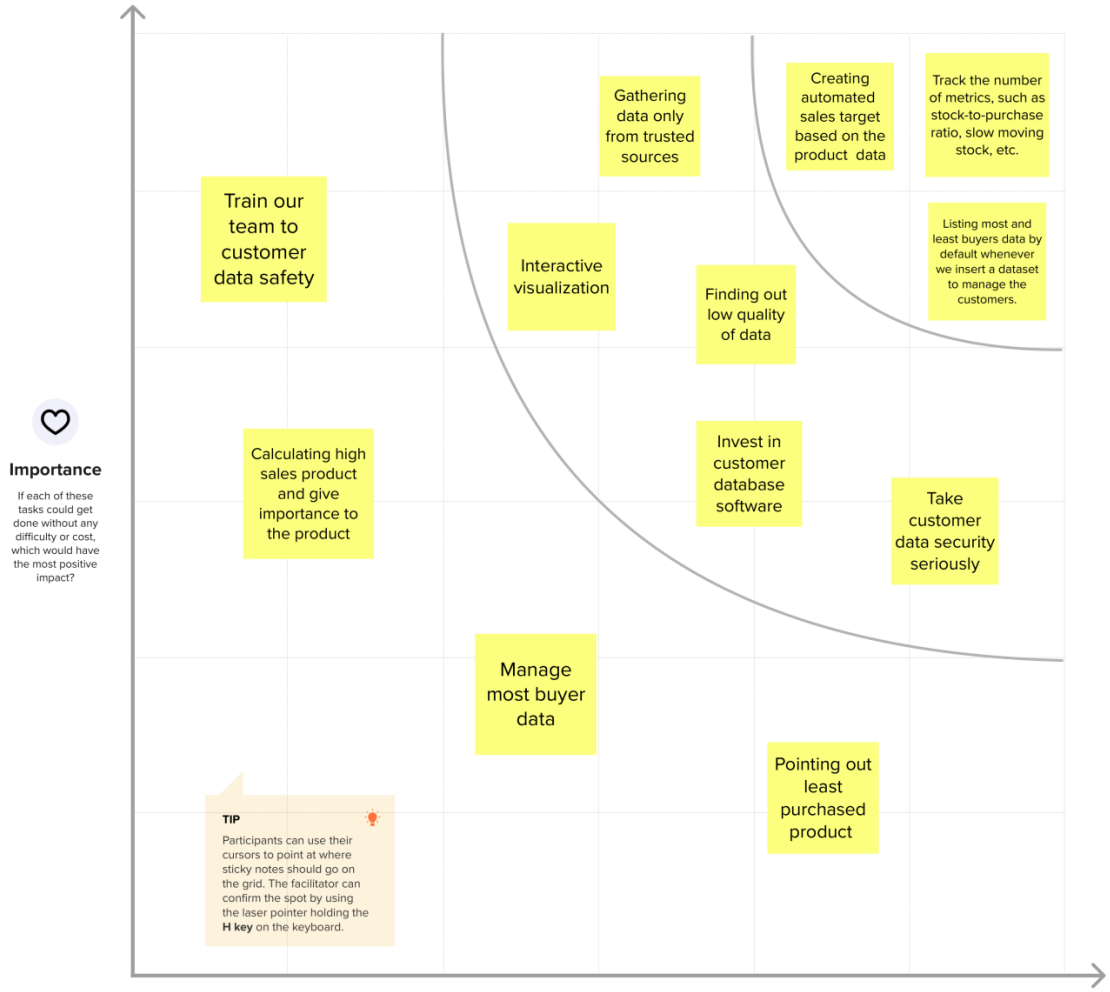
Step-3: Idea Prioritization

4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

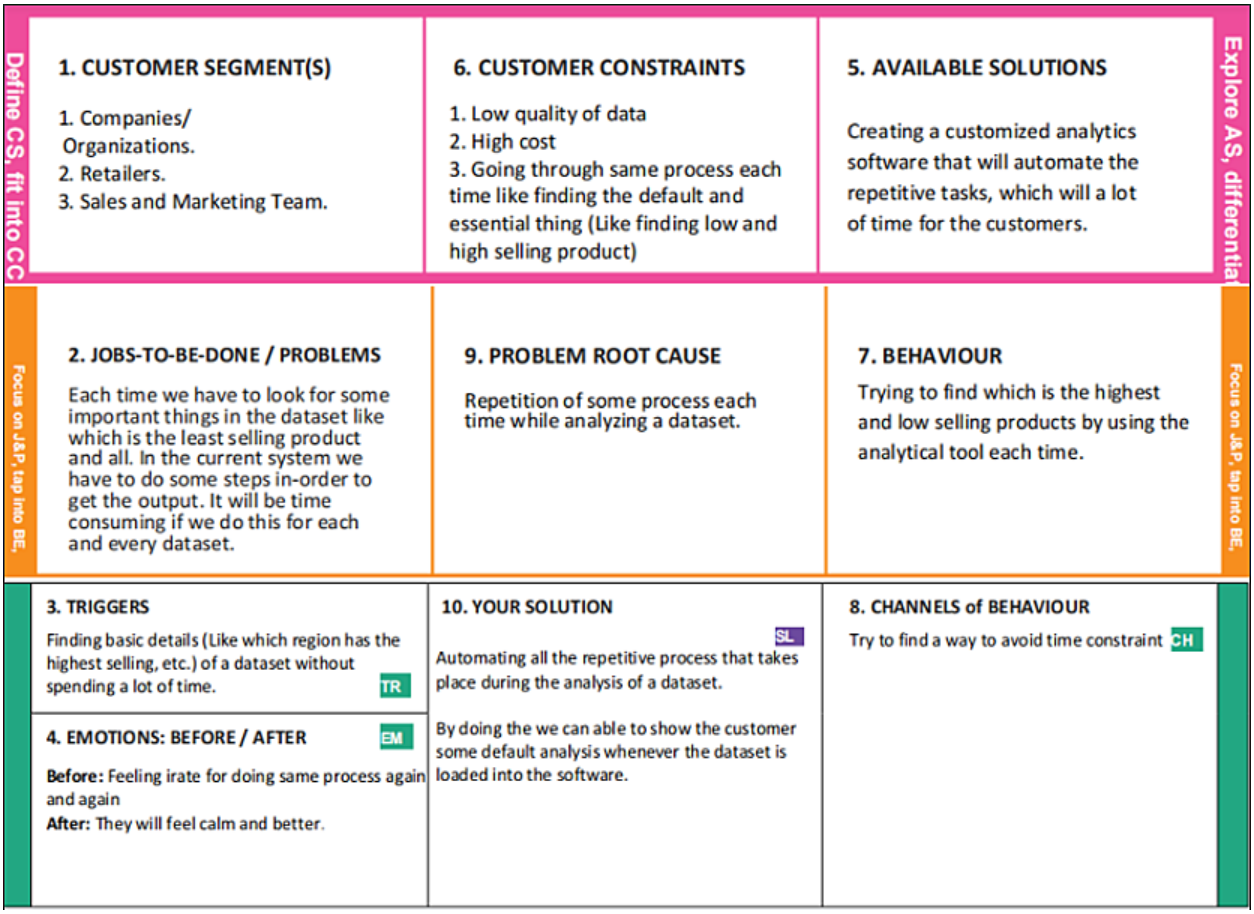


3.3 Proposed Solution

S.No	Parameter	Description
1.	**Problem Statement (Problem to be solved)**	Customer, Product analysis and detect emerging trends in business using data analytics. (Sales analysis is an important aspect of running a successful business. Through sales analytics, we can decide which products to focus on, where to sell and how best to reach customers.)
2.	**Idea / Solution description**	There are many ready-made analytics software's but that is not the cure to all problems. To tackle this, we are creating a customized analytics model that will help helps businesses of all sizes grow revenue, automate tasks, make smarter decisions and keeps you updated of your customer behavioural changes
3.	**Novelty / Uniqueness**	The customized analytics model will help to get a successful data analytics initiative that will provide a clear picture of where you are, where you have been and where you should go. By using this model. So, this model will stand apart from others.
4.	**Social Impact / Customer Satisfaction**	This model will help various businesses to make informed business decisions, improve efficiency, increase revenue and minimize the financial loss.
