

# **Retail Store Stock Inventory Analytics**

## **A PROJECT REPORT**

**Submitted by**

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## **ABSTRACT**

Inventory Management System is important to ensure quality control in businesses that handle transactions revolving around consumer goods. Without proper inventory control, a large retail store may run out of stock on an important item and it's also easy to lose its possible customer if they do not have sufficient stocks in the store.

A good Inventory Management System will alert the retailer when it is time to reorder. Inventory Management System is also an important means of automatically tracking the stocks of their product. For example, if a business orders ten pairs of socks for retail resale, but only receives nine pairs, this will be obvious upon inspecting the contents of the package, and error is not likely. On the other hand, say a wholesaler orders 100,000 pairs of socks and 10,000 are missing. Manually counting each pair of socks is likely to result in error. An automated Inventory Management System helps to minimize the risk of error. In retail stores, an Inventory Management System also helps track theft of retail merchandise, providing valuable information about store profits and the need for theft-prevention systems.

The product quantity is updated by the store operator every time a product is bought/received. This information is then tracked by a central computer system. The Inventory Management System can serve a variety of functions in this case. It can help in identifying the overstock and understock products prior. It also provides sales insights and stock reports in the form of graphs/charts which will be useful for easier visualization. All of this data works in tandem to provide businesses with real-time inventory tracking information. Inventory Management Systems make it simple to locate and analyze inventory information in real-time with a simple database search.

# 1.INTRODUCTION

## a Project Overview

Analytics is the discovery and communication of meaningful patterns in data. As a topic, analytics has found its way from being discussed at the sidelines of industry and technology conferences, to the top of the corporate agenda. With the existing promise of delivering performance improvements not seen since the redesign of core processes in the 1990s, these tools are likely to change the competitive landscape in many industries in the years to come. This provides retail industry with entirely different perspectives of looking towards the datasets available at their disposal.

## b Purpose

Retail inventory management is the process of ensuring you carry products that shoppers want, with neither too little nor too much on hand. By managing inventory, retailers meet customer demand without running out of stock or carrying excess supply. Inventory management is vital for retailers because the practice helps them increase profits.

Based on the inventory management analysis we can manage how much inventory is required for selling the product based on which they can calculate the profit and losses. Our dataset contains a lot of historical sales data of a Brazilian top retailer

Basic Questions of every retailer: How much inventory should I carry? Too much inventory means working

capital costs, operational costs and a complex operation, lack of inventory leads to lost sales, unhappy customers and a damaged brand. This is why short-term forecasting is so important in the retail and consumer goods industry.

## **2. LITERATURE SURVEY**

### **a. Existing problem**

Irrespective of the size of the business, inventory management is one of the most challenging processes in the retail sector. In this industry, the efficiency of inventory management directly impacts customer satisfaction. As retail is a fast-paced, and customer-facing sector, customer satisfaction is core to its business growth.

The inventory process involves multiple intricate aspects that drive accurate product delivery. Even a single error in the process can have expensive and long-term consequences. This will eventually affect the company's growth and reputation. Thus, retail companies need to understand and analyze the risks involved in inventory management. Only then can companies find proactive solutions to the problems.

To-Increase's Anywhere for Retail employs automation to resolve critical issues of manual inventory management. Our software has helped many retail companies address their stock management challenges. We have observed that companies who can identify the problems of the retail inventory management can

select a retail inventory management system that fits their processes best.

## **b. References**

- i. Brown, C 2003, 'Managing the next wave of enterprise systems: leveraging lessons from IS', *MIS Quarterly Executive*, vol. 2 no.1, pp. 1.
- ii. Khosrow, M 2006, *Emerging trends and challenges in information technology management*, Idea Group Press, London.
- iii. King, W 2000, 'Ensuring HRIS implementation success', *Information Systems Management*, vol. 6 no. 2, pp. 3.

## **c . Problem Statement Definition**

The two basic inventory decisions that managers face are:

- How much additional inventory to order or produce
- When to order or produce it

Although it is possible to consider these two decisions separately, they are so closely related that a simultaneous solution is usually necessary. Typically, the objective is to minimize total inventory costs. Total inventory costs typically include holding, ordering, shortage, and purchasing costs.

In a continuous review system, managers continuously monitor the inventory position. Whenever the inventory position falls at or below a level  $R$ , called the reorder point, the manager orders  $Q$  units, called the order quantity. (Notice that the reorder decision is based on the inventory position including orders and not the inventory level.

If managers used the inventory level, they would place orders continuously as the inventory level fell below  $R$  until they received the order.) When you receive the order after the lead-time, the inventory level jumps from zero to  $Q$ , and the cycle repeats.

In inventory systems, demand is usually uncertain, and the lead-time can also vary. To avoid shortages, managers often maintain a safety stock. In such situations, it is not clear what order quantities and reorder points will minimize expected total inventory cost. Simulation models can address this question.




### 3. IDEATION & PROPOSED SOLUTION

#### a. Empathy Map Canvas



## b. Ideation & Brainstorming


Template



### Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.


- 10 minutes to prepare
- 1 hour to collaborate
- 2-8 people recommended




#### 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 as 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

To Provide Analytics to improve new Marks and Grow the Business



#### Key rules of brainstorming

To run an smooth and productive session

- Stay in topic
- Encourage wild ideas
- With 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

TIP

Move sticky notes to groups and then predictions to sticky notes to start using!



3

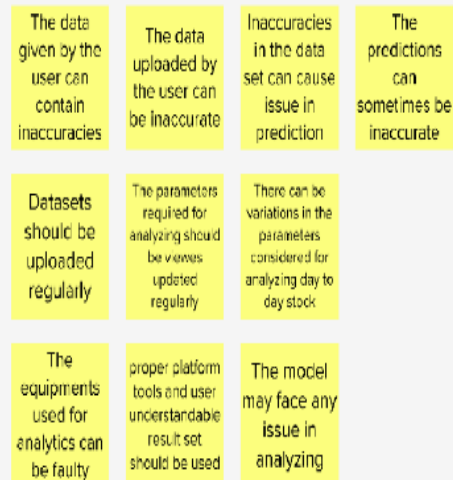
## Group ideas

Take hints showing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, 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

TIP

Add a sentence-like label to each cluster to make it more like a sentence. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.



## 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.



### After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

### Quick add-ons

- Export the mural**  
Export a copy of the mural as a PNG or PDF to attach to email, include in a slide, or save in your drive.

