CIA - III

Exploratory Data Analysis

Report submitted in partial fulfilment of the requirements for the degree of Master of Business Administration

By

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Under the Guidance of

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SUB MODULE: SALES/INVENTORY

MBA PROGRAMME

SCHOOL OF BUSINESS AND MANAGEMENT

CHRIST (DEEMED TO BE UNIVERSITY)

APRIL 2025

Title of Sub module in Inventory Data-Management: "**Inventory Data Management-Sales**" Managed and created by: "**Tharunbalaaje R**"

Date: "**2025-04-13**" Output: **HTML document: default PDF_document: default**

a) **Problem statement/ problem area or objectives derived from the business domain.**

As I have worked in data I tried to manage and engaged with all attributes with needed as most but some problems are also there which should be included in it:

Stock efficiency and Turnover Ratio

Sales forecasting based on the Time series model

Profitability Analysis based on each product

Then identifying the inventory gaps at present

Finally, Return rate and waste analysis.

R Markdown

This is an R Markdown document. This Document contains all inventory and sales details wiht the analysis of sales by date and inventory by sale etc., By this HTML file we can understand the sales and inventory of product.
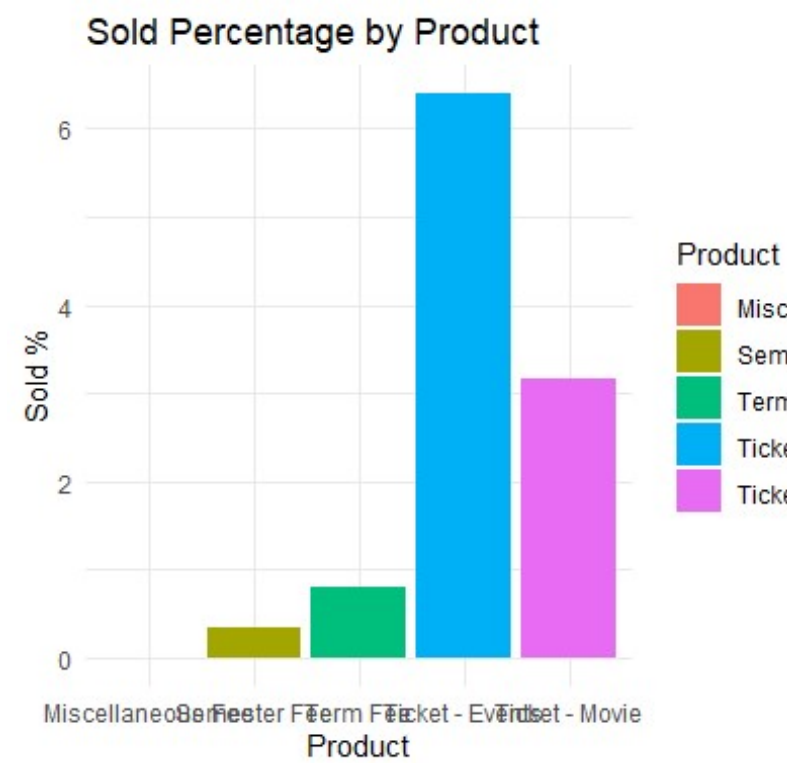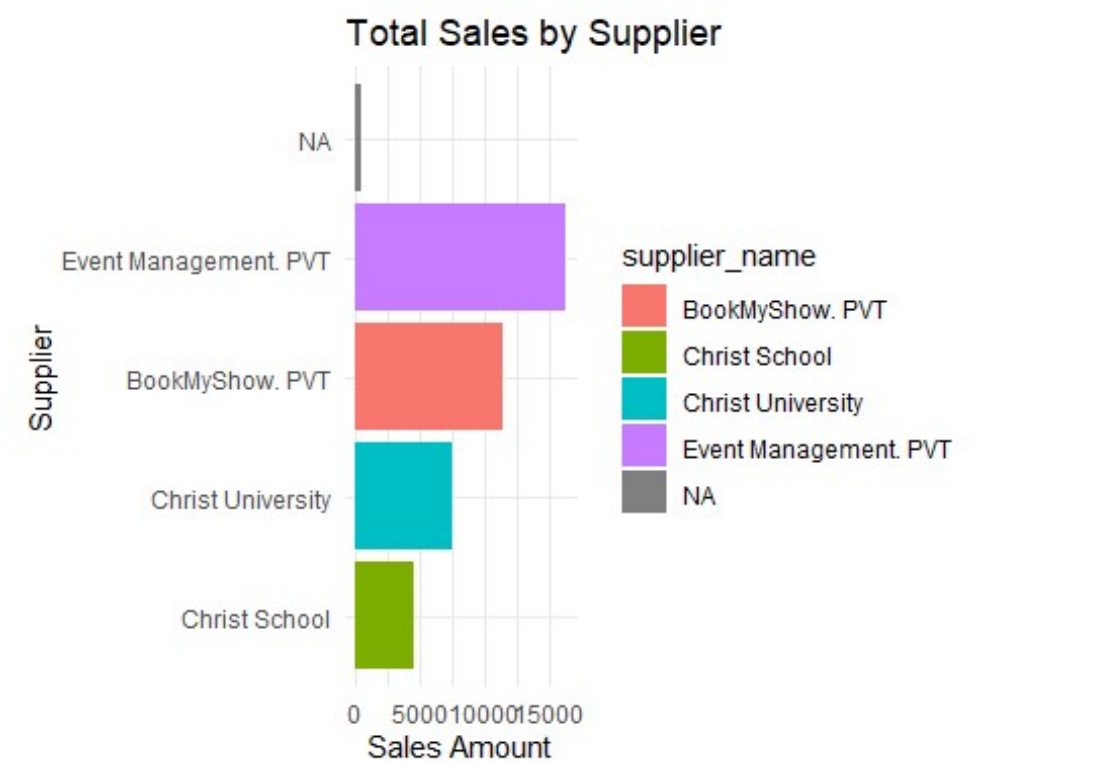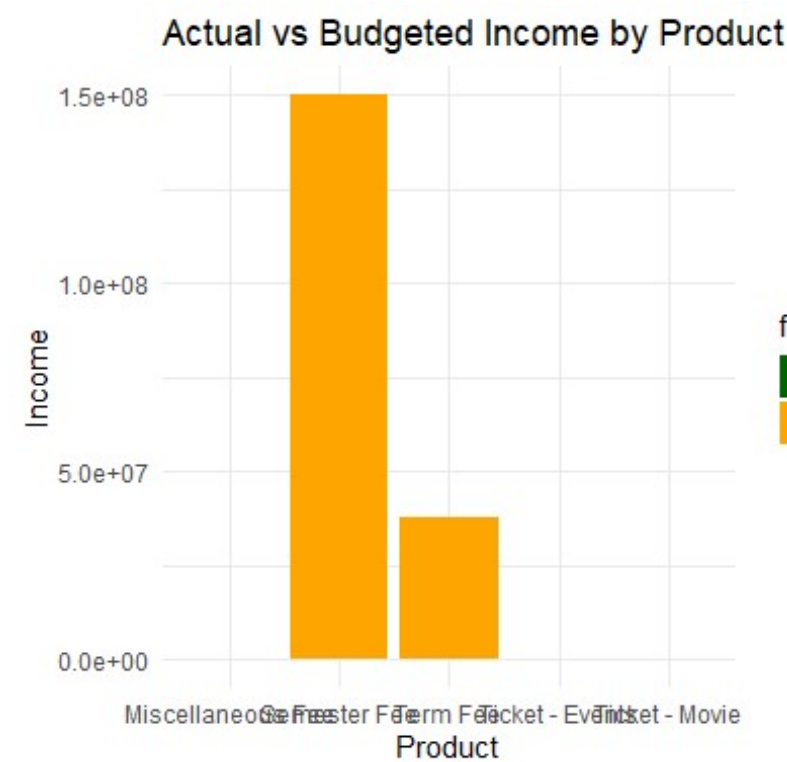
I'm maintaining the data of sales and Inventory by sales data in a daily manner.