5.	**Business Model (Revenue Model)**	This model help companies better understand their customers, evaluate their ad campaigns, personalize content and create content strategies, so it will be a successful model.
6.	**Scalability of the Solution**	Whatever the dataset is, the customized model will produce a clear insight of the data with good and interactive visualization. That data visualization is used to identify patterns, trends, etc.

3.4 Problem Solution fit

The problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why.



CHAPTER-4

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

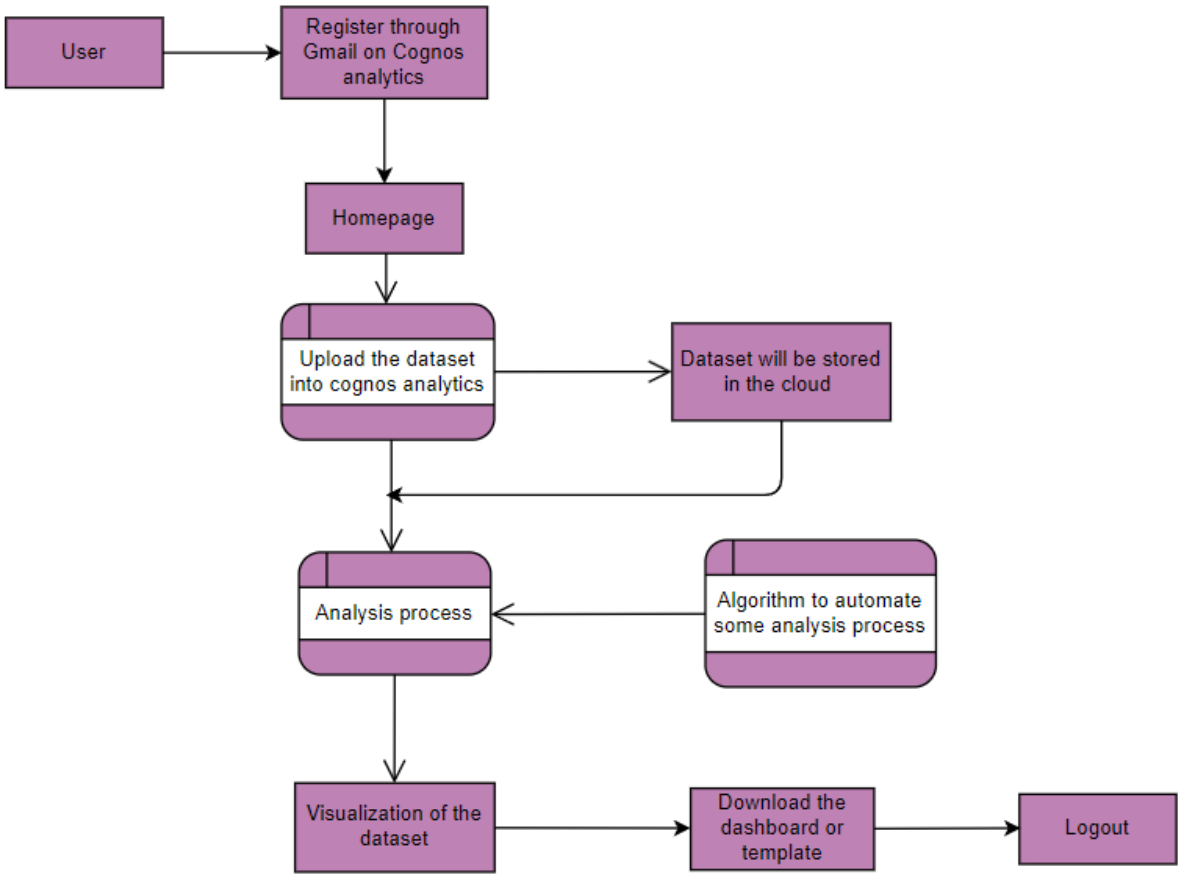
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
1.	**User Registration**	Registration through Form, Registration through Gmail
2.	**User Confirmation**	Confirmation via Email
3.	**Login**	The user should login to the system by using valid user credentials.
4.	**Dataset**	Upload dataset into the analytics tool.
5.	**Analysis**	It involves gathering all the information, processing it, exploring the data, and using it to find patterns and other insights.
6.	**Create Dashboard**	Create Charts, Graphs, Tables, etc.
7.	**Reporting**	The reporting function helps users have complete control over their business. The real-time reporting collects current information and displays the data on an intuitive user interface.