Keep moving forward

- Strategy blueprint**  
Define the components of a new idea or strategy  
[Open the template →](#)
- Customer experience journey map**  
Understand customer needs, motivations, and demands for an experience  
[Open the template →](#)
- Strength, weakness, opportunities & threats**  
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan  
[Open the template →](#)

[Share template feedback](#)

## **b. Proposed Solution**

S .No	Parameter	Description
1.	Problem Statement	Magi is a retailer facing problem on how much inventory should he carry,so that he could makehappy customers and doesn't undergocapitalcosts due
2.	Solution description	We can simplify our accessibility issueswith retail inventory management analytics. Theanalytics can efficiently manage the process and productivity of the team.access, which would, in turn, improvethe quality of the processand productivity of the team
3.	Novelty / Uniqueness	The visualization chartscan be filtered based onhis requirement to get the overall salesview.
4.	Social Impact / CustomerSatisfaction	When customers get the products they wantfaster with fewermistakes or out-of-stocks, it increases customer loyalty.

5.	Business Model	When the customer needs are satisfied, Retailers have generating financial income or revenue relatively. Retailers can identify which revenue source to pursue, how to price, and which kind of people going to purchase it.
6.	Scalability of the Solution	The visualization of sales data makes the retailer to estimate accurate inventory to be maintained.

### c. Problem Solution fit

Project Title : Retail Store Stock Inventory Analytics			Team id : PNT2022TMID40315	Project Design Phase I : Problem Solution Fit		
<div>Define CS, Fit into CC</div>	<b>1) CUSTOMER SEGMENT(S)</b> <span>CS</span>  The customers of retail store are mostly from middle-class background.	<b>6) CUSTOMER CONSTRAINTS</b> <span>CC</span>  The main constraint is money the products sold must be reasonable in their prices.	<b>5) AVAILABLE SOLUTION(S)</b> <span>AS</span>  1.Transport : To provide delivery services 2.Warehouse: To store stocks.	<div>Explore AS, Differentiate</div>	<div>Focus on J &amp; P, tap into BE</div>	<div>Identify Strong TM &amp; ER</div>
	<b>2) JOBS TO BE DONE/ PROBLEMS</b> <span>J &amp; P</span>  The major job is to track the stocked goods & the major problem here is out of stock	<b>9) PROBLEM ROOT CAUSE</b> <span>RC</span>  Many customers alter their changes in their decisions due to their wishes in different products.	<b>7) BEHAVIOUR</b> <span>BE</span>  Behaviour matters here a lot. The sellers must be polite with their customers to sustain their customers			
	<b>3) TRIGGERS</b> <span>TR/EM</span> Trigger is the minimum amount of inventory a certain item can have before reorder  <b>4) EMOTIONS</b> The major key of emotion is customer confidence	<b>10) YOUR SOLUTION</b> <span>SL</span>  The foremost solution in any retail store inventory management is to build customer trust and to satisfy their common customers.	<b>8) CHANNELS OF BEHAVIOUR</b> <span>CH</span>  1.Online : Customers verify their dealers via some online websites 2.Offline : Some customers verify through their neighbors			

## 4. REQUIREMENT ANALYSIS

### a. 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 throughForm Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via EmailConfirmation via OTP
FR-3	User Ordering	Ordering through WebsiteOrderi ng Through directly
FR-4	User Payment	Payment via Online Payment via offline

## b. Non-Functional requirements

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

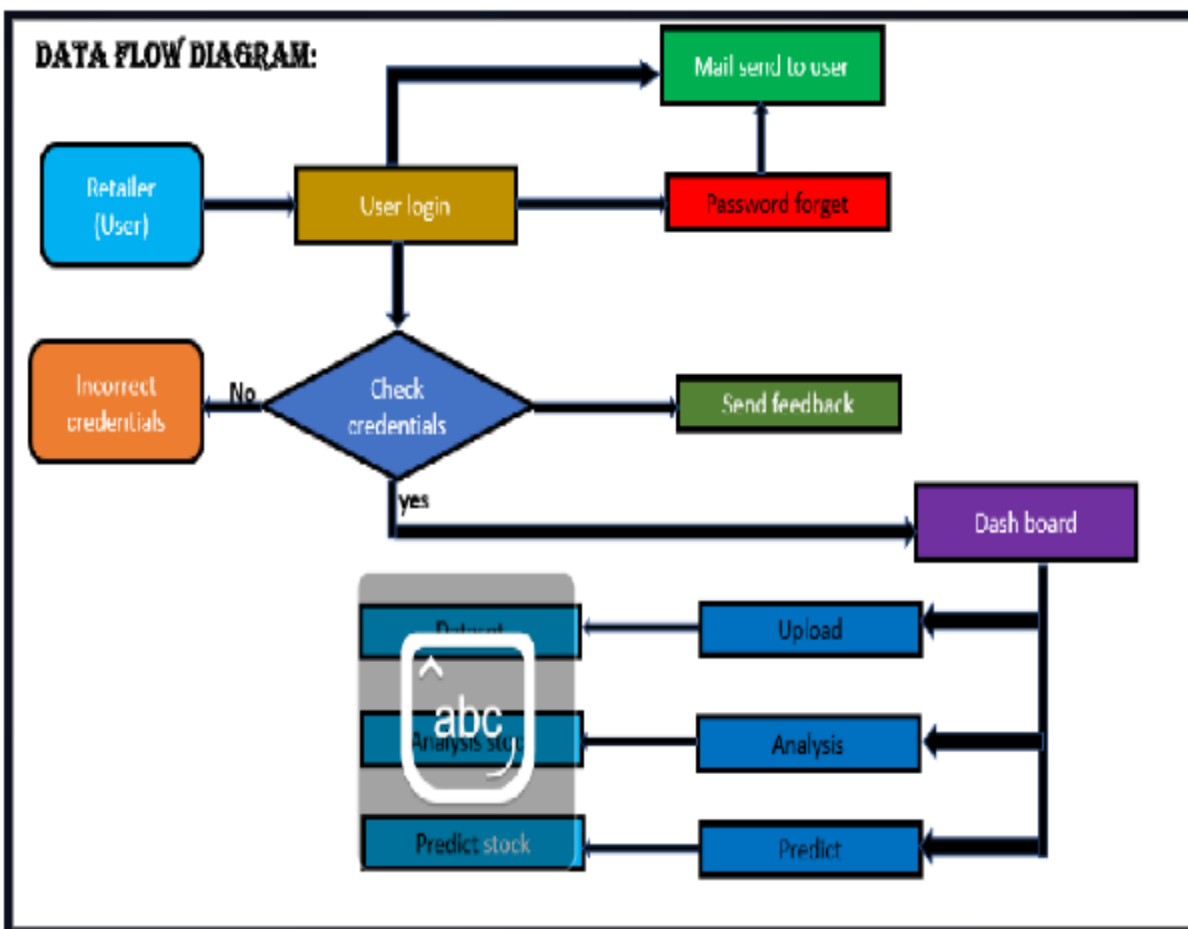
FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The customer decides where he shops and whether he uses the online store via the computer,the smartphone or a tablet. Good usability for every enddevice is essential forthe shopping experience and in somecases makes the difference ofwhether apurchase takes place or not.
NFR-2	<b>Security</b>	The process of ensuring safetyand optimummanagement control of storedgoods.
NFR-3	<b>Reliability</b>	The understanding of customers wellcan drasticallyreduce churn and increase up-selling opportunities,thus increasing revenues for the company.
NFR-4	<b>Performance</b>	Inventory performance is a measure of how effectively and efficiently inventory is usedandreplenished.
NFR-5	<b>Availability</b>	It represents the extent to which acompany has enough inventory to fulfill customer orders



