Department of Computer Engineering

Pimpri Chinchwad College of Engineering and Research,

Ravet

CERTIFICATE

This is certify that Jayesh Wadhwani from Fourth Year Computer Engineering has successfully completed his mini project work titled **"Software Defined Load Balancer with POX Controller"** at Pimpri Chinchwad College Of Engineering and Research, Ravet in the partial fulfillment of the Bachelor's Degree in Engineering.

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	Pimpri Chinchwad Education Trust's **Pimpri Chinchwad College of Engineering & Research Ravet, Pune** **IQAC PCCOER**	
Academic Year: 2024-2025	**Mini Project Report**	**Term:** II

MINI PROJECT REPORT

On

Software Defined Load Balancer with POX Controller

By

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Abstract:

The E-commerce Sales Dashboards project was designed to deliver in-depth insights into the sales performance of an e-commerce platform by leveraging the capabilities of Power BI. This project focused on developing interactive and visually engaging dashboards that facilitate the analysis of key performance indicators such as profit, order volume, customer demographics, product-wise sales, and overall sales trends. By integrating and visualizing real-time data, the dashboards empower stakeholders to make informed, data-driven decisions, optimize marketing strategies, and identify areas for business growth. The solution enhances operational efficiency by transforming raw data into actionable insights, supporting strategic planning and performance monitoring across the organization.

Introduction:

In the rapidly evolving digital marketplace, data-driven decision-making has become essential for maintaining a competitive edge in e-commerce. With vast amounts of data generated daily from online transactions, customer interactions, and product performance, there is a growing need for tools that can effectively organize, analyze, and present this information. The E-commerce Sales Dashboards project was initiated to address this need by utilizing Power BI to create dynamic, user-friendly dashboards. These dashboards provide a centralized platform for monitoring vital sales metrics, uncovering business trends, and gaining deeper insights into customer behavior. The project aims to support stakeholders in making informed strategic decisions and enhancing overall business performance.

Objectives:

- To visualize and monitor key sales metrics such as profit, order volume, and revenue using interactive Power BI dashboards.
- To analyze customer demographics and behavior for improved market segmentation and personalized targeting.
- To evaluate product performance across various categories and identify top-performing as well as underperforming items.

Methodology:

- Used Orders.csv and Details.csv as primary datasets.
- Cleaned and merged data using common identifiers like Order ID.
- Calculated key metrics such as profit, order volume, and sales trends.
- Developed interactive dashboards in Power BI for visualization.
- Extracted insights to support data-driven business decisions.

Output:

Order ID	Amount	Profit	Quantity	Category	Sub-Categ	PaymentMode
B-25681	1096	658	7	Electronics	Electronic	COD
B-26055	5729	64	14	Furniture	Chairs	EMI
B-25955	2927	146	8	Furniture	Bookcases	EMI
B-26093	2847	712	8	Electronics	Printers	Credit Card
B-25602	2617	1151	4	Electronics	Phones	Credit Card
B-25881	2244	247	4	Clothing	Trousers	Credit Card
B-25696	275	-275	4	Clothing	Saree	COD
B-25687	387	-213	5	Clothing	Saree	UPI
B-25643	50	-44	2	Clothing	Hankerchie	UPI
B-25851	135	-54	5	Clothing	Kurti	COD
B-25703	231	-190	9	Clothing	Hankerchie	COD
B-25887	2125	-234	6	Electronics	Printers	EMI
B-25923	3873	-891	6	Electronics	Phones	Credit Card
B-25756	729	-492	5	Furniture	Bookcases	UPI
B-25761	2188	1050	5	Furniture	Bookcases	Credit Card
B-25655	6	-3	1	Clothing	Hankerchie	UPI
B-25786	1854	433	5	Furniture	Bookcases	Credit Card
B-26095	6	1	1	Clothing	Kurti	UPI
B-25853	2093	721	5	Furniture	Chairs	Credit Card
B-25735	7	-1	2	Clothing	Skirt	UPI
B-25910	1622	-624	5	Furniture	Tables	Credit Card
B-25950	1622	95	5	Electronics	Printers	Credit Card
B-25744	373	254	6	Electronics	Printers	UPI
B-25845	82	-33	4	Clothing	Kurti	COD

Conclusion:

The project successfully utilized Power BI to transform e-commerce data into actionable insights, supporting data-driven decision-making and business growth.