4.2 Non-Functional requirement

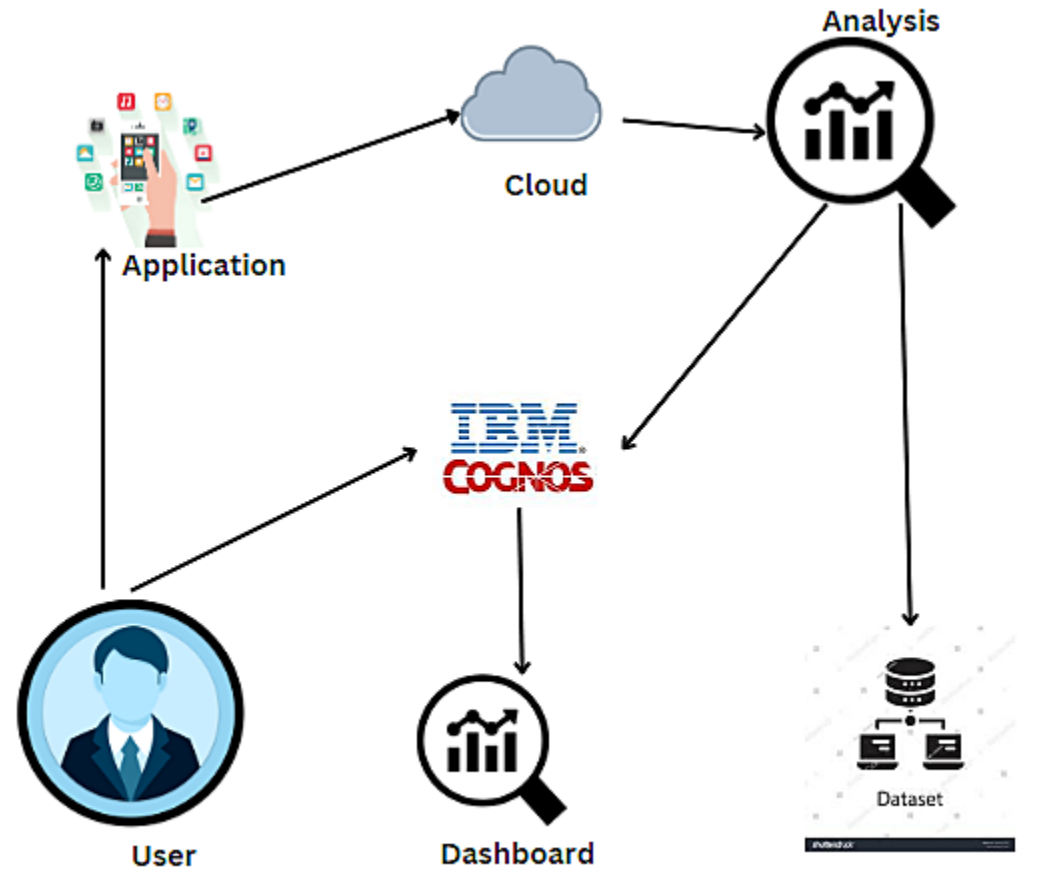
FR No.	Non-Functional Requirement	Description
1.	**Usability**	Optimized resources and it can be used by everyone.
2.	**Security**	Anyone with correct Log In credentials can view the Dashboards/Templates.
3.	**Reliability**	Templates are reliable because we are uploading and accessing it through Cloud.
4.	**Performance**	It has high state of performance and efficiency.
5.	**Availability**	It is free of cost and available to everyone who wants to know about sales data.
6.	**Scalability**	Dashboards/Templates are very much Scalable, the user can modify the metrics whenever they want.

CHAPTER-5
PROJECT DESIGN

5.1 DATA FLOW DIAGRAM



5.2 Solution & Technical Architecture



5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Web user)	Registration	1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
	Login	5	As a user, I can log into the application by entering email & password		High	Sprint-1

	Dashboard	6	User can able to see the upload dataset option in the browser	The user can upload the dataset into the Cognos analytics	High	Sprint - 1
	Dashboard	7	If the user already used the Cognos analytics, we can able to see the previously uploaded dataset.		Low	Sprint - 2

CHAPTER-6

PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNNING & ESTIMATION

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Dataset exploration and preparing the dataset	1	Explore the data and look for similarities, patterns and outliers and to identify the relationships between different variables. Preparing the dataset will be done by removing the unwanted values, null values, duplicate values and the missing values.	2	Low	Sankar Ram R, Ajay P, Madhavan MK, Dhatchanamoorthy U

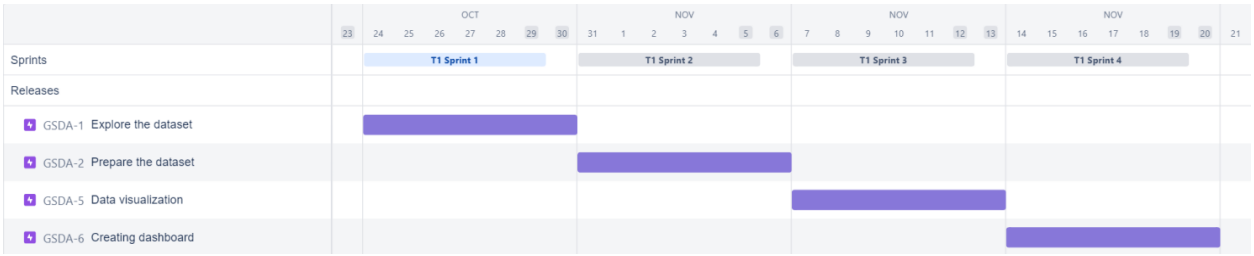
Sprint-2	Data visualization	2	Visualization of data will represent information graphically, highlighting patterns and trends in data and to achieve quick insights.	2	Low	Sankar Ram R, Ajay P
Sprint-3	Creating dashboard	3	From the data visualization we will be creating interactive dashboards	3	High	Sankar Ram R, Ajay P,
Sprint-4	Creating story and report	4	From the visualization and dashboard, we will be creating story and report	3	High	Sankar Ram R, Ajay P, Madhavan MK, Dhatchanamoorthy U