## 5. PROJECT DESIGN

### a. 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.

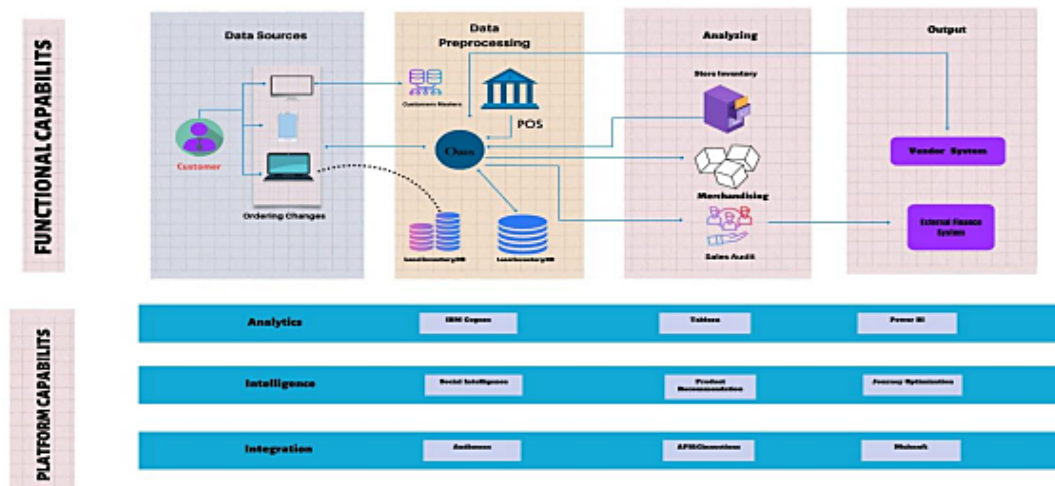


## b. Solution & Technical Architecture

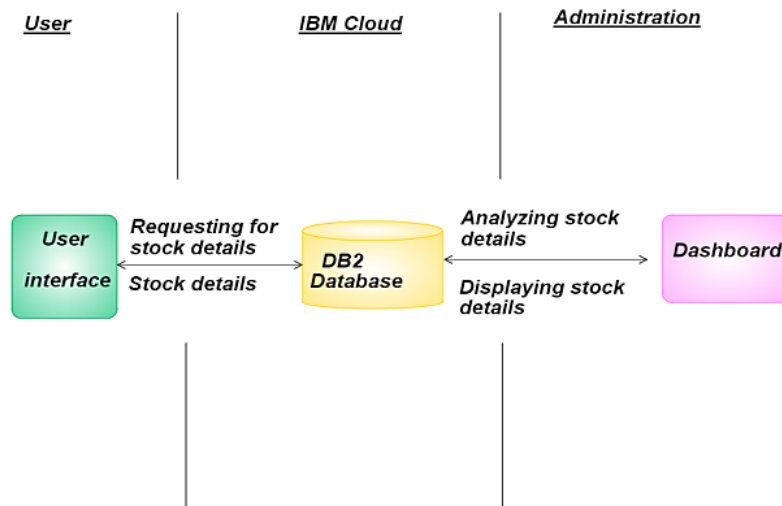
Solution architecture is a complex process with many sub-processes that bridges the gap between business problems and technology solutions. Its goals are to:

Find the best tech solution to solve existing business problems.

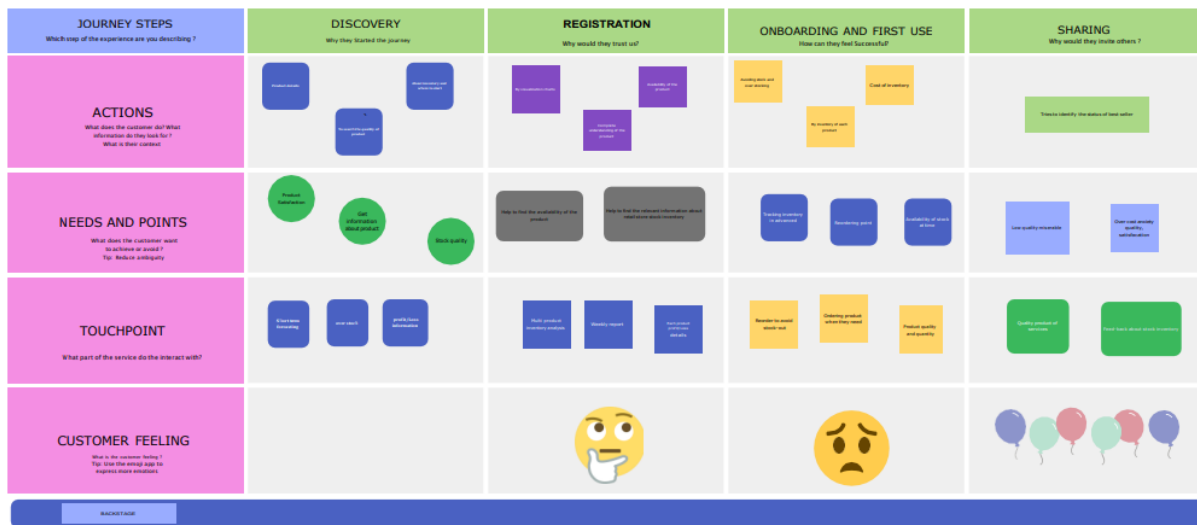
1. Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
2. Define features, development phases, and solution requirements.
3. Provide specifications according to which the solution is defined, managed, and delivered.



