GLOBAL SALES DATA ANALYTICS

IBM PROJECT REPORT

2022

Submitted by

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Team ID: PNT2022TMID31896

College : Karpagam Institute Of Technology, Coimbatore

Project Report

Date	19 November 2022
Team ID	PNT2022TMID31896
Project Name	Global Sales Data Analytics

1. INTRODUCTION

1.1 Project Overview

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. It has 51291 Rows and 24 Columns.

1.2 Purpose

To create data visualization charts like those mentioned below:

1. Column Graph Showing Sales,Quantity and Profit By Segment.
2. Pie Chart Showing Sales By Order Priority and Sales.
3. TreeMap showing Sales for Sub-Category Hierarchy and Bar Graph showing Sales By Region.
4. Geographical Map showing Top-10 Country-Wise Sales coloured by Region.
5. Line Graph Showing Profit and Sales By Sub-Category.
6. Bullet Chart Showing Sales Analytical Values Across Different Sub- Categories
7. Scatter Plot showing Sales by Profit with points for Sub-Category.
8. Line Graph showing Regional Sales Forecast.
9. Line Graph showing Sales and Profit for Month_Order
10. Box Plot showing Sales Sub Category with Segment Key.
11. Sales Bullet Chart By Ship Mode
12. Geographical Map for Showing Top-10 Countries By Sale
13. Radar Graph for showing Regional Sales By Segment

14. To Create Word Cloud for Country-Wise Sales a Bar Graph for Sales By Region.

15. Summary Graph for Sales,Profit,Quantity and Discount and a Bar Graph for Sales By Sub-Category.

2 LITERATURE SURVEY

2.1 EXISTING PROBLEM

- If we are finding unusual patterns within our data analysis or our statistical significance is not strong enough, we might not have enough data to make valid conclusions
- Data is meaningless without context and without context, we cannot turn data into information
- Without doing data analysis, we won't get the opportunity to evaluate the data before making actionable plans
- Information is useless without being able to apply to something

2.2 REFERENCES

REFERENCES	AUTHORS
Predictive Sales Analytics	1. Johannes Habel Associate Professor of Marketing University of Houston 2. Sascha Alavi, Professor of Sales Management and Chair of the Sales Marketing Department University of Bochum 3. Nicolas Heinitz Research Associate University of Bochum
Data Analytics	1. Nada Elgendy , University of Oulu. 2. Ahmed Elragal, Research Associate

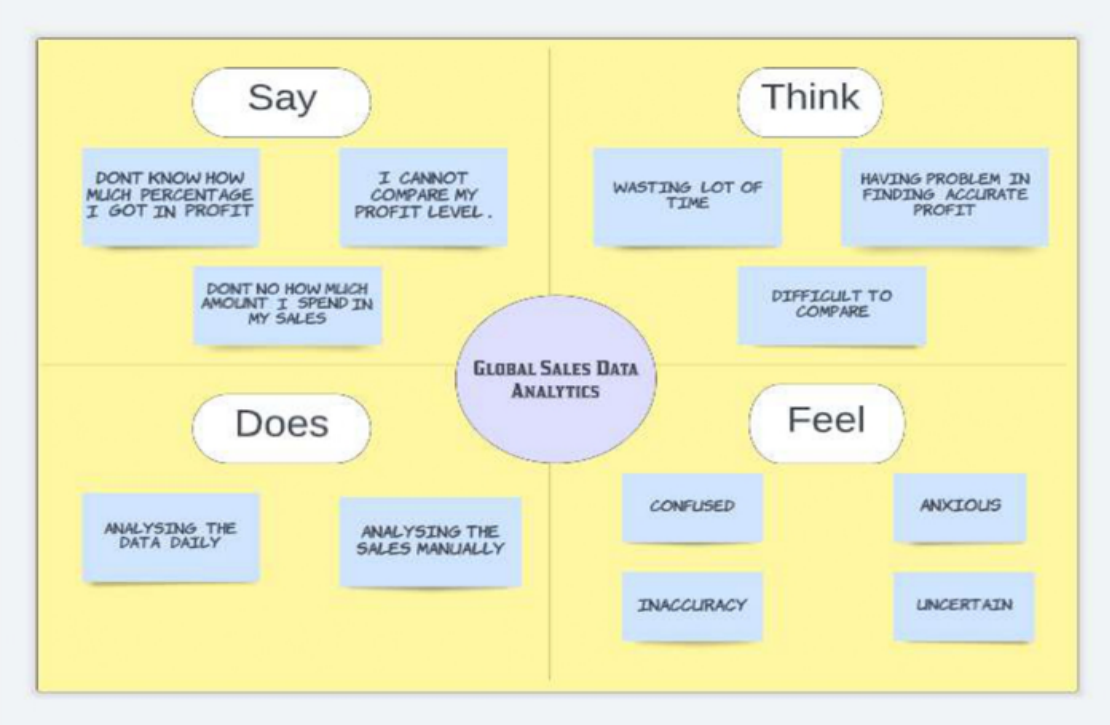
Top-down Data Analysis with Tree maps	1. M. Tennekes, Research Associate Research Associate 2. E. de Jonge, Associate Professor of University of Houston 3. Jian Pei Research Associate University of Bochum
Parallel Arc Diagrams: Visualizing Temporal Interactions	1. P. Hoek, Journal of Social Structure
Data Mining Concepts and Techniques	1. Han Jiawei, University of Oulu 2. Micheline Kamber, University of Houston 3. Jian Pei, Sales, Marketing Department University of Bochum
Social media big data analytics for demand forecasting: development and case implementation of an innovative framework	1. Iftikhar, Associate Professor ofUniversity of Bochum 2. Mohammad Saud, Professor of Sales Marketing Department University of Bochum

