

Strong data analytics ecosystem

Near real-time dashboards to maximize loan-portfolio performance.

Industry: **Banking**

*Image for illustrative purposes only

Summary

A Fintech-sector client needed help organizing and extracting information from Apache Fineract and application APIs, and loading it into the Data Warehouse via GitLab Runner or Snowflake tasks.

Key challenges

- Organize and extract information from Apache Fineract and application APIs, and load it into the Data Warehouse via GitLab Runner or Snowflake tasks.
- Better orchestrate the semantic data transformation layer and adopt data-engineering best practices (documentation and data lineage).
- Ensure data-quality mechanisms so displayed information is correct and up to date, with fast, clear, appealing dashboards.

Approach

A team of data analytics engineers with expertise in SQL, data warehousing, dimensional modeling, data governance, and visualization. Snowflake and DBT were used to organize key information into properly related tables and implement KPIs to monitor business health, and Sigma visualization tools were used to create clear, appealing analyses that address the most common business questions.

Results

- Near real-time visualization tools that let management act on the fly and maximize loan-portfolio performance.
- Greater confidence in the accuracy and timeliness of data, fostering a data-driven culture.
- A company-wide training program that lets teams create ad-hoc analyses and enhance existing models.
- Reverse-ETL techniques that let business teams consume Data Warehouse information for marketing campaigns, journal entries, and partner reports.

Technologies used

Snowflak	DBT	Anomalo
Sigma Computing		GitLab Runner
Apache Fineract	Apache Pulsar	Java APIs
MySQL	JSON	Amazon S3



Conclusion

Stakeholders unlocked the power of curated data to grow the business, with a solid data structure supporting decision-making.