## Technical Architecture:



## c. User Stories



## 6. PROJECT PLANNING & SCHEDULING

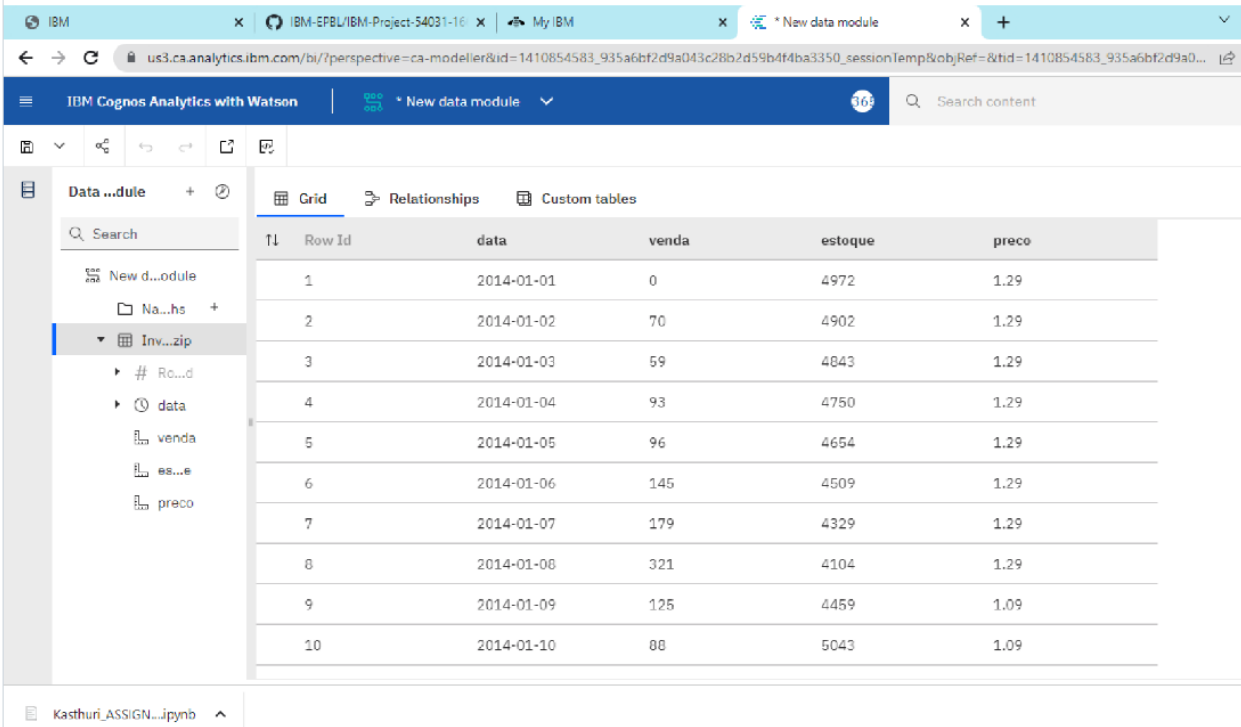
### a. Sprint Planning & Estimation

Steps to be  
done  
Collection of  
data Data  
Processing  
Upload the  
dataset

#### Collection of data:

<https://colab.research.google.com/drive/1oqGpxKpqLQVO6YAn2iOBtJP1uP8xuzmm>

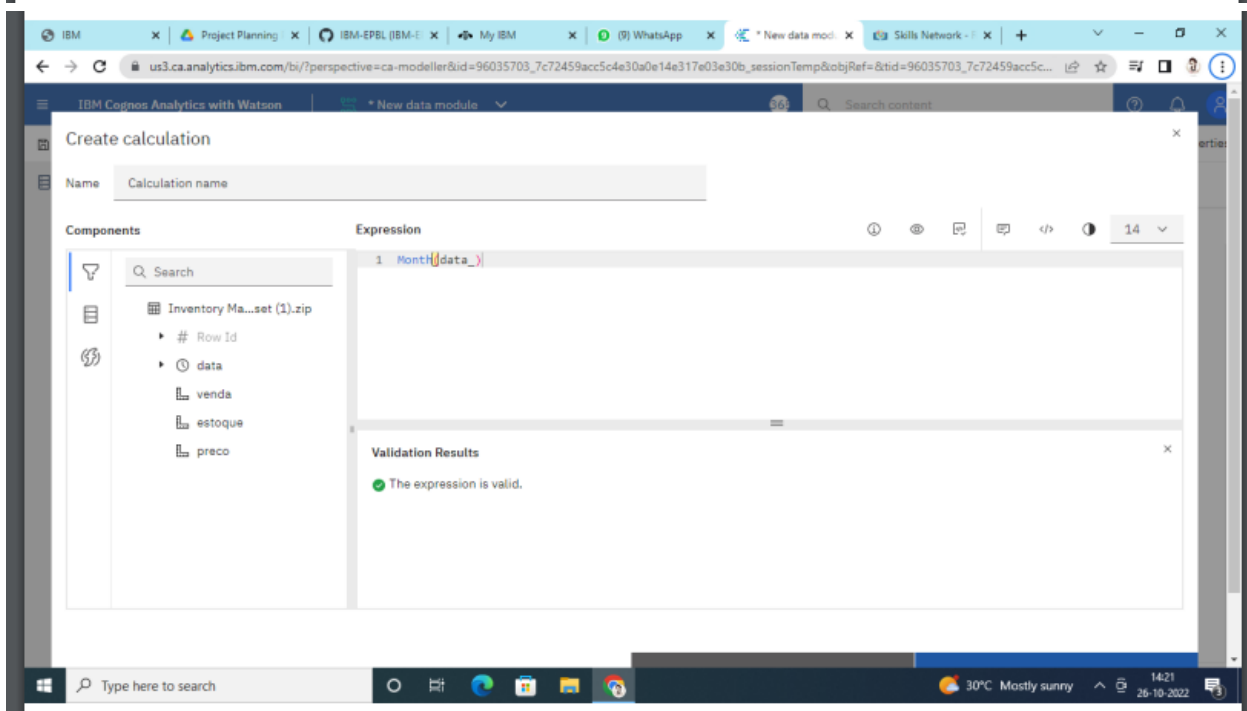
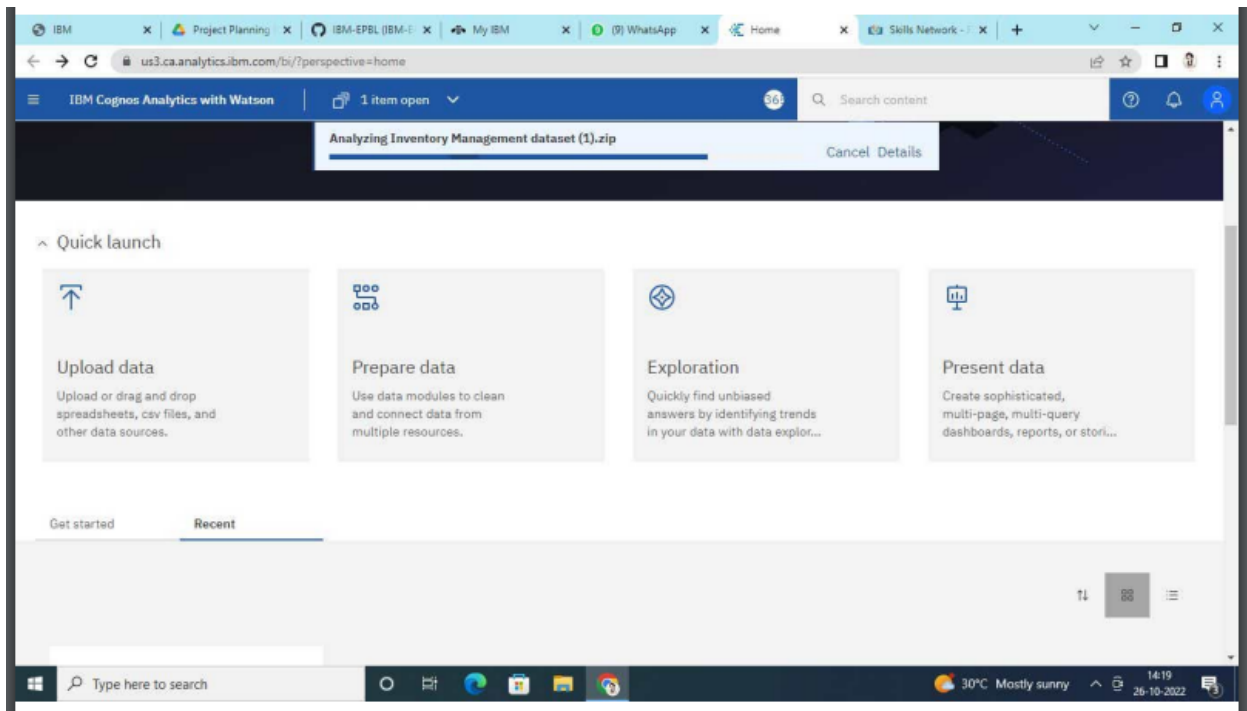
#### Data Processing :