2.3 PROBLEM STATEMENT

Data that includes a large array of metrics is known as sales data, but broadly speaking, if you can measure something that relate to the sales process. Software such as IBM cognos, which help to collect the data and helps to analyse the performance. It is important to know to learn to read that data to understand that what means for business and where to improve. With right sales analysis tools and wealth of information, we can able to spot the current trends that will empower the organization to provide better sales forecasts and goals for the rest of the organization.

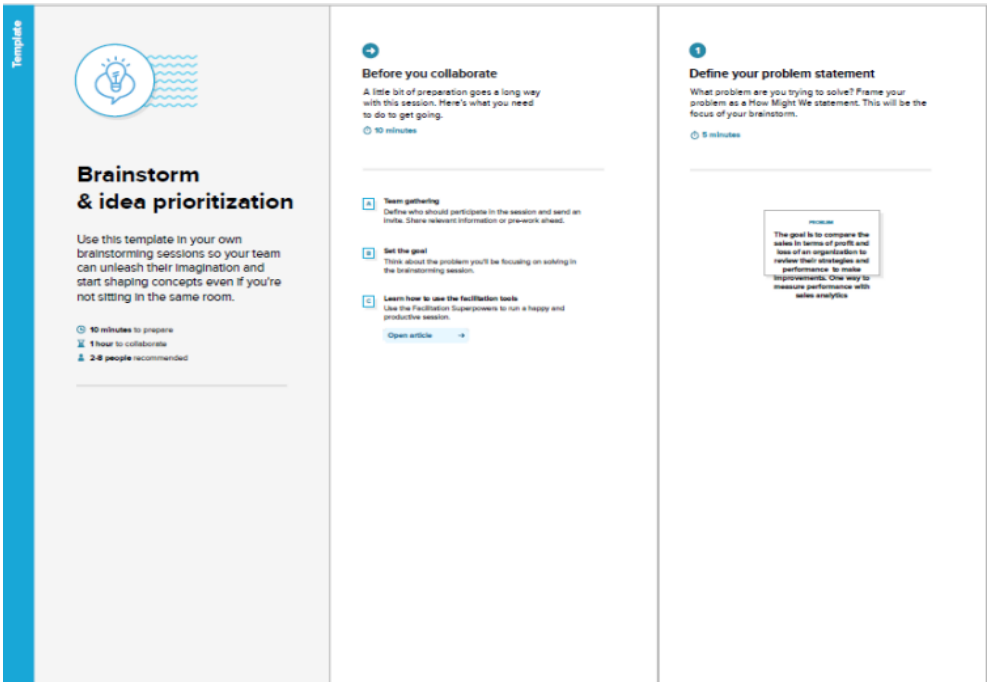
3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