6.2 Sprint Delivery schedule

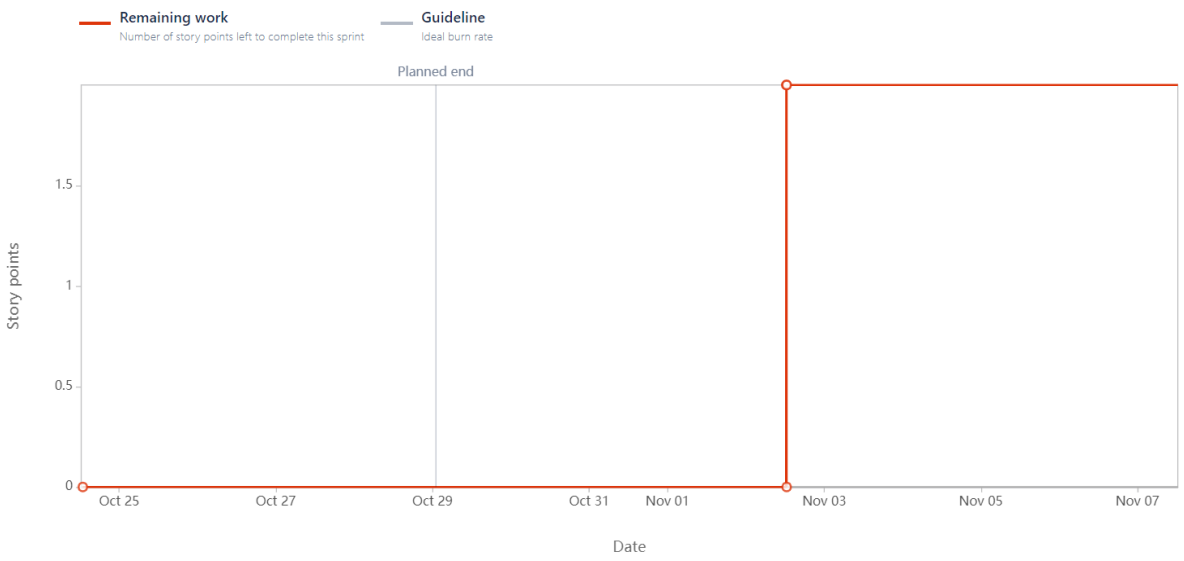
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	30	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	30	19 Nov 2022

6.3 Reports from JIRA

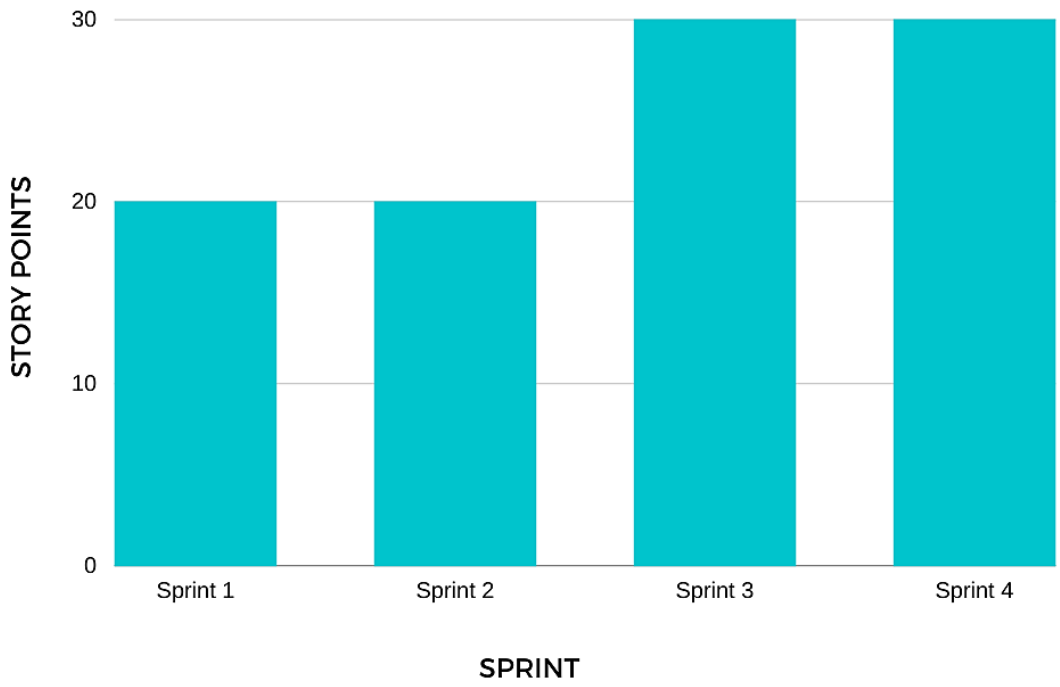
Roadmap:



Burndown Chart:



Velocity Chart



CHAPTER-7

CODING & SOLUTIONING

Feature 1:

Dataset exploration, Preparing the dataset and Data visualization:

- **Dataset exploration:** It is the process of finding what are the things that are present in the dataset.
- We have used Google collab to explore the dataset.
- Then we have used a python library called Pandas (for Python Data Analysis Library) to explore the data

Code used in data exploration:

- import pandas as pd
- pd.read_csv('/content/Global_Superstore2.csv',encoding = 'unicode_escape')
- saledata=pd.read_csv('/content/Global_Superstore2.csv',encoding = 'unicode_escape')
- Saledata.shape - To find how many rows and columns are present in the dataset.
- saledata.duplicated() - To Check for duplicate values.
- saledata.head(), saledata.tail() - Finding out how the dataset looks like by Calling head() and tail() it will by default return the first and last 5 rows of the dataset.
- Saledata.dtypes - What kind of data types are present in the dataset.
- saledata.info() - To find out the overview information about the

dataset by using the info() function.