The screenshot displays the IBM Cognos Analytics interface. The top navigation bar includes the IBM logo and several tabs: 'IBM-EPBL/IBM-Project-54031-16', 'My IBM', and '\* New data module'. The main content area shows a data table with the following columns: 'Row Id', 'data', 'venda', 'estoque', and 'preco'. The table contains 10 rows of data, with dates ranging from 2014-01-01 to 2014-01-10. The left sidebar shows a 'Data module' list with options like 'New d...odule', 'Na...hs', and 'Inv...zip'. The bottom status bar indicates the user is logged in as 'Kasthuri\_ASSIGN...jpynb'.

Row Id	data	venda	estoque	preco
1	2014-01-01	0	4972	1.29
2	2014-01-02	70	4902	1.29
3	2014-01-03	59	4843	1.29
4	2014-01-04	93	4750	1.29
5	2014-01-05	96	4654	1.29
6	2014-01-06	145	4509	1.29
7	2014-01-07	179	4329	1.29
8	2014-01-08	321	4104	1.29
9	2014-01-09	125	4459	1.09
10	2014-01-10	88	5043	1.09

Upload the dataset :



us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=96035703\_7c72459acc5c4e30a0e14e317e03e30b\_sessionTemp&objRef=&tid=96035703\_7c72459acc5c4e30...

### Create calculation

Name: Calculation name

Components

- Inventory Ma...set (1).zip
  - M\_Data
  - # Row Id
  - data
  - venda
  - estoque
  - preco

Expression

```
1 venda*preco
```

Validation Results

✓ The expression is valid.

Type here to search

30°C Mostly sunny 14:43 26-10-2022

us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=2818311301\_43a2990ffe6a4c11ae94620b150a2e2c\_sessionTemp&objRef=&tid=2818311301\_43a2990ffe6a4c...

### Data module

Grid Relationships Custom tables

Revenue	M_Data	Row Id	Year
0	1	1	2014-0
90.3	1	2	2014-0
76.11	1	3	2014-0
119.97	1	4	2014-0
123.84	1	5	2014-0
187.05	1	6	2014-0
230.91	1	7	2014-0
414.09000000000003	1	8	2014-0
136.25	1	9	2014-0
95.92	1	10	2014-0
204.92000000000002	1	11	2014-0

Properties

General

Label: price

Hide from users: ☐

Expression: [View or edit](#)

Usage: Measure

Aggregate: Total

Data type: Decimal

Represents: [Default](#)

Lookup reference: None

Description: [Description](#)