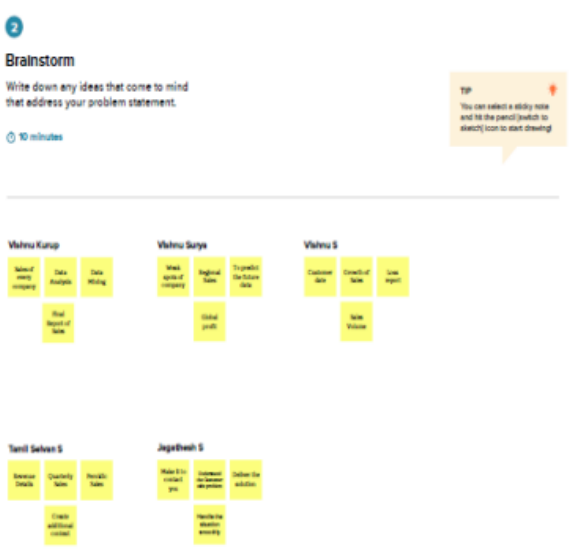


3.2 Ideation & Brainstorming

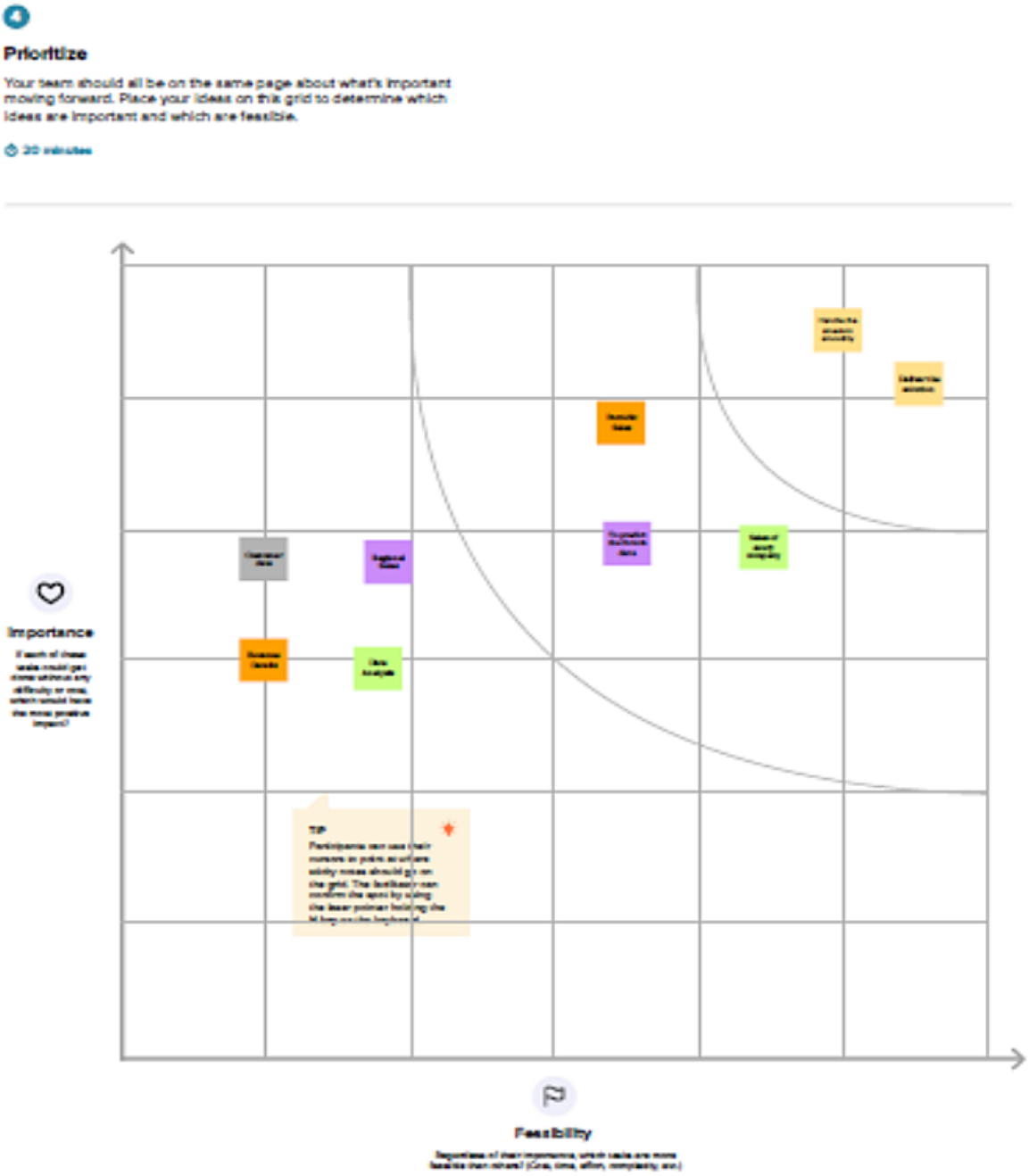
Step-1: Team Gathering, Collaboration and Select the Problem Statement



