Data Quality Reporting for ESG

Leveraging reporting to ensure data quality and trust in ESG data

Situation

- The organization worked with **data from multiple sources** that fed the data warehouse and downstream reporting.
- However, **data quality was not systematically validated before being used**.
- There was no unified mechanism to:
  - identify errors in input data
  - monitor data quality over time and
  - ensure data reliability for reporting and decision-making.
- As a result, there was a risk of incorrect decisions driven by poor-quality data

Challenges

Based on the situation it was necessary to:

- Design and implement data quality controls directly in the ETL layer (SAP Data Services)
- Transform data quality rules into technical implementation (validations, checks, metrics)
- Ensure systematic logging of errors into the data warehouse
- Translate technical control outputs into a business-friendly reporting layer

Solution

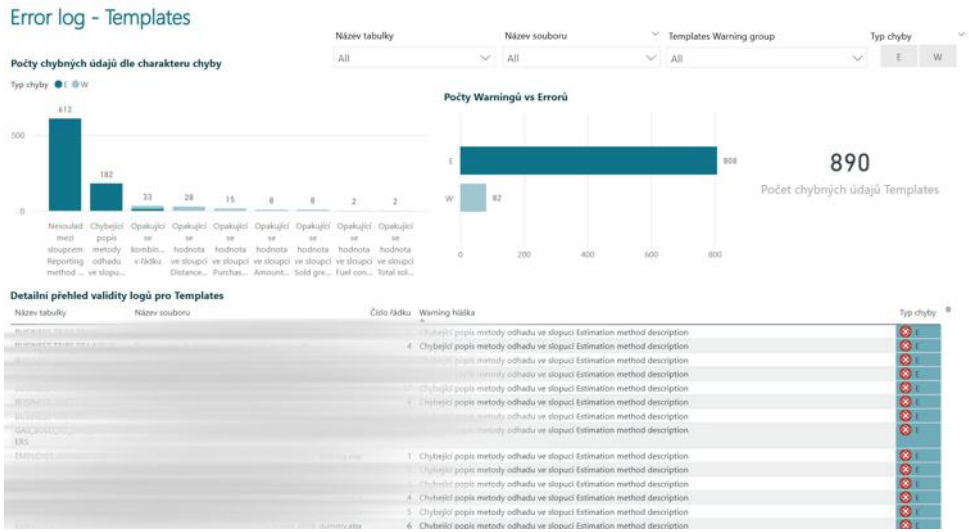
- **Implementation of data quality controls** within the ETL process using SAP Data Services .
- **Definition of rules** for selected data quality dimensions such as completeness, accuracy, consistency, and uniqueness.
- **Automated data quality checks** during data processing.
- **Logging of errors** into a centralized table in the data warehouse.
- Development of a **reporting layer for data quality monitoring** in Power BI.
- All of this resulting in a unified data quality management framework.

Benefits

- **Increased trust in data**
  - Business users work with validated and consistent data, eliminating doubts about accuracy and reducing the need for manual checks.
- **Early identification and resolution of issues**
  - Errors are detected already during data processing (ETL), before being used in reporting – minimizing business impact.
- **Transparent data quality monitoring**
  - Clear visibility of data quality across dimensions (e.g. completeness, accuracy, consistency), including trends over time.
- **Reduced time to analyze issues**
  - Error logging and categorization enable quick identification of root causes and faster corrective actions.

Future Plans & Development

- Extension to additional data quality dimensions
- Expansion to other data domains across additional reports



Industry

Energy

LoB

Energy Sales, Distribution, Customer Solutions

Customer

E.ON Czech Republic

Location

Czech Republic

Products & Service

Electricity and gas supply, distribution, energy solutions for households and businesses

Employees

~3,000+ employees (E.ON Group in CZ)

Systems

- SAP Data Services
- MS SQL Management Studio
- Power BI

Project Duration

09/2023–12/2023

Reference

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