Type here to search

30°C Mostly sunny 14:55 26-10-2022

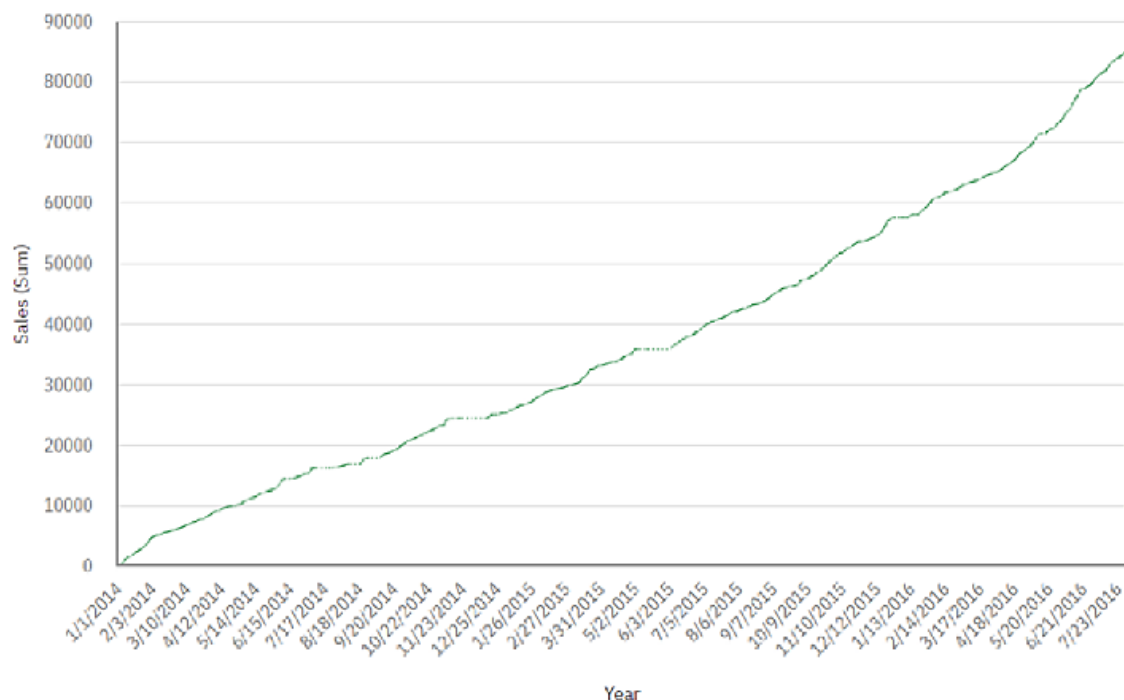
The screenshot shows the IBM Cognos Analytics web interface. On the left, a 'Data module' sidebar lists a hierarchy: 'New data module' > 'Navigation paths' > 'Inventory M...set (1).zip' > 'Revenue' > 'M\_Data'. The main area displays a table with columns: Revenue, M\_Data, Row Id, Year, Sales, and stock. The table contains 11 rows of data for the year 2014, starting from 2014-01-01.

Revenue	M_Data	Row Id	Year	Sales	stock
0	1	1	2014-01-01	0	4972
90.3	1	2	2014-01-02	70	4902
76.11	1	3	2014-01-03	59	4843
119.97	1	4	2014-01-04	93	4750
123.84	1	5	2014-01-05	96	4654
187.05	1	6	2014-01-06	145	4509
230.91	1	7	2014-01-07	179	4329
414.09000000000003	1	8	2014-01-08	321	4104
136.25	1	9	2014-01-09	125	4459
95.92	1	10	2014-01-10	88	5043
204.92000000000002	1	11	2014-01-11	188	5239

## b. Sprint Delivery Schedule

In Agile product development, a sprint is a set period of time during which specific work has to be completed and made ready for review. Each sprint begins with a planning meeting. During the meeting, the product owner (the person requesting the work) and the development team agree upon exactly what work will be accomplished during the sprint. The development team has the final say when it comes to determining how much work can realistically be accomplished during the sprint, and the product owner has the final say on what criteria need to be met for the work to be approved and accepted. The duration of a sprint is determined by the scrum master, the team's facilitator and manager of the Scrum framework. Once the team

reaches a consensus for how many days a sprint should last, all future sprints should be the same. Traditionally, a sprint lasts 30 days. After a sprint begins, the product owner must step back and let the team do their work. The project owner may not make requests for changes during a sprint and only the scrum master or project manager has the power to interrupt or stop the sprint.



### c. Reports from JIRA

The Jira is very useful for creating milestones which shows the project sprint timelines clearly; the sprints are planned and completed within the given time limit.



## **7. CODING & SOLUTIONING**

### **a. Feature 1**

Dataset from External API are uploaded and DB is created using IBM cloud. Then Dashboard, Story, Report is created using the external API imported dataset and the IBM DB2 cloud database is used to create the dashboard, story, report.

### **b. Feature 2**

Embedded Dashboard, Story, Report is created using the external API imported dataset and the IBM DB2 cloud database is used to create the embedded dashboard, story, report.

### **c. Database Schema**

The database schema is for retail DB2 connection of the data server.

## **8. TESTING**

### **a. Test Cases**

The test case is to download the dataset from an external API and connect DB2 connectivity. Create a dashboard, report and story. Embed the dashboard, report and story to a simple html. Create a web app and

embed the dashboard,report and story which you have created.

### **b. User Acceptance Testing**

The test case report and UAT Execution & Report Submission are created. The test case report consists of feature type, component, test scenario, prerequisite, steps to execute, test data, expected result, actual result, status, comments, TC for automation, bug ID and executed by columns. UAT Execution & Report Submission consists of purpose of document, defect analysis and test case analysis.

## **9. RESULTS**

### **a. Performance Metrics**

The Performance testing consists of dashboard design, data responsiveness, amount of data to be rendered from the utilisation of data filters, effective user story and descriptive report.

Test case ID	Feature Type	Component	Test Scenario
Testcase_1	Functional	Login Page	Verifies whether the user can login if he/she was an registered user
Testcase_2	Functional	Login Page	Verifies whether an unregistered user cannot proceed with the login.
testcase_3	Functional	register page	Verifies whether an unregistered user can successfully register as an user.
testcase_4	Functional	Register page	Verifies whether an register user cannot register themself as an new user.
Testcase_5	Functional	Login page	Verifies whether an alert message popup when an unregistered user tries to login .

## 10. ADVANTAGES & DISADVANTAGES

### Advantages

Easy access to market - in many ways the access to market for entrepreneurs has never been easier. Online marketplaces suchas eBay and Amazon allow anyone to set up a simple online shop and sell

products within minutes. See selling through online marketplaces. Reduced overheads - selling online can remove the need for expensive retail premises and customer-facing staff, allowing you to invest in better marketing and customer experience on your e-commerce site.

Potential for rapid growth - selling on the internet means traditional constraints to retail growth - eg finding and paying for larger - are not major factors.. Widen your market / export - one major advantage over premises-based retailers is the ability to expand your market beyond local customers very quickly.

## **Disadvantages**

Legal issues – getting to grips with e-commerce and the law can be a challenge and you'll need to be aware of, and plan to cope with, the additional customer rights which are attached to online sales. See the law and selling online. Advertising costs – while online marketing can be a very efficient way of getting the right customers to your products, it demands a generous budget. This is especially true if you are competing in a crowded sector or for popular keywords. See pay-per-click and paid search advertising. Customer trust – it can be difficult to establish a trusted brand name, especially without a physical business with a track record and face-to-face interaction between customers and sales staff. You need to consider the costs of setting up a good customer service system as part of your online offering. See manage your customer service.