Step-2: Brainstorm, Idea Listing and Grouping



Step-3: Idea Prioritization



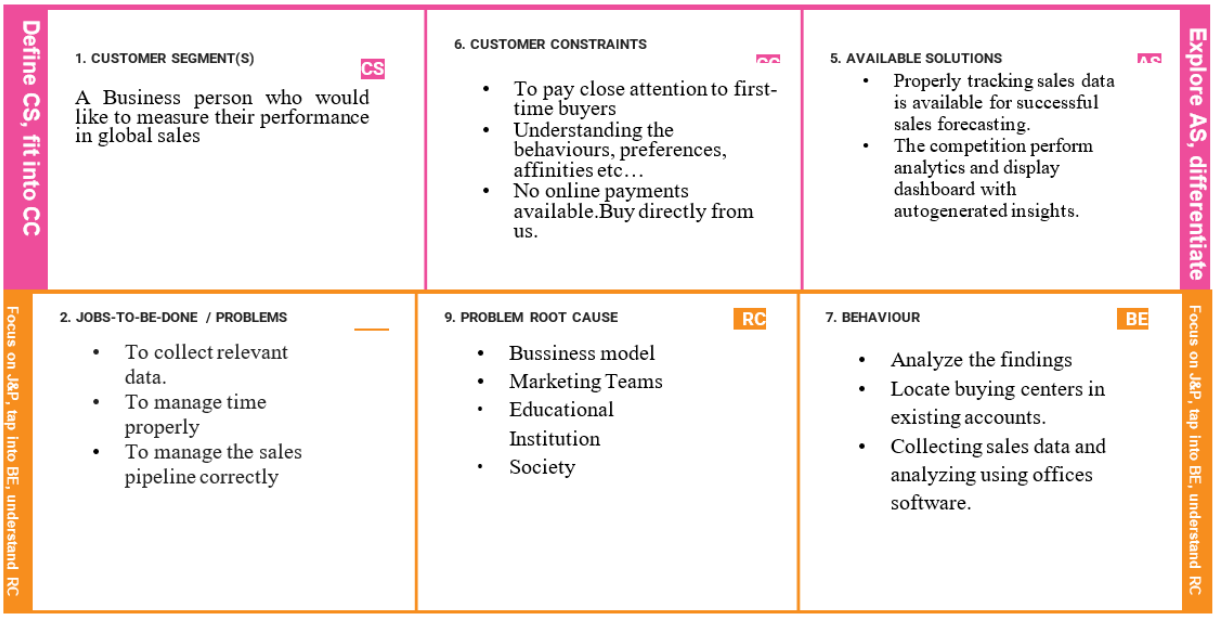
3.3 Proposed Solution

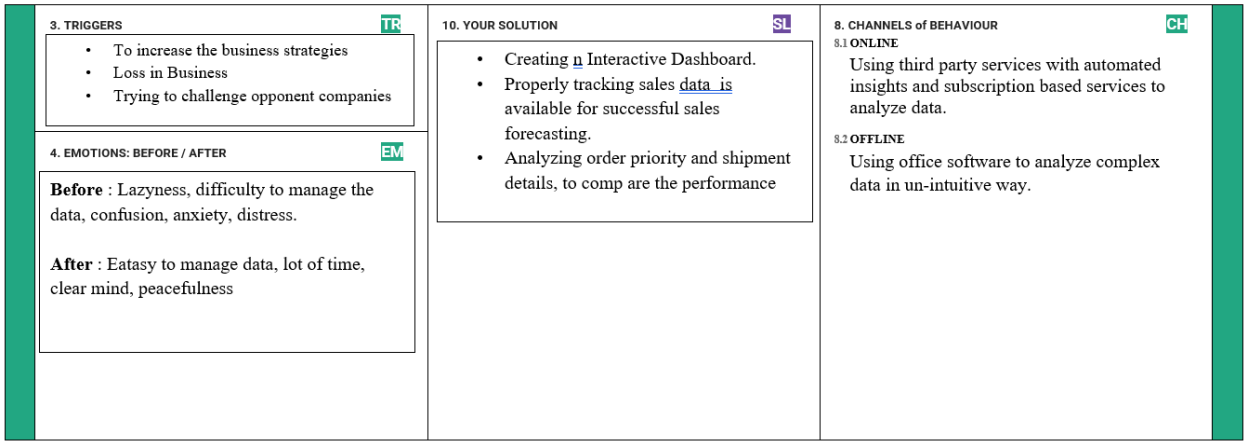
Project team shall fill the following information in proposed solution template

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	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.
2.	Idea / Solution description	Using IBM Cognos , we can analyze the previous year sales data analysis and we could predict the sales pattern for the future good extend.
3.	Novelty / Uniqueness	Focusing on the data will provide most valuable and important information that will be useful to predict the future sales pattern. Once you've incorporated sales data analysis into your pipeline, you can begin moving on to metrics that suit the more bespoke challenges you face.
4.	Social Impact / Customer Satisfaction	A MNC companies and huge organization can predict the sales pattern to determine their performance in terms of profit and loss in the future.

5.	Business Model (Revenue Model)	This could cost with less expensive . Data science and a gadget is needed to develop this. If developing an app with some extra facilities may cost some charges.
6.	Scalability of the Solution	Investors, Financers and Business Organizations.

3.4 Problem Solution Fit





4 REQUIREMENT ANALYSIS

4.1 Functional Requirement

Following are the Functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through form Registration through email SignUp/SignIn
FR-2	User Confirmation	Confirmation via registered email.
FR-3	User Login	Login via email and password .
FR-4	Uploading Dataset	Upload dataset in Cognos analytics tool
FR-5	Visualize and analysing data	Creating different visualization such as line chart, pie chart etc… to analyse the dataset
FR-6	Creating Dashboard	Create graphs, tables, charts etc…
FR-7	Log out	Logout after downloading the Dashboard