- saledata.describe() - To get an overview of the minimum, maximum and mean value of all numerical variables in the dataset.

Preparing the dataset: It's the process of cleaning and transforming raw data prior to processing and analysis. By using the prepare data option in IBM Cognos we have prepared the dataset by creating the required calculations and navigations.

Data visualization: It is the graphical representation of information and data. By using visual elements like charts, graphs, and maps

We have created the following visualizations:

1. Segment Wise Sales , Profit And Quantity.

2. Sales By Market.

3. Sales By Sub Category And Sales By Region.

4. Country Wise Sales Using Map Points.

5. Sub Category Wise Sales And Profits Using Line And Bar Chart.

6. Sales Vs Profit Scatter Plot With Sub Categories And Regions.

7. Sales Forecast By Order Priority.

8. Sales By Sub Category Analytics.

9. Country Wise Sales Vs Profit Using Word Cloud.

10. Regional Quantity And Sales Using Radar Chart.

Visualization Link:
https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FVisualization&action=view&mode=dashboard&subView=model000001845accf416_000

00002

Feature 2

Creating Story, Report in IBM Cognos & Embedding Dashboard, Story and Report into Webpage using HTML and CSS.

Story: Data storytelling is **the ability to effectively communicate insights from a dataset using narratives and visualizations**. It can be used to put data insights into context and inspire action from your audience.

We have used IBM Cognos to create story from the given dataset

Story Link:
https://us3.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2FStory%2FProject%2Bstory&action=view&sceneId=model0000018476abad6b_00000006&sceneTime=105850

Report: In data analytics reports the present metrics, analyses, conclusions, and recommendations in an accessible, digestible visual format so everyone in an organization can make informed data-driven decisions.

We have used IBM Cognos to create reports.

Report Link:
https://us3.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FReport%2FGlobal%2BSales%2BReport1&action=run&prompt=false

Embedding Dashboard, Story and Report into Webpage:

We used HTML and CSS to create the website then we embedded the dashboard, story and report into a web page by using the <iframe> tag.

CHAPTER-8
TESTING

8.1 TEST CASES

Test case ID	Component	Feature Type	Test Scenario	Steps To Execute
HomePage_TC_OO1	Home Page	Functional	Directly enter into the homepage	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button
Dashboard_TC_OO2	Dashboard	Functional	Click dashboard option menu.It direct into Dashboard	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button
Report_TC_OO3	Report	Functional	Click dashboard option menu.It direct into Dashboard	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button
Story_TC_OO3	Story	Functional	Click Story option menu.It direct into story	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button

8.2 User Acceptance Testing

Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the [ProductName] project at the time of the release to User Acceptance Testing (UAT).

Defect Analysis

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

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	7	0	0	7
Client Application	51	0	0	51
Security	2	0	0	2
Outsource Shipping	3	0	0	3
Exception Reporting	9	0	0	9
Final Report Output	4	0	0	4
Version Control	2	0	0	2

Test Case Analysis

This report shows the number of test cases that have passed, failed, and untested

Resolution	Severity 1	Severity 2	Severity 3	Severity 4
By Design	10	4	2	3
Duplicate	1	0	3	0
External	2	3	0	1
Fixed	11	2	4	20
Not Reproduced	0	0	1	0
Skipped	0	0	1	1
Won't Fix	0	5	2	1
Totals	24	14	13	26

CHAPTER-9
RESULTS

9.1 Performance Metrics

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Screenshot / Values
1.	Dashboard design	No of Visulizations / Graphs - 10-14visualization/5-6 graphs
2.	Data Responsiveness	Users and Analyst or Developers
3.	Amount Data to Rendered (DB2 Metrics)	5 counrties
4.	Utilization of Data Filters	Sales ,profit, products, market rate and order id filtration
5.	Effective User Story	No of Scene Added - 25 user stories
6.	Descriptive Reports	No of Visulizations / Graphs - 4 visualizations/1 graph

CHAPTER-10

ADVANTAGES & DISADVANTANGES

ADVANTAGES

It helps the salesperson find vital trends, dig deep into data, and increase accuracy in forecasting results.

The team can customize their efforts and work with high-value prospects thanks to accurate analysis. It also helps find new options for the organization to explore.

More Accuracy: The overall precision of managerial forecasting, planning, and budgeting relies heavily on the available data. The completeness and accuracy of information while making such decisions and a company's capacity to handle analytics. Analytics reporting systems provide relevant and reliable information that helps make significant decisions.

Get automatic updates: A system that updates on its own, without the need for persuading or assistance from your IT department, is priceless. With an automated update option, sales analytics software will always be relevant and up to date. Businesses frequently squander time preparing for a report days in advance, only to arrive at the meeting with an out-of-date essay.

DISADVANTANGES

This may breach privacy of the customers as their information such as purchases, online transactions, subscriptions are visible to their parent companies. The companies may exchange these useful customer databases for their mutual benefits.

The cost of data analytics tools vary based on applications and features supported. Moreover some of the data analytics tools are complex to use and require training. This increases cost to the company willing to adopt data analytics tools or softwares.The information obtained using data analytics can also be misused against group of people of certain country or community or caste.

It is very difficult to select the right data analytics tools. This is due to the fact that it requires knowledge of the tools and their accuracy in analysing the relevant data as per applications. This increases time and cost to the company.

