National College of Ireland

Project Submission Sheet

Student Name (s): Temitope Oladimeji, Thapelo Emmanuel Khantsi, Etinosa Eghaghe

Student ID: x23187204, x23131535, x23138548

Programme: MSc in Data Analytics

Year: 2023

Module: Business Intelligence & Business Analytics

Lecturer: Vikas Sahni

Submission Due Date: 06/12/2023

Project Title: Implementation Report – Adidas BIBA Implementation With Salesforce CRM Analytics and Microsoft Power BI

Word Count:

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

ALL internet material must be referenced in the references section. Students are encouraged to use the Harvard Referencing Standard supplied by the Library. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action. Students may be required to undergo a viva (oral examination) if there is suspicion about the validity of their submitted work.

Signature: Temitope, Thapelo, Etinosa

Date: 06/12/2023

Adidas BIBA Implementation With Salesforce CRM Analytics and Microsoft Power BI

(December 2023)

Thapelo Emmanuel Khantsi, Temitope Oladimeji, Etinosa Eghaghe
National College of Ireland
MSc in Data Analytics
Business Analytics & Business Intelligence
CA – Semester 1 2023/2024

1. INTRODUCTION

The implementation of the analytics solution for Adidas consists of two technology components:

- CRM Analytic referred to as analytics studio in salesforce. It deals with data analytics and management.
- Microsoft Power BI, which deals with reporting.

CRM analytics effectively transforms raw data into actionable insights, enabling businesses to uncover critical customer patterns, underlying drivers, and the resulting impacts of individual customer interactions. In our use case, the dataset was taken from Kaggle for the CRM Analytics implementation. Power BI is a business intelligence tool that encompasses a suite of cloud-based applications and services that empower organizations to seamlessly collect, manage, and analyse data from diverse sources, all within an intuitive user interface. We used this tool to uncover insights for strategic business decisions.

2. DATABASE IMPLEMENTATION

The architecture of salesforce database consists of the following:

a. Objects

These are fundamental building blocks of the Salesforce database; they serve as repositories for storing and managing critical data and information records. We utilized account object which is a standard salesforce object to create a blueprint for the adidas dataset. A page layout was configured to control the layout and organization of fields on the object record pages.