4.2 Non-Functional Requirements

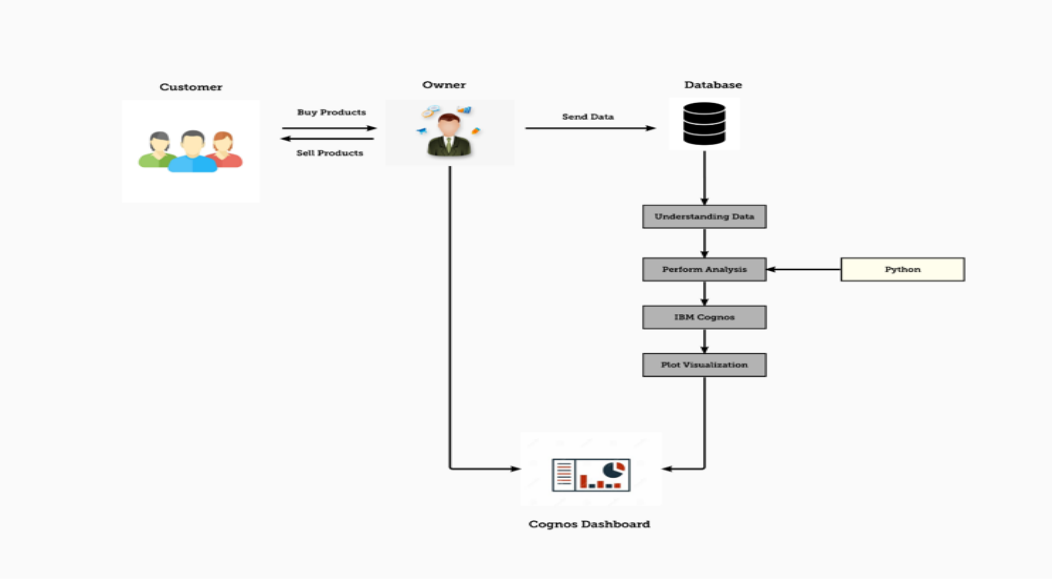
Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Optimized resources and the user can access the dashboard till it has the right store sales dataset.
NFR-2	**Security**	It is securable. Anyone with correct login credentials only can view the dashboards.
NFR-3	**Reliability**	Based on development, it is highly reliability.
NFR-4	**Performance**	Performance and efficiency levels are high. User can easily drag to any functions which they want to visualize.

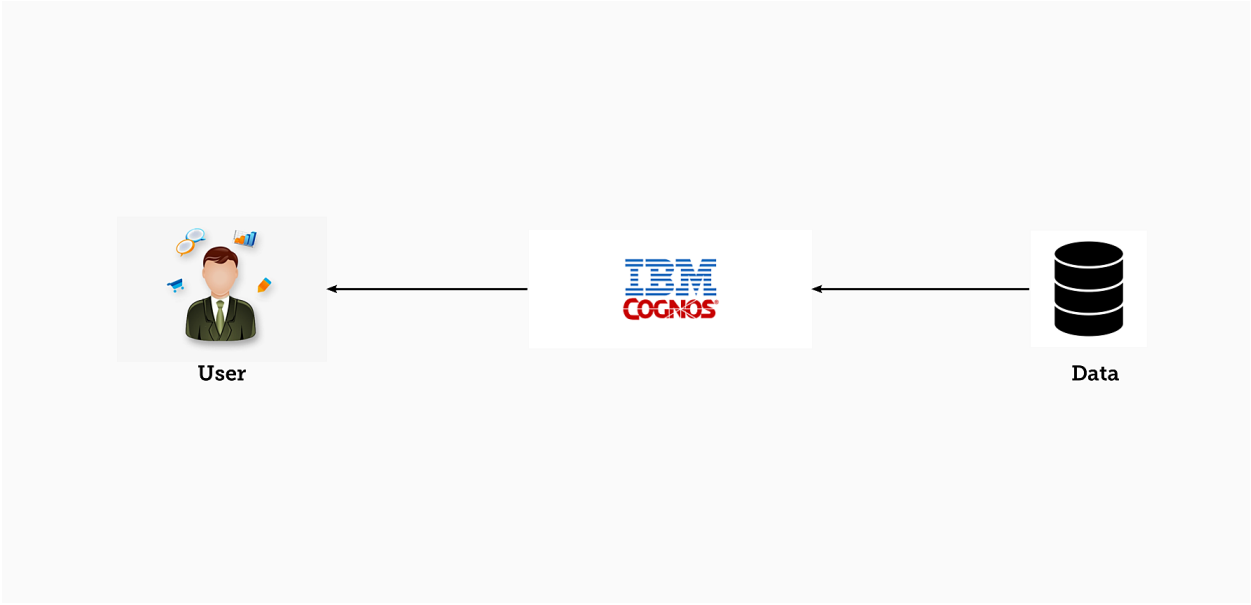
NFR-5	**Availability**	Available to all users who wants to know about the sales data in all websites. It is free of cost.
NFR-6	**Scalability**	Dashboards are very scalable and user can modify the metrics of the dashboard whenever they want.

