

Dashboard Report

Section: BCS-6B

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Introduction

This report analyzes dashboards created by Saim Haider, Rohail Nawaz, and Muhammad Abdullah. Each dashboard focuses on different data analytics objectives, showcasing skills in data visualization, user interaction, and actionable insights. The report evaluates the dashboards, their project learnings, and the outcomes achieved, providing a comprehensive overview of their contributions to data-driven decision-making.

1 Saim Haider(22P-9244): Ecommerce Sales Dashboard

1.1 Dashboard Overview

I developed an *Ecommerce Sales Dashboard* to track and analyze online sales data. The dashboard includes key metrics such as the sum of amounts, categorized sales, and quantities, totaling \$438K in amount, \$37K in assets, 5415 in quantity, and \$121K in category-specific amounts. It employs various visualization types, including bar charts, pie charts, donut charts, clustered bar charts, scatter charts, line charts, area charts, maps, and slicers, to present the data interactively.

1.2 Project Learnings

- **Created an interactive dashboard:** Built a comprehensive tool to monitor online sales, enabling real-time insights.
- **Utilized complex parameters:** Implemented filters and slicers for in-depth data exploration and customization.
- **Manipulated data for visualization:** Created connections, joined new tables, and performed calculations to support user-driven parameters.
- **Employed diverse visualizations:** Used multiple chart types to cater to different analytical needs, enhancing data interpretation.

1.3 Analysis and Outcomes

The *Ecommerce Sales Dashboard* effectively provides a holistic view of sales performance, with its interactive features allowing users to drill down into specific categories and metrics. The use of varied visualizations ensures that insights are accessible to different user preferences, while the incorporation of time series analysis (as part of broader learnings) suggests potential for forecasting capabilities, driving business success through data-driven strategies.

2 Rohail Nawaz(22P-9367): HR Analytics Dashboard

2.1 Dashboard Overview

I created an *HR Analytics Dashboard*, focusing on workforce analytics with an emphasis on functions segmented by age. The dashboard repeatedly highlights "Function by Age," indicating a deep dive into demographic-based workforce analysis, likely visualizing roles, performance, or other HR metrics across age groups.

2.2 Project Learnings

- **Identified key factors to reduce attrition:** Pinpointed critical elements affecting employee retention.
- **Improved the hiring process:** Streamlined recruitment strategies based on data insights.
- **Enhanced employee experience:** Used analytics to improve workplace satisfaction and engagement.
- **Increased workforce productivity:** Implemented changes that boosted overall efficiency.
- **Gained employee trust:** Fostered transparency and trust through data-driven HR decisions.

2.3 Analysis and Outcomes

The *HR Analytics Dashboard* demonstrates a strong focus on improving HR processes through data analytics. By analyzing functions by age, Rohail likely identified trends that informed strategies to reduce attrition and enhance employee experience. The outcomes suggest a successful application of analytics in addressing workforce challenges, making the workforce more productive and building trust among employees.

3 Muhammad Abdullah(22P-9371): Super Store Sales Dashboard

3.1 Dashboard Overview

I designed a *Super Store Sales Dashboard* in Power BI, offering a comprehensive overview of sales and profits across regions, states, categories, and time. The dashboard covers data from January 2019 to December 2020 and includes a 15-day sales forecast into January 2021.

- **Overall Sales and Profit:** The store achieved \$1.57M in total sales and \$175K in profit, handling a quantity of 22K items.
- **Sales by Category:** Technology led with \$0.64M in sales, followed by Office Supplies at \$0.47M and Furniture at \$0.45M.
- **Top Sub-Categories:** Phones generated \$0.20M, Chairs \$0.18M, and Binders \$0.17M.
- **Sales by Region:** The West led at 33%, followed by East (29%), South (22%), and Central (16%).
- **State-wise Performance:** California dominated with \$0.34M in sales, followed by New York (\$0.19M) and Texas (\$0.12M).
- **Sales by Segment:** Consumer segment contributed 48%, Corporate 33%, and Home Office 19%.
- **Sales by Payment Mode:** Cash on Delivery (COD) led with 43%, Online payments made up 35%, and Card transactions were 22%.
- **Sales by Ship Mode:** Standard Class was the most used (0.33M), followed by Second Class (0.11M), First Class (0.08M), and Same Day (0.03M).

3.2 Project Learnings

- **Applied time series forecasting:** Used historical sales data to build a short-term predictive model.
- **Advanced data modeling:** Integrated and cleaned large datasets across regions, segments, and timeframes.
- **Enhanced user interaction:** Created a visually dynamic and user-friendly interface using slicers, filters, and maps.
- **Explored diverse KPIs:** Balanced high-level overviews (total sales/profit) with deep-dives (state, category, and sub-category breakdowns).

3.3 Analysis and Outcomes

The dashboard’s 15-day forecast (Jan 1–15, 2021) highlighted stable sales predictions, e.g., January 14, 2021 projected sales of \$5,304.19 with an upper bound of \$9,585.03 and a lower bound of \$1,023.35. Sales patterns revealed peak sub-categories and regional demand, aiding stock management and marketing focus. For instance, the dominance of the Technology category and the West region suggests areas for strategic investment. The dashboard empowers stakeholders to make informed decisions using both historical trends and future projections, contributing significantly to data-driven planning and revenue optimization.

Conclusion

The dashboards created by the BCS-6B contributor, Saim Haider, Rohail Nawaz, and Muhammad Abdullah showcase a range of data analytics skills, from interactive visualization to predictive analytics and workforce optimization. Saim’s *Ecommerce Sales Dashboard* excels in providing detailed sales insights, Rohail’s *HR Analytics Dashboard* improves HR processes, and Muhammad’s *Super Store Sales Dashboard* enhances forecasting accuracy with stable predictions. Together, these projects demonstrate the power of data analytics in driving business success, improving operational efficiency, and fostering trust through transparency.