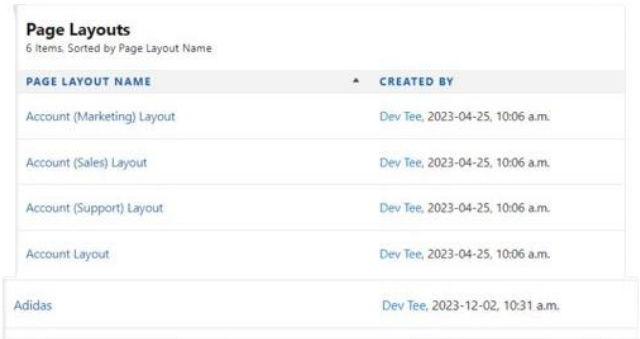


Figure 1 Account Page Layout

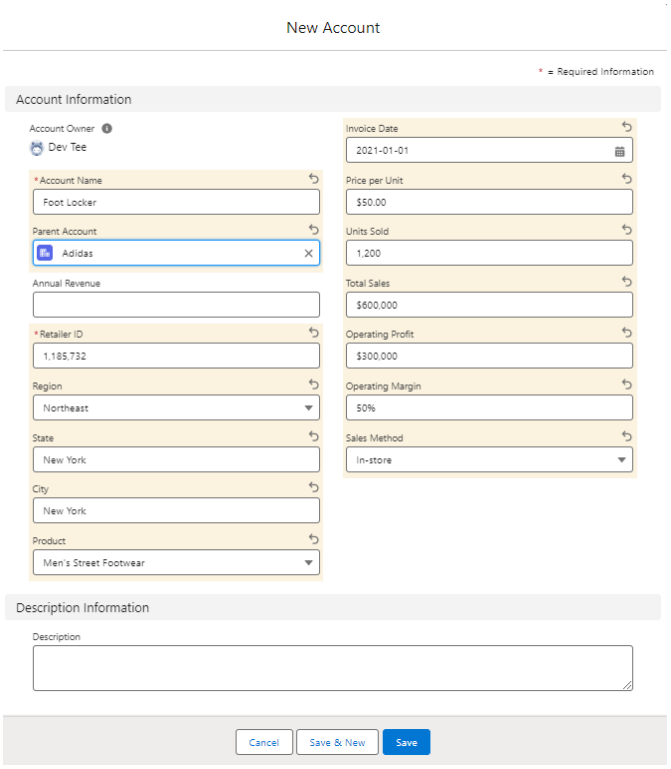


Figure 2: Manual Account Creation

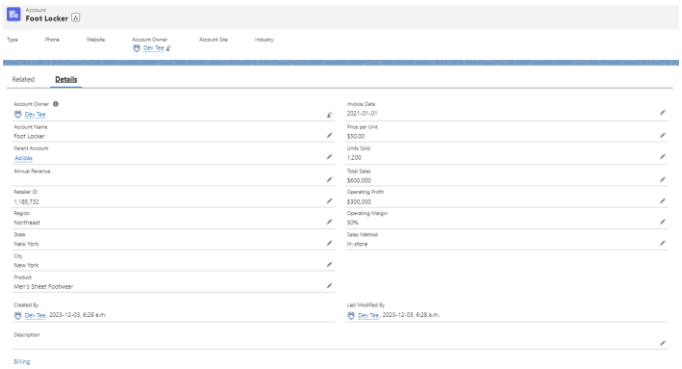


Figure 3: Account Details View

b. Fields

They are individual data containers within the Salesforce database, which provide the granular structure for organizing information. Custom fields for our

implementation were created based on the dataset structure These fields collectively populate the account object utilized, and can subsequently be represented visually through tables, charts, and other graphical representations.

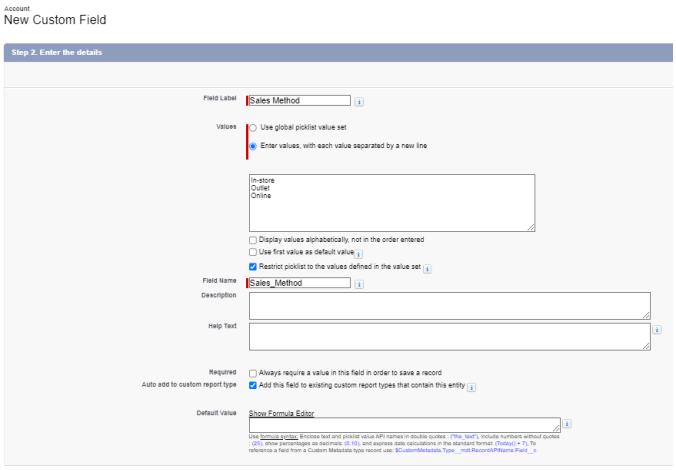


Figure 4: Field Creation

Figure 4 demonstrates creation of a custom field creation. The same procedure was done for all the fields to implement fields and relationships as well as defining data types to specify the type of information that the custom field will contain.

c. Records

In the implementation instance, records are any form of data or information that are stored in Salesforce database. We created custom fields to allow data mapping into salesforce.

2.1. Bulk Account Uploads via Data Import Wizard

In this process, three stages:

- Choosing Data: This involves selecting a CSV into the data import wizard. Most of the data cleaning was done in excel, so that the format of the format of the CSV file imported allows mapping to be done without any errors and duplications.
- Edit Mapping: This process involves mapping the data fields in the import file to the salesforce data fields.
- Start Import: The import status is provided in the bulk data load job section to assess if the records processed failed or passed.