5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS



5.2 Solution & Technology Architecture



5.3 User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-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
		USN-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
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard	USN-6	As a user, I can create a visualization by using the dashboard in the application.		High	Sprint-3
Customer (Web user)	Login	USN-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
Customer Care Executive	Chat box	USN-2	It can be used by easily access and responsible	I can access by easily through application	High	Sprint-2
Administrator	Calling	USN-3	It can be used by easily access and responsible	I can access by easily through application	High	Sprint-2

6 PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	user can register for the application by entering my email and password	3	High	VISHNU KURUP
Sprint-1		USN-2	User will receive email if the registration is successful. That the registration has conformed	3	High	VISHNU SURYA P
Sprint-1		USN-3	As a user, I can register by any browser.	5	Low	TAMILSELVAN S
Sprint-1		USN-4	As a user, I can extract data	3	Medium	JAGATHESH S
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	6	High	VISHNU S
Sprint-2	Dashboard	USN-6	I can access the dashboard of mine.	3	Medium	JAGATHESH S
Sprint-2		USN-7	I can register for the application throughany web browser.	5	Low	VISHNU SURYA P
Sprint-2		USN-8	I can use my credentials. For accessing my resources.	2	High	VISHNU S
Sprint-2		USN-9	As, a user I can schedule events and set events.	7	High	VISHNU KURUP
Sprint-3	Support	USN-10	I can perform analysis by tools (IBM Cognos)	10	Medium	TAMILSELVAN S
Sprint-3		USN-11	Responds to user queries via telephone, emailetc.	3	Medium	VISHNU SURYA P
Sprint-3		USN-12	The team must respond immediately to the queries based on the priority	5	High	TAMILSELVAN S
Sprint-4	System Requirements	USN-13	Hardware Requirement 1. Laptop or PC • i5 processor system or higher • 4 GB RAM or higher • 128 GB ROM or higher 2. Mobile (12.0 and above)	5	Low	VISHNU KURUP
Sprint-4		USN-14	Software Requirement 1. Laptop or PC • Windows 10 or higher Android Studio	8	Medium	VISHNU SURYA P

6.2 Sprint Delivery & Schedule

Project Tracker, Velocity & Burndown Chart: (4 Marks)

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	17	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	18	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	13	19 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) periteration unit (story points per day)

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

7. CODING & SOLUTIONING (Explain the features added in the project along with code)

7.1 Feature 1

Global superstore dataset is required data set for our data analytics. Using analytical visualizations in IBM Cognos Analytics tool required dashboard, report and story has been created. Kaggel API has been . Purpose of external API has been used in the application. IBMDB2 database is used for uploading the dataset to the cloud database for performing basic sql operations and then connected to IBM cognos analytics platform. Open source frameworks has been used for embedding the dashboard , report and story using HTML and Bootstraps.

7.2 Feature 2

Code :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <meta content="width=device-width, initial-scale=1.0" name="viewport">
<title>Global Sales Data Analytics</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/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: KnightOne - v4.9.1
  * Template URL: https://bootstrapmade.com/knight-simple-one-page-bootstrap-template/
  * Author: BootstrapMade.com
  * License: https://bootstrapmade.com/license/
  ======================================================== -->
</head>

<body>

  <!-- ======= Header ======= -->
  <header id="header" class="fixed-top ">
    <div class="container-fluid">
      <div class="row justify-content-center">
      <div class="col-xl-9 d-flex align-items-center justify-content-lg-between">
        <h1 class="logo me-auto me-lg-0"><a href="index.html">Data Analytics</a></h1>
        <!-- Uncomment below if you prefer to use an image logo -->
        <!-- <a href="index.html" class="logo me-auto me-lg-0"><img src="assets/img/logo.png"
alt="" class="img-fluid"></a>-->

        <nav id="navbar" class="navbar order-last order-lg-0">
          <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">Dashboard</a></li>
            <li><a class="nav-link scrollto " href="#portfolio">Report</a></li>
            <li><a class="nav-link scrollto" href="#pricing">Story</a></li>
          </ul>
          <i class="bi bi-list mobile-nav-toggle"></i>
        </nav><!-- .navbar -->
<a href="#about" class="get-started-btn scrollto">Get Started</a>
      </div>
    </div>
</div>
 </header><!-- End Header -->

 <!-- ======= Hero Section ======= -->
 <section id="hero" class="d-flex flex-column justify-content-center">
   <div class="container">
     <div class="row justify-content-center">
       <div class="col-xl-8">
         <h1>Global Sales Data Analytics</h1>
         <h2>What Gets Measured, Gets Managed</h2>
         <a href="https://youtu.be/tikHooKBxjY" class="glightbox play-btn mb-4"></a>
       </div>
     </div>
   </div>
 </section><!-- End Hero -->

 <main id="main">

   <!-- ======= About Us Section ======= -->
   <section id="about" class="about">
     <div class="container">
```

```
        <div class="section-title">
         <h2>About Us</h2>
         <h3>One way to measure performance is with sales analytics</h3>
         <p>
           Global Sales covers all activities involved in selling a product or service to a consumer or business.It is important for sales and marketing teams to review their strategies and performance in order to make improvements.Sales data analytics refers to the use of technology to collect and use sales data to identify actionable insights. It is used to identify, optimize, and increase sales. An efficient sales model that generates higher revenue for the business.
         </p>
          </div>
 <div class="row content">
         <div class="col-lg-6">
         </div>
        </div>
   </div>
    </section><!-- End About Us Section -->