CHAPTER-11
CONCLUSION

With the right data, sales success is far more achievable and, importantly, measurable. You just need to know how to analyze this data. Sales data is enormously powerful and it's something you come by just by tracking your activities effectively. Knowing how to fully utilize it will revolutionize your sales process, leading to better lead generation, client engagement and retention and, ultimately, more sales. When coupled with the sales activities we've explored, you'll have a cycle that provides you with refined data, revealing how you can save time and make money. But remember, analyzing your data isn't a one-time event; it's a constant process. The sales industry doesn't stay still for long, and you'll want to make sure your team has the best chance it can to beat the competition.

CHAPTER-12

FUTURE SCOPE

Data Analytics eliminates guesswork and manual tasks. Be it choosing the right content, planning marketing campaigns, or developing products. Organizations can use the insights they gain from data analytics to make informed decisions. Thus, leading to better outcomes and customer satisfaction. Data analytics helps companies develop new products/services that will have better customer responses by analyzing customer preferences through surveys. This will help them create new products/services that will have a better response from customers and increase their sales revenue and profits.

Data analytics helps companies improve operations by analyzing past trends and patterns to predict future trends and patterns so that they do not miss out on opportunities for increased sales revenue or profits. For example, if a company wants to know if there is an increase in the sales of its products. Today, data analytics is being used in many fields such as healthcare, retail, transportation, manufacturing, and many others. However, there are certain areas where it can be used more effectively. Data analytics has a bright future ahead as it has more potential, which everyone can explore. There is no shortage of opportunities for those who want to explore this field and move forward with their career in this competitive market world.

CHAPTER-13

APPENDIX

13.1 Source Code

HTML & CSS:

```
<html>
<head>
<title>Global Sales Data Analytics</title>
<style>
*{
font-family: 'Trebuchet MS', 'Lucida Sans Unicode', 'Lucida Grande', 'Lucida Sans', Arial, sans-serif;
    padding: 0;
    margin: 0;
  }
  .title {
   padding: 15px;
   width: 100%;
   text-align: left;
  }
  h1 {
  text-align: center;
  padding-top: 50px;
  padding-bottom: 30px;
```

```
}
body {
 background-color: white;
}
 .Dashboard {
    text-align: center;
    color: black;
    padding: 20px;
}
.Story {
    text-align: center;
    color: black;
}
.Report {
    text-align: center;
    color: black;
}
ul {
    margin: 0;
    padding: 0;
}
li {
    display: inline-block;
```

```
        margin-right: 20px;
    }
    nav {
        padding: 15px;
        font-size:larger;
        text-align: right;
        display: block;
        background-color:royalblue;
        color: white;
    }
    a {
        text-decoration: none;
        color: black;
}
    a:hover {
        color: white;
    }
    .definition {
        padding: 40px;
    }
    p {
        font-size: larger;
    }
```

```
iframe {
    align-content: center;
}
img {
    padding: 20px;
    padding-left: 70px;
}
  </style>
  </head>
  <body>
   <header>
   <nav>
   <h1 class="title">Global Sales Data Analytics</h1>
   <ul>
    <li><a href="#Dashboard"><b>Dashboard</b></a></li>
    <li><a href="#Story"><b>Story</b></a></li>
    <li><a href="#Report"><b>Report</b></a></li>
    </ul>
    </nav>
   </header>
   <img src="/Bg.jpg">
   <div class="definition">
    <h2>Project Description</h2><br>
```

Shopping online is currently the need of the hour. Because of this COVID, it's not easy to walk in a store randomly and buy anything you want. So, try to understand a few things like, Customer Analysis and Product Analysis of this Global Super Store.

<hr>

<h1> Dashboard</h1>

<iframe src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FProject_Dashboard&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model000001846fa13785_00000000" width="1250" height="900" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

<h1>Story</h1>

<iframe src="https://us3.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2FStory%2FProject%2Bstory&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&sceneId=model0000018476abad6b_00000006&sceneTime=0" width="1250" height="900" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

