OT Database Analysis Report

Implementing basic data analytics functions and creating effective
data visualizations that support business decision-making processes

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Executive Summary

This report provides a detailed analysis of OT's business performance using Oracle APEX, with a focus on Order Analysis, Best & Least Selling Products, Product Stock Levels, and Employee Sales Performance. Through the use of classic reports and visualizations, the analysis offers valuable insights that can inform strategic decision-making and enhance OT's operations. The findings indicate that high-value customers significantly contribute to revenue, highlighting the importance of targeted retention strategies. The analysis of best and least-selling products reveals opportunities to refine pricing, marketing, and inventory decisions. Additionally, the stock levels analysis emphasizes the need for optimized inventory management, while the employee sales performance evaluation underscores the importance of performance-based incentives and targeted training. Key recommendations include enhancing customer engagement, optimizing product and inventory strategies, and investing in employee development to improve overall efficiency and profitability.

Introduction

In today's competitive e-commerce environment, data-driven insights are crucial for improving business operations. OT, a global supplier of computational hardware, seeks to leverage Oracle APEX to enhance its enterprise system with advanced analytics and visualization capabilities. This report examines four key areas: Order Analysis, Best & Least Selling Products, Product Stock Levels, and Employee Sales Performance. By analyzing these areas, OT can gain a deeper understanding of customer behavior, product demand trends, inventory distribution, and employee contributions, allowing for more informed decision-making and strategic improvements.

Data Analysis and Findings

Order Analysis

The Order Analysis reveals the importance of high-value customers, who significantly contribute to OT's revenue. By identifying customers with the highest number of orders, OT can implement targeted marketing campaigns,

loyalty programs, and personalized promotions to encourage repeat purchases. The findings also show a declining trend in orders from specific customers, which may indicate potential dissatisfaction or shifting market preferences. To mitigate this, OT can focus on customer retention initiatives and engage with customers who have reduced their order frequency, ensuring sustained sales growth.
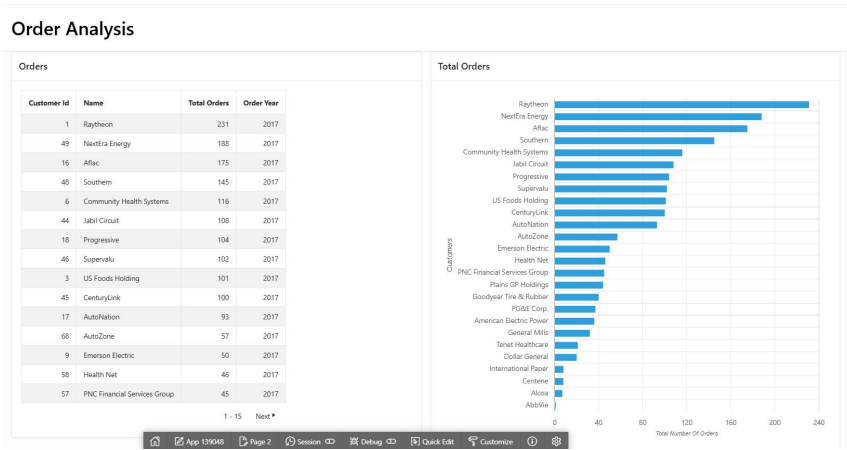
Best & Least Selling Products

The Best and Least Selling Products analysis highlights the performance of products like "Intel Xeon," which generated substantial revenue in 2017, accounting for a significant portion of total sales. However, the report also identifies underperforming products that contribute little to revenue, suggesting issues with demand, pricing, or marketing. To optimize product offerings, OT should focus on increasing the stock of best-sellers, introducing promotions, and refining the marketing strategies for low-performing products. This approach can help OT better align with market demand and maximize revenue.
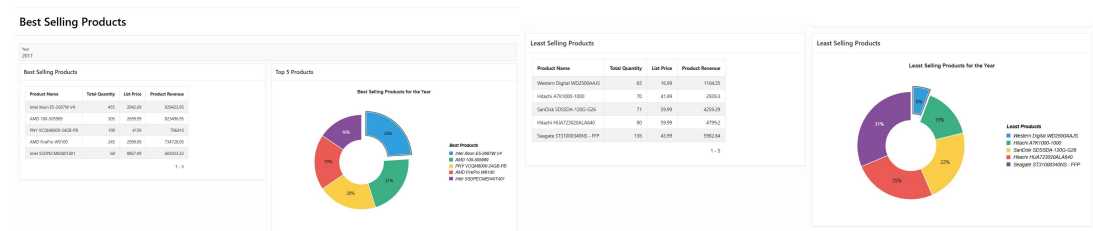
Product Stock Levels

The Stock Levels report reveals inconsistencies in inventory distribution across OT's warehouses, particularly in 2016 and 2017. While best-selling products were well-stocked in certain years, there were inefficiencies in stock allocation, leading to revenue variations. To address these challenges, OT should implement a demand-based inventory management strategy, ensuring that best-sellers are consistently available in high-performing warehouses. Real-time stock monitoring can further help prevent both overstock and understock issues, optimizing revenue potential and operational efficiency.