    <!-- ======= Services Section ======= -->
    <section id="services" class="services">
      <div class="container">
          <div class="section-title">
         <h2>Dashboard</h2>
        <p> A tool used to do multi-task, organize, visualize, analyze, and track data.View automatically updated data with interactive charts, graphs and tables.</p>
        </div>
        <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.my_folders%2FData%2BModule%2FDashboardDB2&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;mode=dashboard&amp;subView=model000001847a849dc0_00000000" width="1500" height="1000"
frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
```

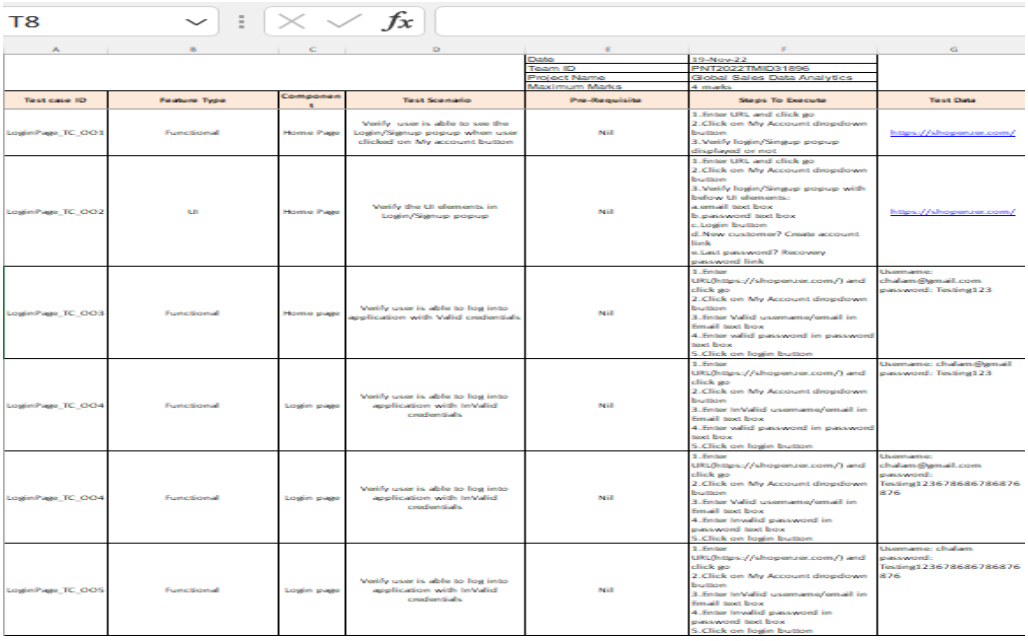
```
    </div>
  </section><!-- End Cta Section -->
  <!-- ======= Portfolio Section ======= -->
  <section id="portfolio" class="portfolio">
    <div class="container">
      <div class="section-title">
      <h2>Report</h2>
      <p> Sorting and organization of data, while analytics derive insights from that data and
often influence business decisions.</p>
      </div>
  <iframe
src="https://us1.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FData%2BModule%2FSales
%2Breport&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false
&amp;shareMode=embedded&amp;action=run&amp;prompt=false" width="1500"
height="1000" frameborder="0" gesture="media" allow="encrypted-media"
allowfullscreen=""></iframe>
  </div>
  </section><!-- End Portfolio Section -->

  <!-- ======= Pricing Section ======= -->
  <section id="pricing" class="pricing">
    <div class="container">
      <div class="section-title">
      <h2>Story</h2>
      <p>A methodology for communicating information, tailored to a specific audience, with a
compelling narrative.</p>
      </div>
      <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=story&amp;pathRef=.my_folders%2FStor
y&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shar
eMode=embedded&amp;action=view&amp;sceneId=model00000184816b7035_00000002&am
p;sceneTime=0" width="1500" height="1000" frameborder="0" gesture="media"
```

```
allow="encrypted-media" allowfullscreen=""></iframe>
      </div>
    </section><!-- End Pricing Section -->
    <!-- ======= Contact Section ======= -->
    <section id="contact" class="contact">
      <div class="container">

        <div class="section-title">
          <h2>Contact</h2>
          <p></p>
        </div>
      </div>
      <div class="container">
        <div class="row mt-5">
          <div class="col-lg-4">
            <div class="info">
              <div class="address">
                <div class="social-links mt-3">
                  <a href="https://github.com/IBM-EPBL/IBM-Project-39960-1660572586"
class="github"><i class="bi bi-github"></i>  GitHub</a>
                </div>
              </div>
              <div class="email">
                <i class="ri-mail-line"></i>
                <a href="721219106060@smartinternz.com">  Smart Internz Mail</a>
              </div>
            </div>
          </div>
        </div>
      </div>
    </section><!-- End Contact Section -->
```

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

  <!-- ======= Footer ======= -->
  <footer id="footer">
    <div class="container">
      <h3>Team ID : PNT2022TMID31896</h3>
      <p></p>
      <div class="social-links">
        <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>
  </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/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>
```