This shows mapping data into the account object on salesforce using CSV header from the dataset

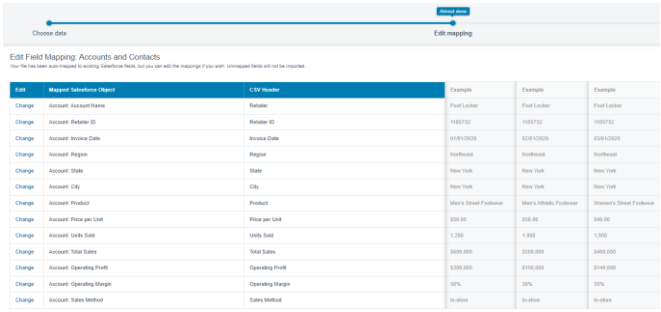
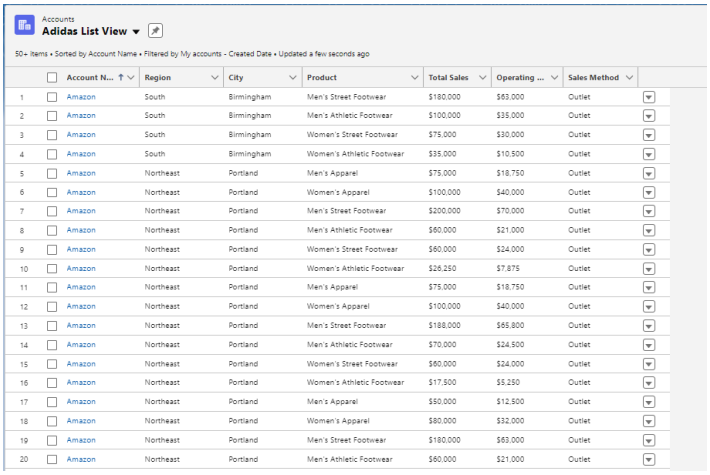


Figure 5: Mapping Data for Bulk Uploads into Salesforce

2.2. Account List View After Bulk Uploads

This list view shows the snapshot of accounts from the data provided, which will be used for Salesforce CRM Analytics implementation.



	Account N...	Region	City	Product	Total Sales	Operating ...	Sales Method
1	Amazon	South	Birmingham	Men's Street Footwear	$180,000	$63,000	Outlet
2	Amazon	South	Birmingham	Men's Athletic Footwear	$100,000	$35,000	Outlet
3	Amazon	South	Birmingham	Women's Street Footwear	$75,000	$30,000	Outlet
4	Amazon	South	Birmingham	Women's Athletic Footwear	$35,000	$10,500	Outlet
5	Amazon	Northeast	Portland	Men's Apparel	$75,000	$18,750	Outlet
6	Amazon	Northeast	Portland	Women's Apparel	$100,000	$40,000	Outlet
7	Amazon	Northeast	Portland	Men's Street Footwear	$200,000	$70,000	Outlet
8	Amazon	Northeast	Portland	Men's Athletic Footwear	$60,000	$21,000	Outlet
9	Amazon	Northeast	Portland	Women's Street Footwear	$60,000	$24,000	Outlet
10	Amazon	Northeast	Portland	Women's Athletic Footwear	$26,250	$7,875	Outlet
11	Amazon	Northeast	Portland	Men's Apparel	$75,000	$18,750	Outlet
12	Amazon	Northeast	Portland	Women's Apparel	$100,000	$40,000	Outlet
13	Amazon	Northeast	Portland	Men's Street Footwear	$188,000	$65,800	Outlet
14	Amazon	Northeast	Portland	Men's Athletic Footwear	$70,000	$24,500	Outlet
15	Amazon	Northeast	Portland	Women's Street Footwear	$60,000	$24,000	Outlet
16	Amazon	Northeast	Portland	Women's Athletic Footwear	$17,500	$5,250	Outlet
17	Amazon	Northeast	Portland	Men's Apparel	$50,000	$12,500	Outlet
18	Amazon	Northeast	Portland	Women's Apparel	$80,000	$32,000	Outlet
19	Amazon	Northeast	Portland	Men's Street Footwear	$180,000	$63,000	Outlet
20	Amazon	Northeast	Portland	Men's Athletic Footwear	$60,000	$21,000	Outlet

Figure 6: Table List View

Kanban view provides a graphical view of records in the list view.

