**Project Report on Laptop Sales and Brand Analysis Project**

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**2. Title of Project**

Laptop Sales and Brand Analysis: A Data-Driven Dashboard for Market Insights

**3. Project Description**

This project aims to analyze laptop sales data across various brands, examining factors like final pricing, device specifications (e.g., CPU, RAM, storage), and brand influence. The analysis helps visualize market trends, aiding in decision-making for pricing strategies, inventory management, and product development. The dashboard created in Excel serves as an interactive tool for stakeholders to understand and act on these insights effectively.

**4. Literature Work**

Several studies and business reports emphasize the importance of data visualization in business intelligence. In particular, analysis using pivot tables and dashboards in Excel provides a quick, flexible, and widely accessible solution for interpreting large datasets. Research also shows that consumer choice in electronics is often influenced by brand perception, pricing, and product specifications.

**5. Parameters Used in the Project**

Device Brand: Tracks laptop sales by brand, providing insight into market preference.

Model and Specifications: Differentiates laptops based on RAM, CPU, storage, and touch capability.

Final Price: Indicates pricing trends across brands and models.

Status: Classifies devices as new or refurbished.

**6. Analysis of Parameters with Diagram**

Parameter Analysis

Using pivot tables, we analyzed several parameters to explore patterns in sales data:

Brand Performance: Comparison of sales among brands (e.g., Acer, Apple, Asus).

Pricing Trends: Analysis of final prices to understand brand value and positioning.

Specifications Analysis: Insights into the most popular specifications (e.g., RAM size, CPU type) and their impact on pricing.

Diagrams

Brand Sales Chart: A bar chart showing total sales by brand.

Price Distribution Histogram: Histogram displaying the frequency of devices within different price ranges.

Specification Analysis Graph: Scatter plot comparing RAM vs. final price.

**7. Complete Dashboard Screenshot**

Include a screenshot of your dashboard here, highlighting the main sections like Brand Analysis, Pricing Trends, and Device Specifications.

**8. Limitations of Project**

Data Scope: The dataset is limited to specific brands and may not reflect all market trends.

Excel Constraints: Excel’s processing capability may restrict dashboard performance with very large datasets.

Device Specifications Detail: Some device specifications were incomplete, potentially affecting analysis accuracy.

**9. Future Work**

Enhanced Data Collection: Expanding the dataset to include more brands and devices could improve insights.

Automation with VBA: Adding VBA (Visual Basic for Applications) scripts could automate data updates.

Integration with Power BI: Linking the dashboard with Power BI could enhance interactivity and scalability.

Consumer Preferences Analysis: Adding consumer reviews and ratings to better understand purchase drivers.

1. **GitHub Link and Screenshot**

*<https://github.com/Xampnaman/project/tree/main>*