## **11. CONCLUSION**

For the success of the program, the managers of the retail stores must formulate a modern way of managing the inventory by instituting electronic systems to take care of the resources of the company. This ensures that they can be accounted for and there are proper records available all the time for reference to be made when the need arises. Besides, the retail management system is necessary for ensuring that there is accountability in the way the company handles its stock. It helps in saving time. Retail companies have acquired significant importance within several countries due to their high economic contribution. Therefore, the need to analyze their KPIs becomes highly significant, as well as their different systems, methodologies, and tools used within inventory management and optimization. From the aspects mentioned above, the main trends in inventory management.

## **12. FUTURE SCOPE**

The enhanced version of the web application is created using the updated dashboard, report and story using the updated dataset and with better DB connectivity.

## 13. APPENDIX

### Source Code

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

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

  <title>Retail Store Stock InventoryAnalytics - Index</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">

  <!-- GoogleFonts -->
  <link href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Jost: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/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">

<!-- =====
===== -->

</head>

<body>

<!-- ===== Header===== -->
<header id="header" class="fixed-top ">
  <div class="container d-flexalign-items-center">

    <h1 class="logo me-auto"><a href="index.html">Retail Store StockInventory
Analytics</a></h1>
    <!-- Uncommentbelow if you prefer to use an image logo -->
    <!-- <a href="index.html" class="logo me-auto"></a>-->

    <nav id="navbar" class="navbar">
      <ul>
        <li><a class="nav-link scrolltoactive" 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="#team">Story</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" class="d-flex align-items-center">

    <div class="container">
        <div class="row">
            <div class="col-lg-6 d-flex flex-column justify-content-center pt-4 pt-lg-0 order-2
order-lg-1" data-aos="fade-up" data-aos-delay="200">
                <h1>Better Analytics of your Retail Inventory</h1>
                <h2>Overview of your Stock</h2>
                <div class="d-flex justify-content-center justify-content-lg-start">
                    <a href="#about" class="btn-get-started scrollto">Get Started</a>

                </div>
            </div>
            <div class="col-lg-6 order-1 order-lg-2 hero-img" data-aos="zoom-in" data-aos-
delay="200">
                
            </div>
        </div>
    </div>

</section><!-- End Hero -->

<main id="main">

    <!-- =====Clients Section =====>
    <section id="clients" class="clients section-bg">
        <div class="container">

            </div>
    </section><!-- End Clients Section -->

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

```



```

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

<div class="row content">
  <div class="col-lg-6">
    <p>
      Here you can find the sales, stock, year and price of the products
      you handle and can Analyticstheir sales
      by
    </p>
    <ul>
      <li><i class="ri-check-double-line"></i>Dashboard which shows the
      overview, sales and the price </li>
      <li><i class="ri-check-double-line"></i>Report which shows the
      salesresult and the sales greaterthan 350</li>
      <li><i class="ri-check-double-line"></i>Story shows the overviewand the
      Sales</li>
    </ul>
  </div>
  <div class="col-lg-6 pt-4 pt-lg-0">
    <p>

      Dashboard which shows the overview, sales and the price.Reportwhich
      shows the sales resultand the sales greater than 350.
      Story shows the overviewand the Salesare shown below
    </p>

  </div>
</div>

</div>
</section><!-- End About Us Section -->

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

```

```
<div class="section-title">
    <h2>Dashboard</h2>
</div>

<iframe src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my
_folders%2FAMAAIBMDB2&closeWindowOnLastView=true&ui_appbar=false&ui
_navbar=false&shareMode=embedded&action=view&mode=dashboard&sub
View=model000001848e49fda5_00000000" width="1500" height="1000" frameborder="0"
gesture="media" allow="encrypted-media"allowfullscreen=""></iframe>
```

```
</div>
</section><!-- End Dashboard Section-->
```

```
<!-- =====Team Members Section===== -->
```

```
<sectionid="cta" class="cta">
```

```
<div class="container" data-aos="zoom-in">
```

```
<div class="row">
```

```
<div class="col-lg-9 text-center text-lg-start">
```

```
<h3>TeamMembers
```

```
<ul>
```

```
<li>ranjithkumar <li>
```

```
<li>barani </li>
```

```
<li>magili>
```

```
<li>tamilselvan
```

```
</ul>
```

```
</h3>
```

```
</div>
```

```
</div>
```

```
<li>
```

```
</div>
```

```
</section><!-- Team Members Section-->
```

```

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

    <div class="section-title">
      <h2>Report</h2>
    </div>
    <iframe src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FRETAIL%2BSTORE%2BREPORT&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model000001848e564a1a_00000000" width="1500" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

  </div>
</section><!-- End ReportSection -->

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

    <div class="section-title">
      <h2>Story</h2>
    </div>
    <iframe src="https://us3.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2FRETAIL%2BSTORE%2BREPORT&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&sceneId=model000001848e7b3e44_00000000&sceneTime=0" width="1500" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

  </div>
</section><!-- End Story Section-->

<!-- =====Pricing Section =====>

<!-- =====Frequently Asked Questions Section ===== -->
<section id="faq" class="faq section-bg">
  <div class="container" data-aos="fade-up">

    <div class="section-title">

```

```
<h2>Frequently Asked Questions</h2>
</div>
```

```
<div class="faq-list">
```

```
<ul>
```

```
<li data-aos="fade-up" data-aos-delay="100">
```

```
<i class="bx bx-help-circle icon-help"></i> <a data-bs-
toggle="collapse" class="collapse" data-bs-target="#faq-list-1">Is the dashboard only
show the sales and price?<i class="bx bx-chevron-down icon-show"></i><i class="bx bx-
chevron-up icon-close"></i></a>
```

```
<div id="faq-list-1" class="collapse show" data-bs-parent=".faq-
```

```
list">
```

price

```
<p>
```

TheDashboard can the entire detailabout the salesand the

```
</p>
```

```
</div>
```

```
</li>
```

```
<li data-aos="fade-up" data-aos-delay="200">
```

```
<i class="bx bx-help-circle icon-help"></i> <a data-bs- toggle="collapse"
data-bs-target="#faq-list-2" class="collapsed">Is the report only displaythe data? <i class="bx
bx-chevron-down icon-show"></i><i class="bx bx-chevron-up icon-close"></i></a>
```

```
<div id="faq-list-2" class="collapse" data-bs-parent=".faq-list">
```

```
<p>
```

TheReport gives the entire analytics of the data

```
</p>
```

```
</div>
```

```
</li>
```

```
<li data-aos="fade-up" data-aos-delay="300">
```

```
<i class="bx bx-help-circle icon-help"></i> <a data-bs- toggle="collapse"
data-bs-target="#faq-list-3" class="collapsed">Is the Storyonly just displaythe content? <i
```