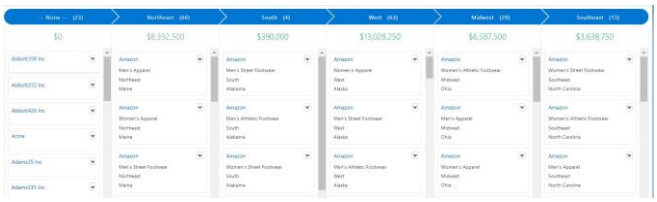


Figure 7: Kanban List View Summarized by Total Sales

3. BA IMPLEMENTATION WITH SALESFORCE CRM ANALYTICS

The salesforce CRM Analytics set up required consideration of the two concepts defined below.

Dataset – Which is a collection of data stored in a denormalized form to help optimize interactive exploration, and it is sometimes created from a recipe in CRM Analytics.

Recipe – Is an alternative way of dataset creation which is built in a visual interface called Data Prep. The recipe can combine data from multiple data sources synced into salesforce. It consists of two nodes.

- Input Node – Which adds data to the recipe, using input data from either the CRM Analytics dataset, Salesforce objects or external connected objects.
- Output Node – Adds recipe results to a target such dataset.

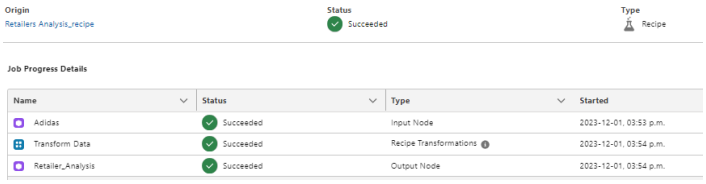


Figure 8: Data Prep Status for Recipe Creation

3.1. Business Analytics and Management Reports

Business analytics involves the process of analysing massive amounts of data to get insights and predictions. With CRM analytics the following valuable benefits are obtained:

- Effective Predictive Modelling - One of the key advantages of CRM analytics lies in its ability to utilize customer data to effectively assess the likelihood of future business decisions proving successful, thereby minimizing overall risk exposure.
- Clear Profitability Analysis - CRM sales analytics empowers businesses with the ability to identify customer segments with the highest potential for generating exceptional returns on investment (ROI). This strategic analysis will allow Adidas to concentrate their advertising, marketing, and sales endeavors on the most valuable demographics, fostering sustained profitability over time.

Metrics Summary Dashboard

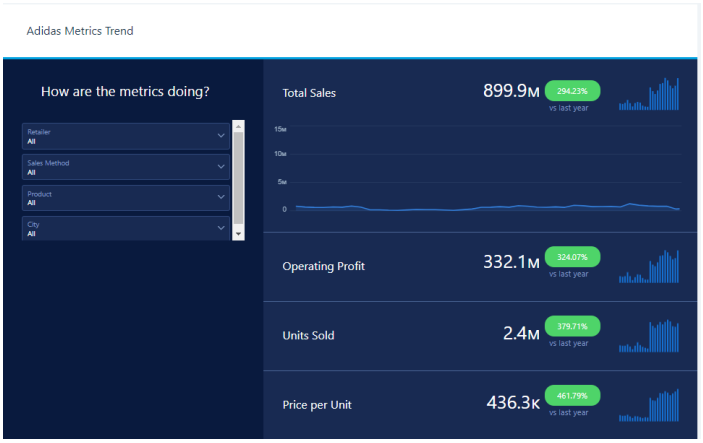


Figure 9: Metrics Summary Dashboard

- A sales team can use a Metrics Trend dashboard to identify trends in sales revenue, average order value, and conversion rate. This can help them target their sales efforts more effectively.
- A marketing team can use a Metrics Trend dashboard to track customer acquisition costs (CAC) over time. This can help them identify areas where they can improve their marketing ROI.
- A customer service team can use a Metrics Trend dashboard to track customer lifetime value (CLV) over time. This can help them identify which customers are most valuable to the business and focus their efforts on retaining them.
- By providing insights into trends and patterns, Metrics Trend dashboards can help businesses make data-driven decisions that can improve their performance.

