Stradivarius BI Project: SSIS ETL, Data Mart Creation, and Power BI Insights

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I began my final project on Stradivarius by researching the company's operational database, Purity ERP, and identifying relevant tables for building a Data Mart (DM). I created an ERD in a Snowflake schema, detailing the structure of the DM. Simultaneously, I developed a technical characterization document outlining project goals, business rules, and final DM tables.

The ETL process in SSIS followed, transforming, and loading data into the DM. I ensured data integrity by applying business laws, like considering only customers with sales in the last 3 years. Special tables, like a product history table and a transferable table for package control, were added to the DM. Thorough end-to-end testing was conducted at each stage, and the characterization document was updated accordingly.

After DM construction, a development environment was created, and a process was implemented to keep it synchronized with the production environment. Scheduled SSIS jobs were established for automatic updates. Finally, I uploaded the DM to Power BI, creating a semantic layer with DAX indices. I developed a dashboard for senior management, featuring key performance indicators (KPIs) and graphs. Two additional reports focused on employee performance and customer sales insights were also generated. The dashboard and reports were updated daily, and an application for end-users was created.

Summary: I successfully executed a comprehensive project for Stradivarius, from researching the operational database to constructing a Data Mart, implementing ETL processes, and creating insightful Power BI dashboards and reports for effective business analysis and decision-making.