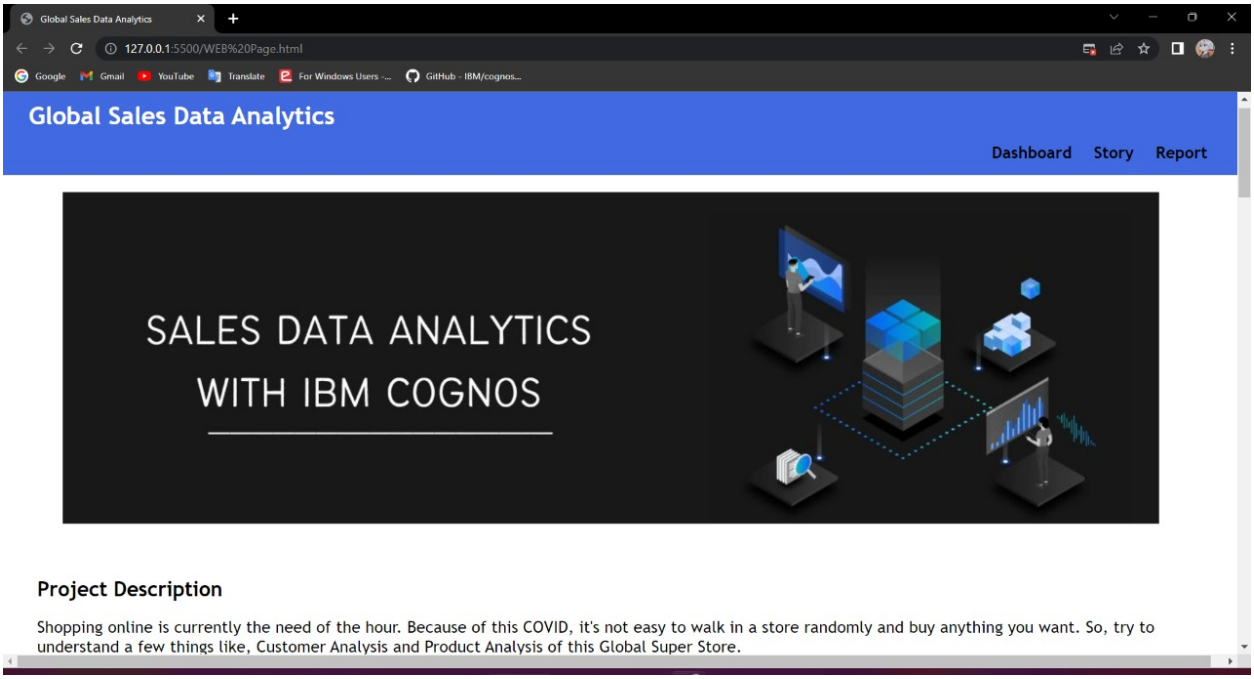
<h1> Report</h1>

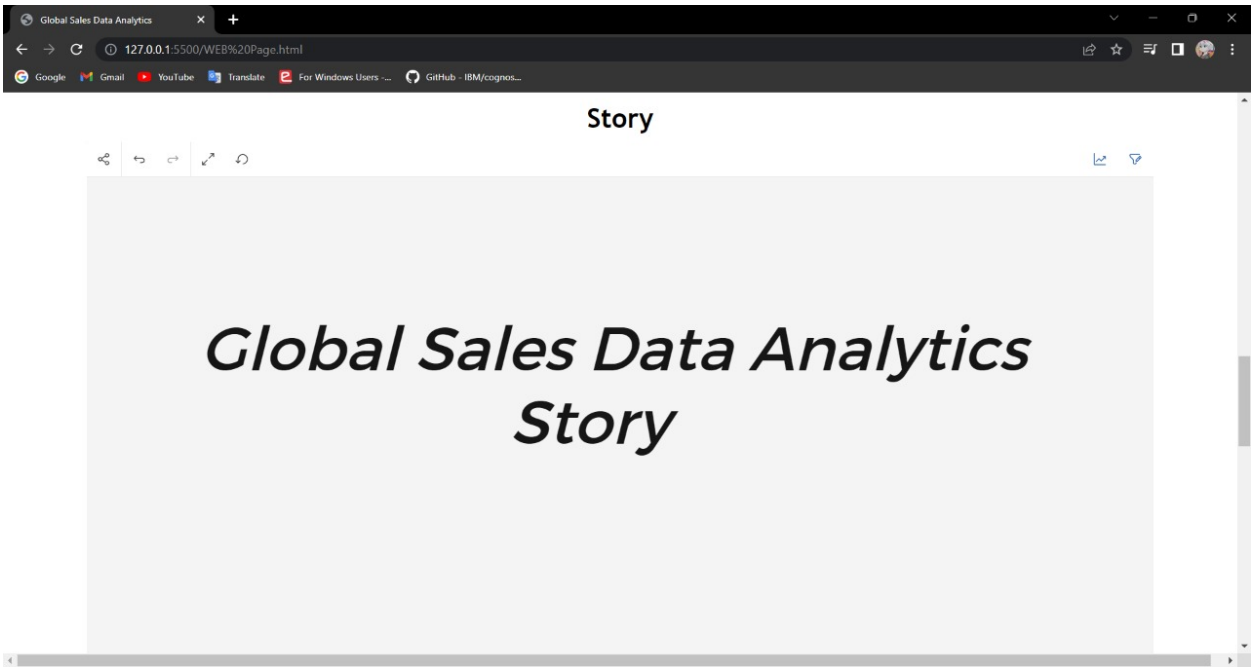
<iframe src="https://us3.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FGlobal%2BSales%2BReport1&closeWindowOnLastView=true&ui_appbar=false&ui

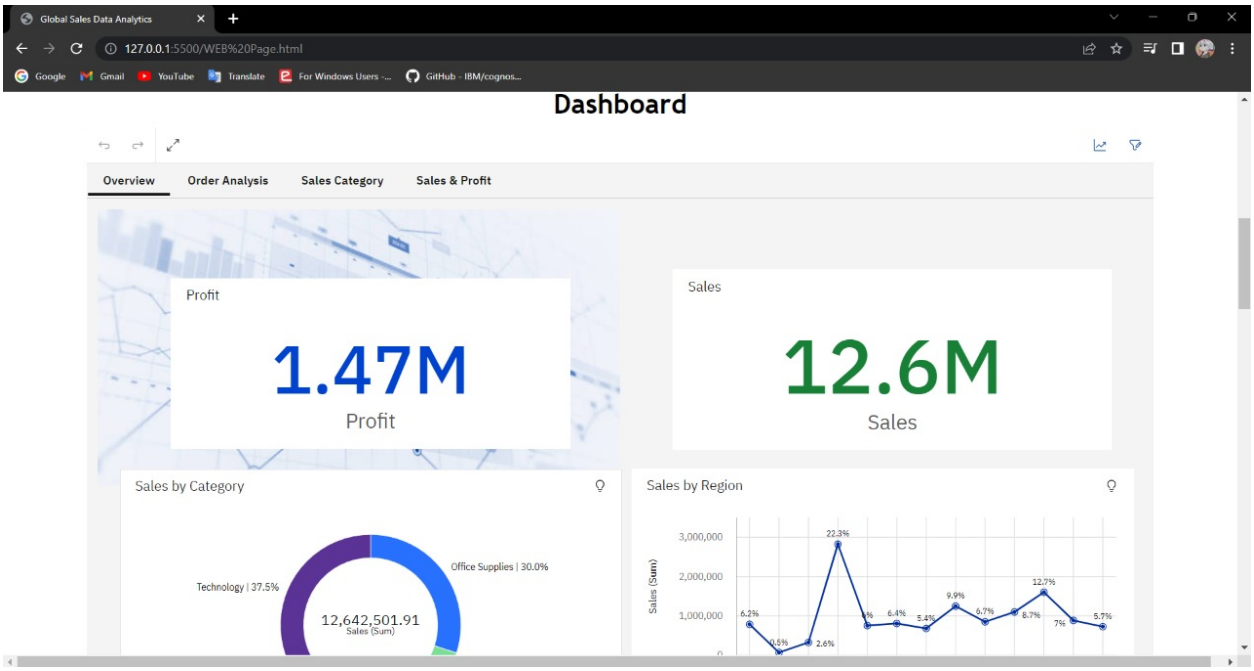
_navbar=false&shareMode=embedded&action=run&prompt=false" width="1250" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