Performance Summary Dashboard

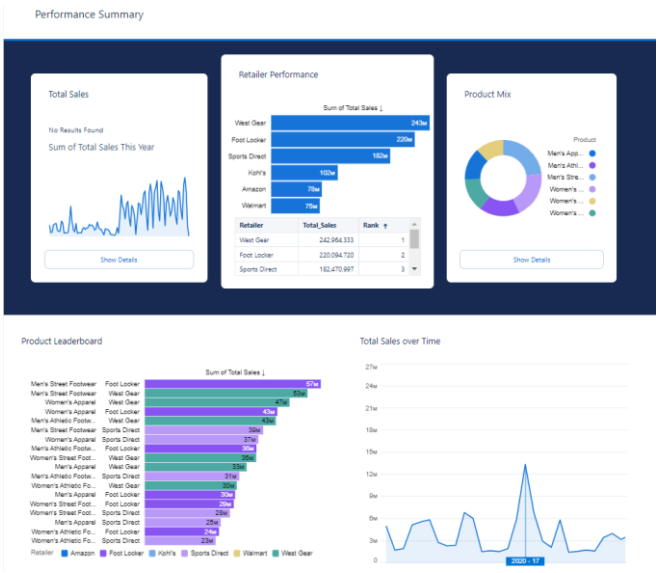


Figure 10: Performance Summary Dashboard

- Performance summary provides a concise overview of key performance metrics by comparing them side-by-side.

- Facilitates comparisons across different dimensions, such as sales revenue, product mix, or retailers performance.

Sales Forecast Dashboard

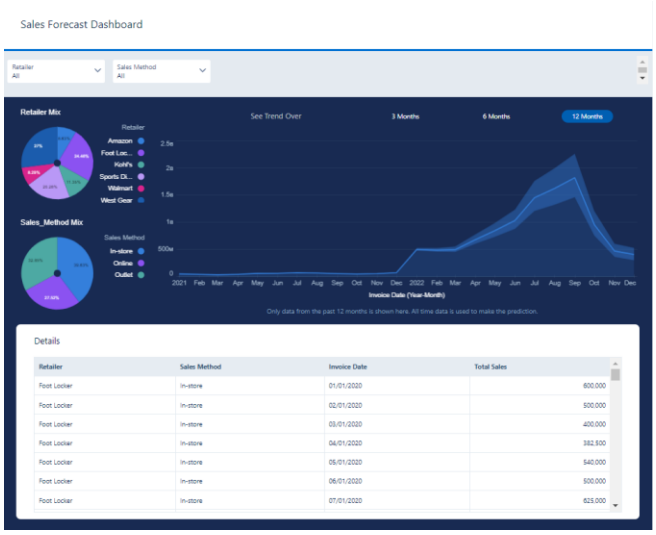


Figure 11: Sales Forecast Dashboard

- The trends show that sales will be high in September provided the current dataset.
- The sales forecast dashboard as observed provides the ability to analyze historical data in order to identify patterns and trends in metrics, providing insights into future performance.
- With the predictive insights, trends data can be utilized to make informed predictions about future metrics, enabling proactive decision-making.

4. DATA VISUALIZATION

4.1. Sales Dashboard

The use of data visualization is important in transforming complex datasets into valuable insights. Our sales dashboard provides a comprehensive view of the sales performance over the specified period. It also addresses the following:

- What is the overall sales performance?
- Which products are the best performers?
- How do different regions and retails compare in terms of sales?
- How effective are different sales methods? And what is their impact on profitability?
- What is the trend in sales over time?

Figure 12: Sales Dashboard

The dashboard reveals comparative analyis on how different regions and retailers contribute to the total sales. There's a significant increase in the amount of sales made in the year 2021 compared to the previous year, and in-store sales is shown to be responsible for this growth.

There is additional insight into the quarterly sales where Q3 contributes more to the nearly billion sales amount, of which men's street footwear is highly favoured.

