data
Analytics

Microsoft .NET

AI-POWERED ANALYTICS SOLUTION FOR DATA MANAGEMENT, VISUALIZATION, AND TREND FORECASTING

We helped the client configure an all-in-one analytics solution capable of data collection, management, and insight generation. With such a system, the client can store and leverage big volumes of data, create custom reports, get data-driven insights, and make AI-powered predictions on their performance.

ABOUT THE CLIENT

Our client is one of the leading ecommerce enterprises in the Nordic region. In total, they run more than 150 ecommerce brands in different niches, from clothes and furniture to kitchen utensils and gadgets. The client's request was to turn their single data repository into an insightful business intelligence tool that can be used without the help of a technical team.

SCOPE OF THE PROJECT

When working with big volumes of data, businesses find it hard to keep them in order. Companies often struggle with finding the needed entries, sorting and categorizing data, leveraging different data types in one report, etc. The same challenges were faced by our client. To help them improve their performance, we configured a smart data collector that can upload data from numerous sources to a single location and put them into action.

We started by listing the sources the client leverages for data collection. These were Google Analytics, Google Ads, an ERP system, an ecommerce platform, and several tracking and performance testing systems. We integrated the data analytics solution with all of these sources to securely store product, marketing, and financial data. From that time on, the client could access ecommerce analytics on the overall business performance as well as key metrics.

This business intelligence and analytics solution enables the client to create both standard and custom reports leveraging any data type that is stored and managed in their repository. The standard reports that can be generated in a few clicks include sales performance reports, inventory management reports, customized Google Analytics reports, ecommerce metrics reports, etc. Apart from this, the client can create custom reports visualizing analytics on their sales, pricing strategy, customer data, and more.

THEIR CHALLENGES

The client wanted to opt out of using multiple ecommerce analytics tools in favor of one solution where all the data can be stored and operated. The solution had to be secure and easy to use.

Off-the-shelf solutions charge recurring fees for data analytics services. The client looked for a more cost-effective strategy for data visualization and smart analytics.

OUR SOLUTIONS

1. Our team configured a single business intelligence & analytics solution that centralizes data from multiple systems. A simple UI allows the client's team to use it without the involvement of tech specialists.

2. The client got a fully customized solution that offers unlimited services and requires no additional investment. There is no limitation to how much data can be stored or for how long.

Out-of-the-box software was unable to provide the client with enough capacity to create custom reports and enable historical and real-time data analytics.

3

We provided the client with the opportunity to create custom reports. In addition to standard automated reporting, they can use role-based reporting features leveraging the segmented data that each separate team works with.

Our client needed a smart AI-driven solution that would help them draw insights from data, make predictions, trace tendencies, and optimize the workflow.

4

The AI algorithms integrated with the system allow the client to use forecasts and smart analytics to make data-driven business decisions.

TECHNOLOGIES WE HAVE USED IN THIS PROJECT

Backend	**Frontend**	**Database**	**Cloud storage**	**Cloud platform**
.NET Core ASP.NET Core MVC	ASP.NET Core MVC	MSSQL	Google BigQuery Google Storage	Google Cloud

Cloud orchestration	**Virtualization**	**Logs/Monitoring tools**	**Continuous integration**	**Other tools**
Google Kubernetes Engine (GKE)	Docker	Seri log Custom logging	Bitbucket	Quartz

HOW WE ADD VALUE

01. UNLIMITED INTEGRATIONS

You may wonder what will happen if the client launches new ecommerce shops or adds new management systems to their infrastructure. We always help our customers scale, and this was taken into account when providing the business intelligence solution to the client. The solution can be integrated with as many systems and sources as needed. If some new sources are added to the list, we will quickly configure the solution and integrate it with the new software types.

02. AI INSIDE

We transformed the way the client manages, searches, and uses data by adding AI-powered features to the data analytics solution. By integrating LLMs (Large Language Models) with the product, we opened access to human-like interaction between the client and the system. Instead of manually looking for some entries or creating reports, the client can expose the data to an AI algorithm, ask it a question, and it processes their query in a matter of seconds.

03. 360-DEGREE LOOK AT DATA

Many software solutions offer access to fresh and real-time data. However, very few of them can provide users with uninterrupted access to historical data from day one. As a rule, the initial data are gradually replaced by the new data a client produces. In contrast to this, we've provided the client with 24/7 access to both historical and fresh data. They can use historical data to create reports and enable ERP analytics, while real-time data are helpful for the analysis of the current situation.

04. NO EXTRA EXPENSES OR EFFORTS

Out-of-the-box solutions offer different subscription plans. As your business needs grow, you have to upgrade the plan and increase your expenses accordingly. With our predictive analytics solution, the client got all the needed features and functions at once. There were no additional fees that would go beyond the project estimate. Furthermore, the client did not need to put extra effort into learning how to use the software. That's because of the simple and unitive user interface for data visualization and AI analytics.

FUTURE COOPERATION

Within 90 days, the customer got an effective solution for centralized AI-driven analytics that unites data from numerous sources under one roof. Their team can use the tool with no help from the technical specialists. The solution is intuitive and requires no specific expertise to draw insights from data. In our turn, the Forbytes team offers support and maintenance for the solution. Our business intelligence consultants are also ready to enrich it with new features as soon as the client's needs grow.