```
class="bx bx-chevron-downicon-show"></i><i class="bx bx-chevron-up icon-close"></i></a>
    <div id="faq-list-3" class="collapse" data-bs-parent=".faq-list">
        <p>
            TheStory gives the overview of the Inventory
        </p>
    </div>
```

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

```
</div>
</section><!-- End Frequently Asked Questions Section-->
```

```
<!-- =====Contact Section =====>
```

```
<section id="contact" class="contact">
```

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

```
<div class="section-title">
```

```
<h2>Contact Us</h2>
```

```
</div>
```

```
</div>
```

```
</section><!-- End Contact Section-->
```

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

```
<!-- =====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>

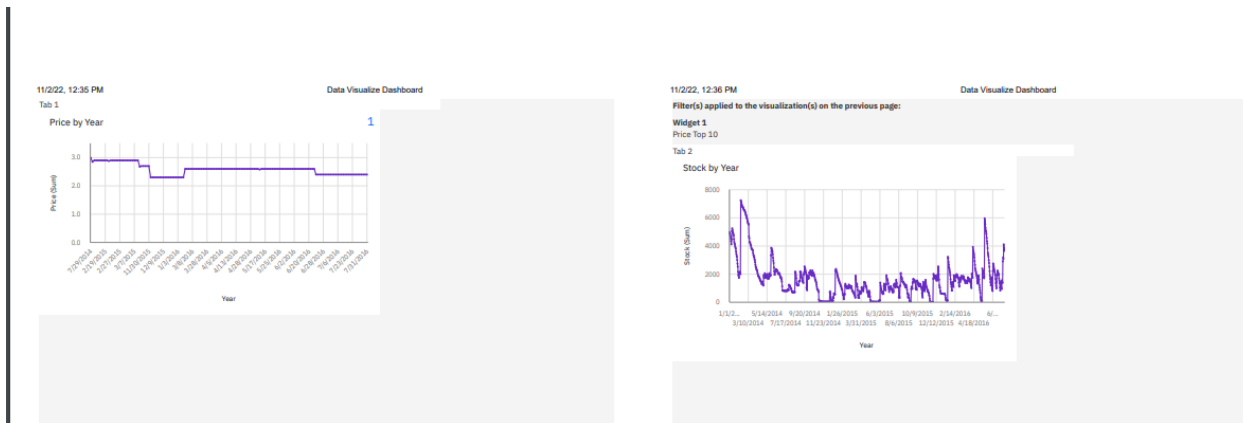
<!-- VendorJS Files -->
<script src="assets/vendor/aos/aos.js"></script>
<script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<script src="assets/vendor/glightbox/js/glightbox.min.js"></script>
<script src="assets/vendor/isotope-layout/isotope.pkgd.min.js"></script>
<script src="assets/vendor/swiper/swiper-bundle.min.js"></script>
<script src="assets/vendor/waypoints/noframework.waypoints.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>

```



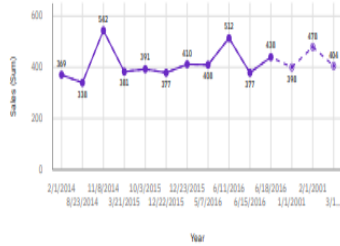
11/2/22, 12:36 PM

Data Visualize Dashboard

Tab 3

Sales by Year

— Forecast



11/2/22, 12:36 PM

Data Visualize Dashboard

Filter(s) applied to the visualization(s) on the previous page:

Widget 1

Sales Top 10

Tab 4

Sales for M\_Data hierarchy

Sales (Sum)

M\_Data

1 2 3 4 5 6 7 8 9 10 11

12

11,859

8,815

9,547

4,975

4,704

8,141

6,798

9,389

7,722

6,739

4,976

3,278

11/2/22, 12:36 PM

Data Visualize Dashboard

Tab 5

Revenue by M\_Data

M\_Data

1 2 3 4 5 6 7 8 9 10 11 12

12,826.41

6,634.91

4,115.63

16,896.24

20,346.16

14,836.92

11,859

8,815

9,547

4,975

4,704

8,141

6,798

9,389

7,722

6,739

4,976

3,278

11/2/22, 12:36 PM

Data Visualize Dashboard

Tab 6

Revenue

139K

Revenue

Sales

84.8K

Sales

Stock

1.51M

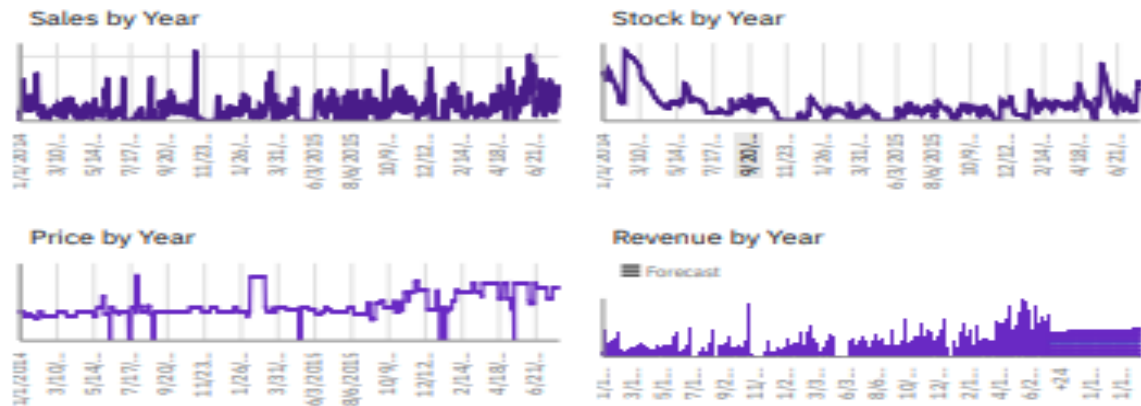
Stock

Price

1.49K

Price

Tab 7



## GitHub & Project Demo Link

## GitHub Link

<https://github.com/IBM-EPBL/IBM-Project-48109-1660804615>

## Project Demo Link

[https://drive.google.com/file/d/13tdBCA2mp\\_KJHHG22LvUM6j11w9HchDr/view?usp=share](https://drive.google.com/file/d/13tdBCA2mp_KJHHG22LvUM6j11w9HchDr/view?usp=share)