Retailer	In-store	Online	Outlet	Total
Amazon	22,366,250.00	28,909,731.00	26,422,931.00	**77,698,912.00**
Foot Locker	76,525,000.00	72,943,290.00	70,626,430.00	**220,094,720.00**
Kohl's	29,566,250.00	30,992,229.00	41,556,274.00	**102,114,753.00**
Sports Direct	55,048,500.00	59,225,997.00	68,196,500.00	**182,470,997.00**
Walmart	16,411,250.00	15,069,494.00	43,077,666.00	**74,558,410.00**
West Gear	156,726,500.00	40,532,141.00	45,705,692.00	**242,964,333.00**
Total	**356,643,750.00**	**247,672,882.00**	**295,585,493.00**	**899,902,125.00**

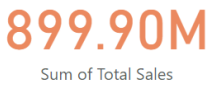


Figure 13: Quarterly Sales Contribution 1

The figure above summarizes the total sales not just made by each retailer but also the preferred method of sales for each retailer, and its contribution to the total sales made over those two years analysed.

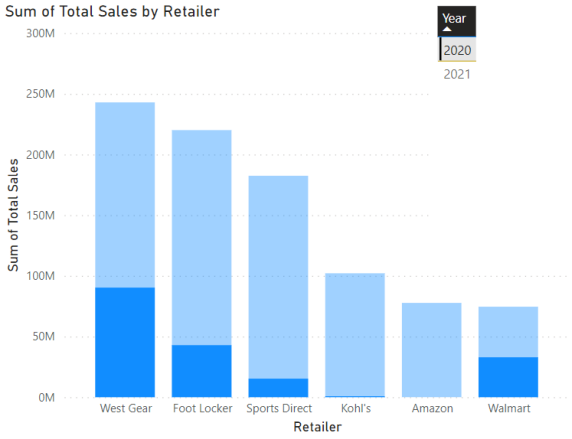


Figure 14: Total Sales by Retailers

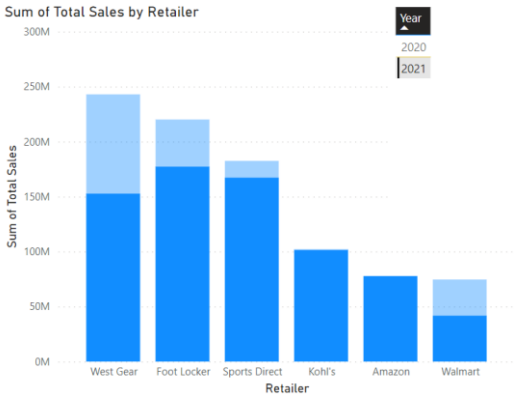


Figure 15: Sum of Total Retailers Sales

In alignement with the specification document, the sales dashboard serves as a strategic tool to mintor and analyze overall sales perfomance, positively impacting the vision and strategy outlined in the Continuous Improvement Program (CIP).

The visualization also addresses the gap identified in the fit-gap analysis. For instance, the visualizations on top-performing products and regional comparisons (see below) fill gaps related to understanding product performance and geogrpahical dynamics. The design incorporates flexibility, as suggested b the CIP, by allowing interactive filters and date ranges.

The sales dashboard caters to analytical requirements by providing visualizations for trend analysis over time, and the effectiveness of sales methods, addressing the need for comprehensive analytics to support decision-making. In fact, it is designed to represent captured data effectively, supporting the objectives of the data capture and analytics system.

4.2. Regional Dashboard

Figure 16: Sales by Region

The dashboard breaks down how different region contributes to the overal revenue. This identifies top-performing regions and uncovers areas for targeted strategies.

A yearly analysis provides insights into regions experiencing significant growth and those that may require targeted interventions to boost sales performance.

