# HOW A DATA LAKE IMPROVED BUSINESS INTELLIGENCE FOR A FINANCIAL SERVICES COMPANY

A Case Study on how insightful reporting helped improve business intelligence for the company

## **KEY METRIC**

The business was able to leverage the data lake for multiple functions and decisions



Data driven decision making

#### **SUMMARY**

A well-established and thriving financial services company faced issues regarding centralized reporting and data management across various platforms. We stepped in to streamline their data by consolidating information from sources such as Analytics, Bing, Social Media, QuickBooks, and others. This process, which involved Extract-Load-Transform (ELT) techniques, cloud computing, and APIs, led to the creation of a Data Lake. The Data Lake became the cornerstone of their business intelligence, enabling easy one-click centralized reporting and enhancing their management's decision-making abilities.

#### **BUSINESS CHALLENGES**

Interactions across platforms complicate comprehensive data management, hindering effective company oversight. The financial firm's use of diverse applications led to data duplication and limited customer insights, posing extraction challenges.

Diverse data influx exacerbated issues; CRM held client data, while vendors and affiliates submitted details. PPC data came from Google and Bing, website traffic from Google Analytics, and QuickBooks handled accounting. Consolidating this unstandardized data for reports proved onerous.

Though Excel is a common choice, manual data linking is laborious. Existing software lacked robust reporting capabilities for valuable insights.



Data consolidated from multiple sources



Insightful reporting to management



Data driven decision making

### **SOLUTION PROVIDED**

A data lake serves as a storage repository for vast amounts of raw data in its original format, remaining unstructured until queried. In contrast to hierarchical data warehouses, data lakes employ a flat architecture that accommodates both structured and unstructured data.

- 1. Nablasol established a cloud-based Data Lake to centralize data storage, consolidating information from various sources.
- 2. Data extraction occurred via APIs, and the data was loaded in its raw state into the storage.
- 3. Subsequently, data transformation took place based on logical relationships between data sources to facilitate various formats.
- 4. The results were presented comprehensively on a centralized dashboard, complemented by custom tools for seamless integrations.

# **IMPACT ON BUSINESS**

Establishing the Data Lake for storing large volumes of data yielded significant benefits.

- It enabled streamlined and data-driven decision-making processes, enhancing the quality of business decisions through more insightful reporting.
- Centralizing data allowed for a more comprehensive and cohesive view of the organization's operations, fostering a deeper understanding of various aspects of the business.
- With a centralized dashboard, management gained enhanced visibility into critical metrics and key performance indicators. This real-time access to datadriven insights empowered decision-makers to assess situations more accurately and respond proactively to challenges or opportunities.

In summary, the creation of the Data Lake represented a strategic move that had far-reaching implications. It not only facilitated efficient data storage but also transformed the way the company harnessed data for informed decision-making, ultimately bolstering its business intelligence capabilities.