Including Plots

You can also embed plots; see below I attached:
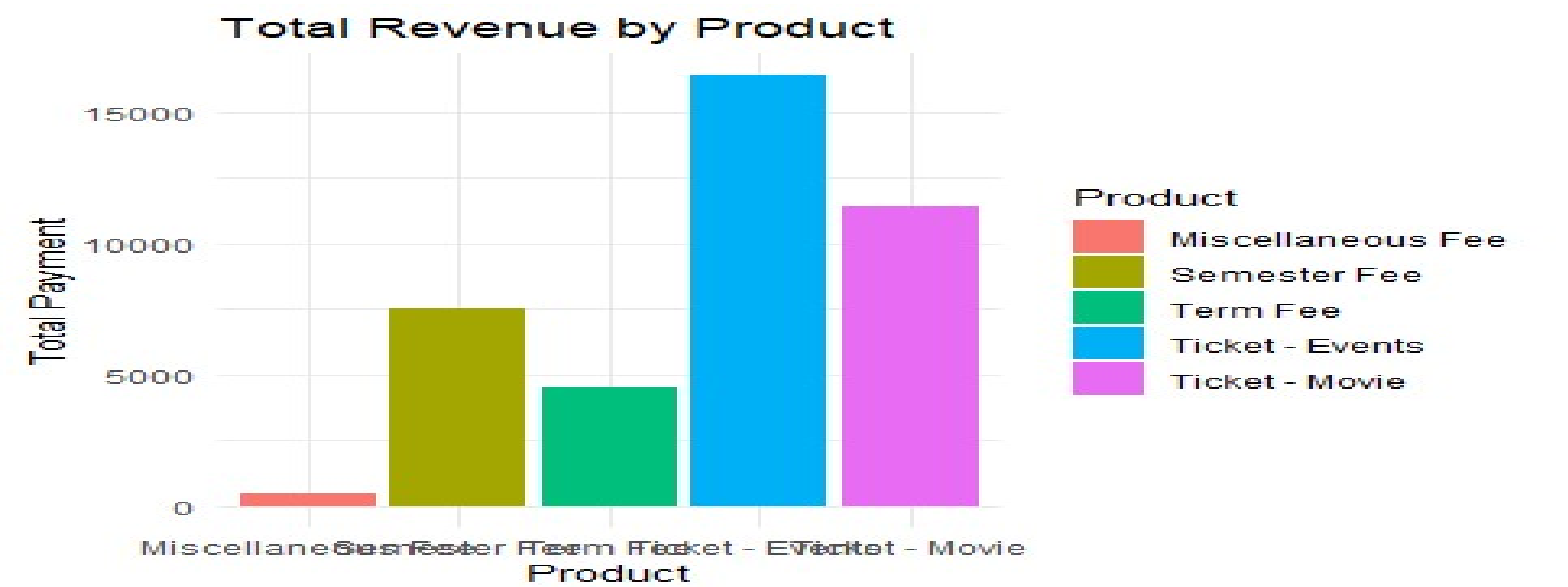

```
##  [1] "Product_Id"            "supplier_id"           "Product"
##  [4] "Description"           "supplier_name"         "Total_product_Quantity"
##  [7] "Price"                 "Stock(In)"             "Sold"
## [10] "Total Income(Actual)"  "Total Income(Budgeted)"
```

Actual vs Budgeted Income by Product

Total Sales by Supplier

Sold Percentage by Product

Top 10 Descriptions by Quantity Sold


```
## # A tibble: 2 × 4
##   Gender Avg_Quantity Avg_Payment Total_Payment
##   <chr>         <dbl>       <dbl>         <dbl>
## 1 Female         2.2         1325         13250
## 2 Male          2.05        1352.         27050
```

Total Quantity Sold by Product

Average Quantity Purchased by Gender

Average Payment by Gender

Product Preference by Gender