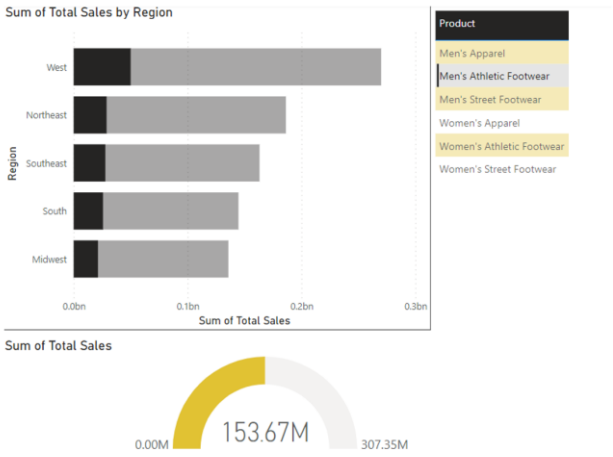


Figure 17: Region Sales

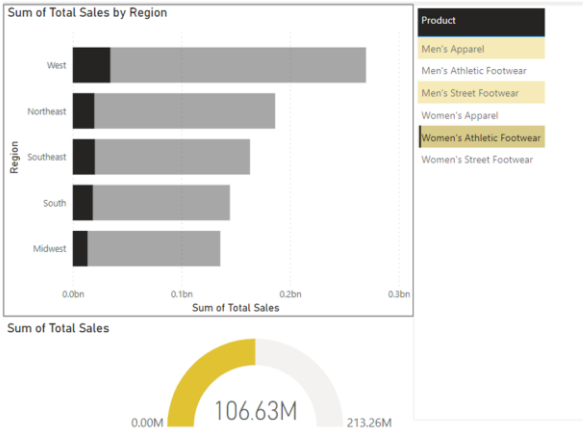


Figure 18: Filtered View for Region Sales

Similar to the sales dashboard, the region dashboard is designed using Power BI, aligning with the flexible architecture mentioned in the CIP. It addresses gaps identified in the fit-gap analysis related to regional insights, complementing the system design by offering flexibility in visualizing and comparing sales data across different regions.

The region dashboard can be desribed as a dedicated view within the reporting sste, meeting the demand for regional analysis as outlined in the CIP. It offers visualiztions that go beyond overall sales performance.

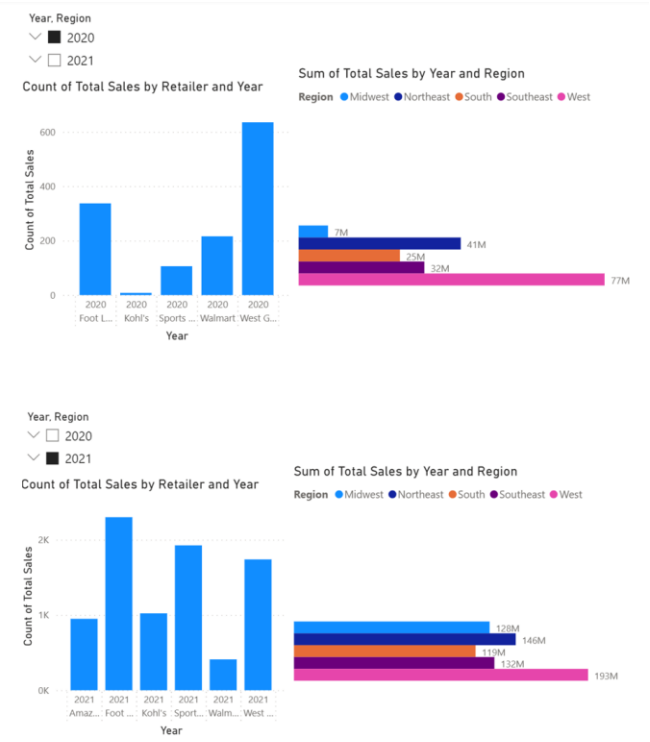


Figure 19: Overview Region Sales with Dates

The dashboards answers the following questions:

- Which region has the highest and lowest sales growth rate?
- How do different sales methods perform in various regions?
- What is the sum of total sales by product and region?

4.3. Product profitability

The operating margins chart identifies which product has the highest operating margin, indicating a strong profitability profile. This insight is crucial for decision making, informing the appropriate presonnel to optimize resources or potentially reevaluate pricing strategies for products which are lacking in that regard.

