Hallmarking Center Performance Analysis Dashboard

Tools: Power BI, Excel | Domain: Operational Analytics

As a data analyst, I designed and developed an interactive Power BI dashboard to provide a comprehensive analysis of the hallmarking center's performance over five years (2020-2024). This project involved end-to-end data management, including data extraction from operational records, cleaning and preprocessing in Excel, and advanced visualization in Power BI.

Project Scope and Objectives: The primary goal was to create a centralized platform for tracking key operational and financial metrics, enabling the management team to make data-driven decisions. Key metrics included:

- **Total Amount Processed:** Over 600000 pieces, with detailed tracking of received, hallmarked, and rejected items.

- **Financial Analysis:** Integrated GST, BIS royalty, and other tax metrics, amounting to millions, to provide a clear view of revenue distribution and financial performance.

- **Performance Metrics:** Monthly profit analysis, highlighting trends, peak performance periods, and underperforming months, to guide strategic planning.

Responsibilities and Actions:

- **Data Collection and Cleaning:** Gathered raw data from multiple sources, ensuring data integrity and consistency through meticulous cleaning processes in Excel, including handling missing values, correcting errors, and standardizing formats.

- **Data Visualization:** Leveraged Power BI's capabilities to build a user-friendly dashboard with interactive filters, charts, and graphs, allowing users to explore data by year and specific metrics.

- **Insight Generation:** Conducted deep dives into the data to identify seasonal patterns, monthly profit fluctuations, and the impact of operational decisions on overall performance. Highlighted areas where efficiency could be improved by 15%, directly influencing operational strategies.

Impact and Results:

- **Enhanced Decision-Making:** The dashboard provided the management team with immediate visibility into key performance indicators, enabling quick and informed decisions that aligned with business objectives.

- **Operational Optimization:** Insights from the data visualizations led to operational changes that improved hallmarking efficiency by 15%, reduced rejection rates, and streamlined processes.

- **Strategic Planning:** The ability to visualize profit trends and financial impacts over multiple years supported strategic planning and targeted actions to maximize profitability and efficiency.

This project exemplifies my ability to transform raw data into actionable insights through effective data management, advanced analytics, and intuitive visualizations, all of which are critical skills for a data analyst role.