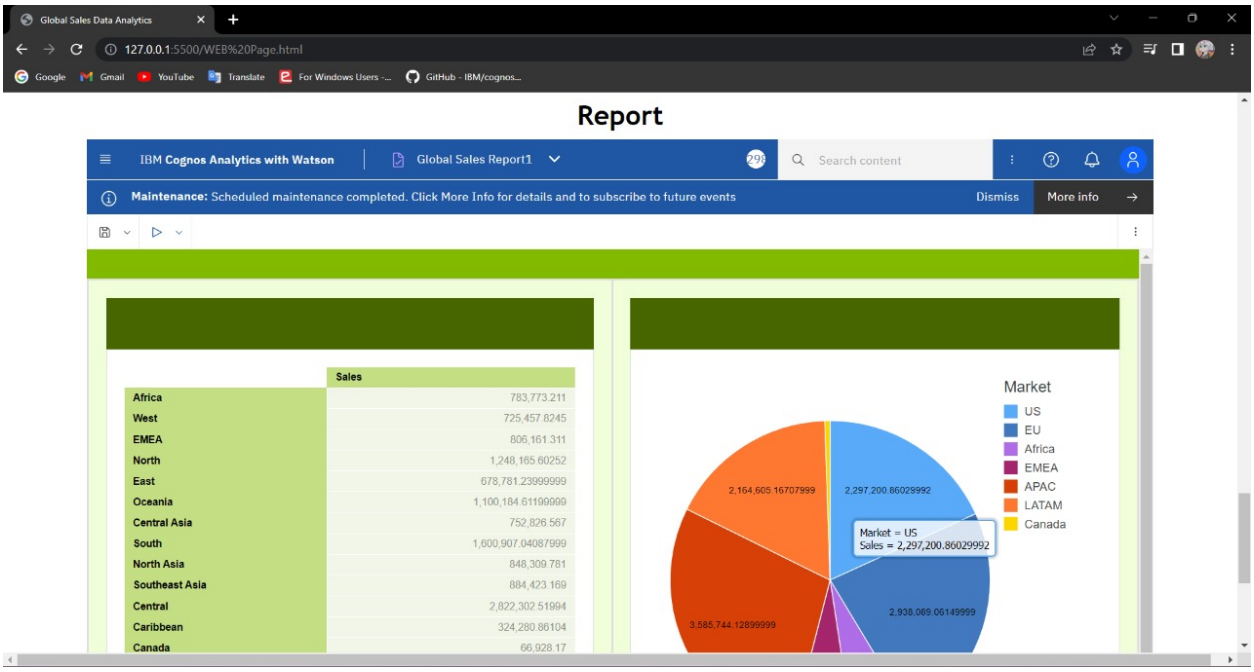
</body></html>

13.2 Screenshots




Global Sales Data Analytics
127.0.0.1:5500/WEB%20Page.html
Google
Gmail
YouTube
Translate
For Windows Users -...
GitHub - IBM/cognos...
Story
Global Sales Data Analytics Story


Global Sales Data Analytics
127.0.0.1:5500/WEB%20Page.html
Google
Gmail
YouTube
Translate
For Windows Users -...
GitHub - IBM/cognos...
Dashboard
Overview
Order Analysis
Sales Category
Sales & Profit
Profit
1.47M
Profit
Sales
12.6M
Sales
Sales by Category
Technology | 37.5%
Office Supplies | 30.0%
12,642,501.91
Sales (Sum)
Sales by Region
Sales (Sum)
3,000,000
2,000,000
1,000,000
6.2%
0.5%
2.6%
22.3%
6.4%
5.4%
9.9%
6.7%
8.7%
12.7%
7%
5.7%


Global Sales Data Analytics
127.0.0.1:5500/WEB%20Page.html
Google
Gmail
YouTube
Translate
For Windows Users -...
GitHub - IBM/cognos...
Report
IBM Cognos Analytics with Watson
Global Sales Report1
Search content
Maintenance: Scheduled maintenance completed. Click More Info for details and to subscribe to future events
Dismiss
More info
Sales
Africa 783,773.211
West 725,457.8245
EMEA 806,161.311
North 1,248,165.60252
East 678,781.23999999
Oceania 1,100,184.61199999
Central Asia 752,826.567
South 1,600,907.04087999
North Asia 848,309.781
Southeast Asia 884,423.169
Central 2,822,302.51994
Caribbean 324,280.86104
Canada 66,928.17
Market
US
EU
Africa
EMEA
APAC
LATAM
Canada
2,164,605.16707999
2,297,200.86029992
Market = US
Sales = 2,297,200.86029992
3,585,744.12899999
2,938,069.06149999

13.3 GitHub and Project Demo Link

GitHub - https://github.com/IBM-EPBL/IBM-Project-3316-1658548558

Project Demo -

CHAPTER 14

REFERENCES

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- https://www.glew.io/
- https://www.zendesk.com/in/blog/guide-sales-analy%20tics/
- https://www.ibm.com/in-en/analytics/predictive-analytics
- https://developer.ibm.com/tutorials/data-visualization-a-powerful-tool-for-visualizing-insight-data-overview/
- https://www.ibm.com/docs/en/cognos-analytics/11.1.0?topic=dashboards-cognos-analytics-tutorial
- https://www.ibm.com/docs/en/cognos-analytics/11.1.0?topic=started-getting-cognos-analytics
- https://www.researchgate.net/publication/359692412_Data_mining_with_its_role_in_marketing_sales_support_and_customer_identification_data_analysis
- https://www.researchgate.net/publication/351153157_Impact_of_big_data_analytics_on_sales_performance_in_pharmaceutical_organizations_The_role_of_customer_relationship_management_capabilities
- https://www.ijraset.com/research-paper/data-analysis-and-visualization-of-sales-dataset-using-power-bi
- https://www.researchgate.net/publication/354780227_Survey_on_Growth_of_Business_using_Data_Analytics_for_Business_Intelligence_in_Real-Time_world