For each retailer, this is better visualized:

(a) Amazon

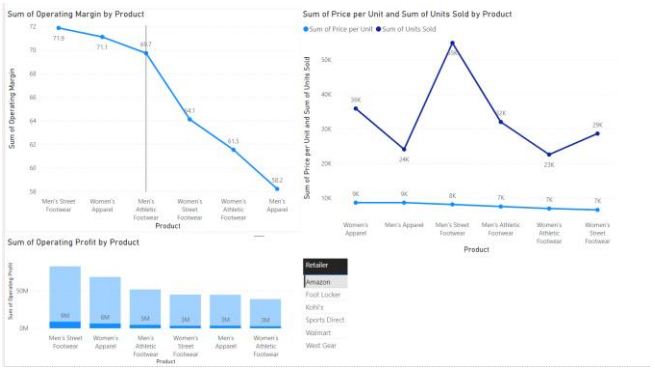


Figure 20: Amazon Sales

(b) Foot Locker

Figure 21: Foot Locker Sales

(c) Kohl's

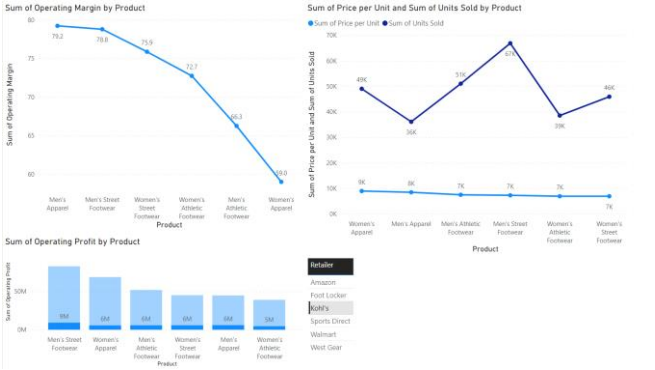


Figure 22: Kohl's Sales

(d) Sports Direct

Figure 23: Sports Direct Sales

(e) Walmart

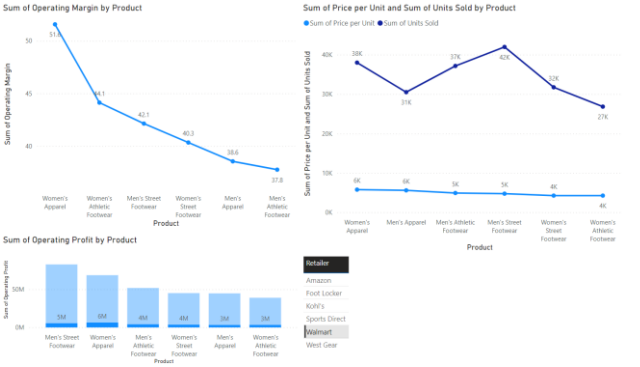


Figure 24: Walmart Sales

(f) West Gear

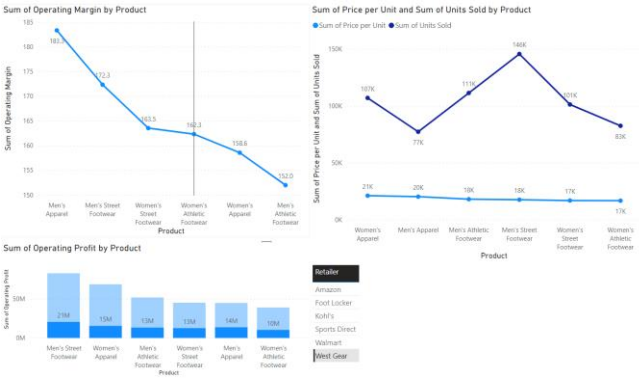


Figure 25: West Gear Sales

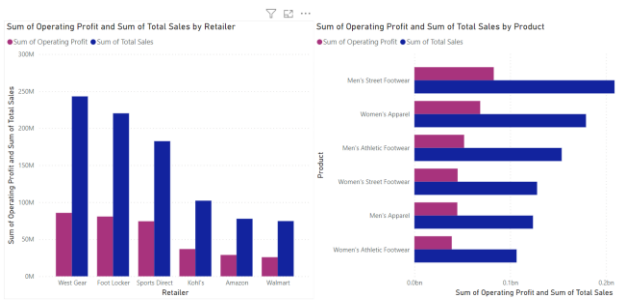


Figure 26: Retailers Sales by Product

The product profitability dashboard provides a focused view on product-specific financial metrics, complementing the system design by visualizing and comparing profitability metrics across different products.

In alignment with the specifications outlined in the document, it addresses the vision, strategy, customer integration, reporting needs, and analytical requirements.