A DATA ANALYTICS DASHBOARD SYSTEM FOR SALES AND MARKETING USING POWER BI

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Abstract

The growing dependence on data-driven decision making within the business environment has enhanced the significance of analytical tools in influencing the sales and marketing strategies. This project focuses on the development and execution of a Sales and Marketing Analytics Dashboard System, using Power BI as the main platform. The dashboard was developed using publicly accessible data of EU Superstore obtained through Google Dataset Search, consisting of four main pages – Overview, Sales Analysis, Profit Analysis and Return Analysis. The study aimed to achieve three primary objectives: firstly, to develop an interactive dashboard system that can aggregate, analyze and visualize sales and marketing data in real-time. Secondly, offering customization features that enable users to adjust visualizations and Key Performance Indicators (KPIs) in alignment with their goals. Finally, assessing the effectiveness of the dashboard in meeting the requirements of the stakeholders, enhancing data-driven decision-making. The results indicate that using Power BI for the development of an interactive dashboard system plays a crucial role in converting raw data into actionable insights. This enables rapid, precise and visually engaging analyses, which are vital for informed decision-making in sales and marketing. This study highlights the significance of customizable and interactive dashboard solutions in enhancing business intelligence and boosting organizational performance.

Keywords: Sales and Marketing Analytics; Power BI; Dashboard; Business Intelligence; Key Performance Indicators (KPIs)

DECLARATION

This dissertation is submitted in part fulfilment of the requirements for the degree of MSc Advanced Computer Science with Data Science of the University of Strathclyde.

I declare that this dissertation embodies the results of my own work and that it has been composed by myself. Following normal academic conventions, I have made due acknowledgement to the work of others.

I declare that I have sought, and received, ethics approval via the Departmental Ethics Committee as appropriate to my research.

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