8. TESTING

8.1 Test Cases



				Date	19-Nov-22	
				Team ID	PNT2022TMID31896	
				Project Name	Global Sales Data Analytics	
				Maximum Marks	4 marks	
Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data
LoginPage_TC_OO1	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button	Nil	1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Singup popup displayed or not	https://shopenzer.com/
LoginPage_TC_OO2	UI	Home Page	Verify the UI elements in Login/Signup popup	Nil	1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Singup popup with below UI elements: a.email text box b.password text box c.Login button d.New customer? Create account link e.Lost password? Recovery password link	https://shopenzer.com/
LoginPage_TC_OO3	Functional	Home page	Verify user is able to log into application with Valid credentials	Nil	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter Valid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: chalam@gmail.com password: Testing123
LoginPage_TC_OO4	Functional	Login page	Verify user is able to log into application with InValid credentials	Nil	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter InValid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: chalam@gmail.com password: Testing123
LoginPage_TC_OO4	Functional	Login page	Verify user is able to log into application with InValid credentials	Nil	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter Valid username/email in Email text box 4.Enter invalid password in password text box 5.Click on login button	Username: chalam@gmail.com password: Testing12367868678687 6876
LoginPage_TC_OO5	Functional	Login page	Verify user is able to log into application with InValid credentials	Nil	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter InValid username/email in Email text box 4.Enter invalid password in password text box 5.Click on login button	Username: chalam password: Testing12367868678687 6876

8.2 User Acceptance Testing

8.2.1 Defect Analysis

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	9	3	2	3	18
Duplicate	1	0	2	0	4
External	2	3	1	1	6
Fixed	10	2	3	18	38
Not Reproduced	0	2	1	0	1
Skipped	0	0	1	0	2
Won't Fix	1	4	2	1	7
Totals	23	14	12	22	76

8.2.1 Testcase Analysis

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	7	1	0	6
Client Application	49	2	1	46
Security	2	0	0	2
Outsource Shipping	2	0	0	2
Exception Reporting	7	0	0	7
Final Report Output	6	0	0	6
Version Control	2	0	0	2

9. RESULTS

9.1 Performance Metrics

S.No.	Parameter	Screenshot / Values
1.	Dashboard design	No of Visualizations / Graphs – 10 Visualizations using IBM Cognos
2.	Data Responsiveness	Visualizations are created using the data the responsiveness was good.
3.	Amount Data to Rendered (DB2 Metrics)	462 Items in the dataset
4.	Utilization of Data Filters	Sales, Profit, Products, Shipping mode, Shipping cost, Order priority, Market and Order id Filtrations
5.	Effective User Story	No of Scene Added – 3 Stories has been created using the IBM Cognos
6.	Descriptive Reports	No of Visualizations / Graphs – 4 Visualization reports have been created

10. ADVANTAGES & DISADVANTAGES

Advantages:

- Enhanced Visibility: Dashboards provide greater visibility with information available whenever it is required to ensure businesses are better placed to respond to changing market conditions.

- Timesaving Efficiency: With dashboards, we are no longer wasting valuable time generating reports from multiple systems. Instead, data is drawn from a source and displayed as an easy to interpret visual overview .

- Better Forecasting: With greater insight into the data, future demand can be more accurately predicted using historic information. Businesses can be more effectively planned for demand fluctuations, setting measurable goals and deliverables for greater success.

- Better Decision Making: Whether you're providing reporting and analysis for the entire organisation or functional areas of the business, a dashboard allows companies to analyse key data quickly and meticulously. Visualised interactivity serves to deliver overwhelming amounts of data in a way that is easy to understand. With the ability to easily identify what the data really means; better decisions can be made relevant to the business.

Disadvantages:

- Flashy or cluttered design, with users attempting to incorporate too much information without understanding constraints or considering their specific needs from the range of different measurables detailed data analysis provides.
- The technology used in the development of dashboards differs from other software solutions already employed in organisations and can be initially difficult to understand.

- The business has no predetermined rules and hierarchies for how dashboard metrics are used. This means each employee can use the metrics in different ways, resulting in a diverse set of data being reported.

11. CONCLUSION

From this project, we have successfully,

- Created multiple analysis charts / graphs .
- Used the analysed chart for creation of dashboard .
- Used the analyesed chart for creation of report and story.
- Saved and visualized the dashboard, report and story in web application using HTML and bootstrap.

12. FUTURE SCOPE

Sellers make websites where they display images of their products with price and description. Shoppers who buy the products have multiple payment options like COD, e-wallet, net banking, credit card, and so on. Online sellers have the responsibility of shipping the product to the buyer and ensuring safe and timely delivery.Various charts can be prepared like regarding Year_Order and Day_Order Columns, Market and Shipping Costs Columns, country and state wise sales column, segment wise price column, order priority wise shipping mode and shipping cost, city wise profit and sales columns etc...can be visualized. Interactive dashboards can be created with more number of visualization. User friendly and interactive web application can be created with latest technology for different type of datasets.

GitHub Link :

https://github.com/IBM-EPBL/IBM-Project-39960-1660572586

Project Demo Link :

https://drive.google.com/file/d/1BY1I8kFxntfpvU21R25UmFLFpqCJUcls/view?usp=sharing