Product Revenue Per Warehouse

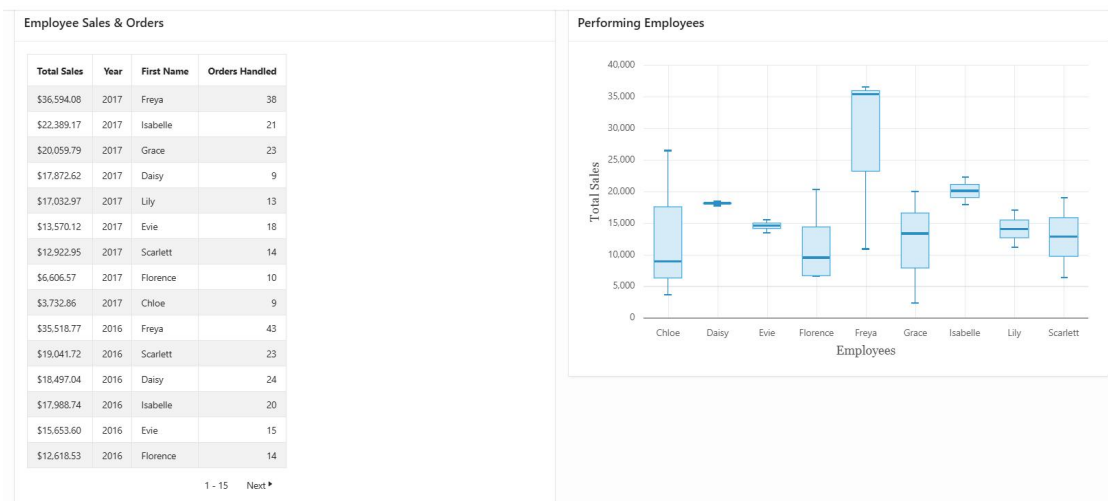| Product Name	Warehouse Name	Quantity	Year	Product Revenue
Intel SSDPECME040T401	San Francisco	117	2017	603023.32
Intel SSDPECME040T401	Toronto	69	2017	603023.32
Intel SSDPECME040T401	Beijing	32	2017	603023.32
Intel SSDPECME040T401	Mexico City	58	2017	603023.32
Intel SSDPECME040T401	Sydney	84	2017	603023.32
AMD FirePro W9100	Southlake, Texas	89	2017	389855.7
AMD FirePro W9100	San Francisco	194	2017	389855.7
AMD FirePro W9100	New Jersey	142	2017	389855.7
AMD FirePro W9100	Seattle, Washington	110	2017	389855.7
AMD FirePro W9100	Bombay	19	2017	389855.7
AMD FirePro W9100	Sydney	69	2017	389855.7
AMD FirePro W9100	Mexico City	51	2017	389855.7
AMD FirePro W9100	Beijing	34	2017	389855.7
AMD FirePro W9100	Toronto	87	2017	389855.7
ATI FirePro S9150	Southlake, Texas	131	2017	368583.04

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Employee Sales Performance

Finally, the Employee Sales Performance analysis evaluates employee contributions from 2013 to 2017, offering insights into individual and team performance. By identifying top-performing employees, OT can develop

targeted incentive programs, leadership opportunities, and performance-based rewards. For underperforming employees, additional training and support should be provided to improve their sales techniques and customer engagement strategies. A focus on performance-based incentives and employee development will help enhance workforce productivity and drive higher sales.

Employee Sales Performance

Employee Sales & Orders			
Total Sales	Year	First Name	Orders Handled
$36,594.08	2017	Freya	38
$22,389.17	2017	Isabelle	21
$20,059.79	2017	Grace	23
$17,872.62	2017	Daisy	9
$17,032.97	2017	Lily	13
$13,570.12	2017	Evie	18
$12,922.95	2017	Scarlett	14
$6,606.57	2017	Florence	10
$3,732.86	2017	Chloe	9
$35,518.77	2016	Freya	43
$19,041.72	2016	Scarlett	23
$18,497.04	2016	Daisy	24
$17,988.74	2016	Isabelle	20
$15,653.60	2016	Evie	15
$12,618.53	2016	Florence	14

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Performing Employees

Key Recommendations

Based on the findings, several key recommendations emerge. First, OT should enhance customer engagement through targeted retention strategies, loyalty programs, and personalized marketing to maintain strong customer relationships. Second, optimizing product offerings by increasing the availability of best-sellers, refining pricing strategies for underperforming products, and improving marketing efforts will help maximize profitability. Third, inventory management should be optimized by implementing demand-based stock distribution and real-time monitoring to ensure product availability and prevent inefficiencies. Lastly, OT should invest in employee development programs, offering performance-based rewards and training to improve productivity and foster a more motivated workforce. By acting on these insights, OT can streamline operations, improve sales performance, and drive long-term growth and success.

Conclusion

This report provides key insights into OT's business performance, highlighting areas for optimization to drive growth and efficiency. The Order Analysis stresses the importance of engaging high-value customers through targeted retention and loyalty programs. The Best and Least Selling Products Analysis suggests refining product offerings and marketing strategies to boost profitability. The Stock Levels Analysis reveals the need for better inventory management to prevent inefficiencies and ensure product availability. The Employee Sales Performance Analysis emphasizes the value of performance-based incentives and training to enhance workforce productivity. By acting on these insights, OT can improve customer engagement, optimize inventory, and foster a motivated workforce, ultimately driving long-term success and growth.