Delimobil

Vertica puts Delimobil in the driver’s seat with data analytics—reporting, pricing, identifying dangerous driving, and fraud prevention.

Who Is Delimobil?
Delimobil is one of the largest per-minute car rental services in Russia. The company’s fleet consists of more than 12,000 cars from different brands—from the inexpensive and popular Polo, Solaris, and Rio to the more upmarket Audi, BMW, and Mercedes-Benz. Delimobil’s services are available in Moscow, Saint Petersburg, Ufa, Nizhny Novgorod, Yekaterinburg, Samara, Grozny, Novosibirsk, Krasnoyarsk, Krasnodar, and Rostov-on-Don.

Centralize Data Collection for Meaningful Reporting
When managing a young and fast-growing company required deep analytics, Delimobil recruited Data Manager Boris Syusyukalov, who quickly became the analytics platform architect. “The need for analytics arises when a company’s business grows to a certain level and when optimization becomes a necessity so that effective development can continue,” Syusyukalov explains.

Before implementing Vertica, Delimobil did not use an analytics platform. But with a broad range of data being collected, including telemetric data coming from the devices installed in cars, the plan was to upgrade financial and operational reporting, supply and demand assessments and forecasting, and improve customer relationships and marketing interactions.

“We first had to ensure that all data was collected in one place in order to study and analyze it, extract valuable information, draw conclusions, and then reuse and supplement the data,” explains Pavel Panshin, Head of the Delimobil Analysis Department.

Vertica: Reduced Operating Costs While Providing Sophisticated Analytics
Company executives needed no persuasion in purchasing an analytics platform. The key managers had already experienced the power of analytics.

In fact, Boris Syusyukalov had already seen the benefits of Vertica products, which influenced their purchase decision: “I knew this platform...”

“At a Glance
- Industry: Transport Services
- Location: Russia
- Challenge: Consolidation of various data sources and analysis to solve a wide range of business challenges
- Products and Services: Micro Focus Vertica Analytics Platform
- Critical Success Factors:
  + Creation of a consolidated data warehouse
  + Qualitative improvement of business processes
  + Flexible pricing based on customer scoring and demand forecasting
  + Prevention of fraudulent activities by customers

硼河

“Вертекс платформа стала интегральной частью компании, без которой бизнес не может быть успешным”

BORIS SYUSYUKALOV
Analytics Platform Architect
Delimobil

“德里莫比尔”
could solve analytical problems effectively and that no modifications would be required once a Vertica-based business analytics system was up and running. We considered alternatives, of course, but ultimately our preference was Vertica.”

Panshin adds: “Like Boris, I also worked with Vertica in my previous employment, and I had confidence in it. I knew that the platform offered high performance, scalability, and reliability. It met all the requirements for an analytical data warehouse, supported SQL, and also offered the option to create custom extensions.”

Delimobil’s wanted an analytical platform that was comprehensive, functionally complete, and with low resource consumption during operation and support.

“Thanks to the fact that Vertica uses SQL—the most effective tool for working with data today, which most specialists in this field are familiar with—the cost of platform support is low. There are many specialists in the job market who are experts in using SQL, and the prospect of attracting them allows the total cost of managing the system to be significantly reduced,” remarks Syusyukalov.

Reduced Integration Time and Reliable Transaction Processing

Implementation and configuration of the Vertica 9.1 analytics platform were managed by one employee (with upgrades to newer versions later), which took approximately two months. Delimobil used virtual machines in a partner’s data center to deploy the system, because rented virtual machines (VMs) will allow the company to quickly scale the system as needed.

To ensure that transactional data was exchanged with other systems correctly, the team created the company’s own interface modules using the capabilities Vertica and connected systems provided. According to Delimobil experts, this not only reduced integration time but also provided reliable control over transaction processing.

“Data from different application systems is streamed to Vertica, providing aggregated data to all the units that require it,” says Panshin.

Consolidated Data Warehouse

The system consolidates a large variety of data: transactional and clickstream data (used to build the sales funnel), telemetry data (from vehicle-installed modules such as Connected Car to report operational parameters and location), geo-analytics data, back-office application data, and internally generated data tables, as well as information on contractors and their activities related to advertising.

Delimobil uses Vertica to prepare financial and operational reporting, for machine learning tasks, and to adjust the user interaction model based on data analysis from these processes. Vertica also helps with pricing decisions, including discounts and the dynamic determination of service costs based on the current demand and forecast.

Specialized Python libraries are used for machine learning. They provide dynamic pricing and demand forecasting, as well as client scoring, including prevention of attempted fraudulent transactions and detection of dangerous driving (based on the telemetry data stored in Vertica, as well as customer-specific information that has already been collected).

“We are prepared to offer more attractive terms to users who drive carefully and safely, not leaving litter in cars and treating both the company’s property and that of other drivers with care,” explains Syusyukalov.
Delimobil’s primary Vertica users are analysts, developers, and various employees of business units. The company’s management and marketing representatives receive information that is processed and prepared by the analysts.

“The responsibility for data quality lies with the analysts in charge of determining the business logic. The analysts work directly with all data projections in the variety of systems, which constitute the pathway from the source system to the end user. If analysts are convinced that the cause of a data problem lies in the delivery or in the way the data is handled by Vertica, they contact the data warehouse development department, whose specialists fix the problem,” says Panshin.

Vertica Analytics Results in Product Improvements and Customer Satisfaction

Delimobil successfully handles all data analysis tasks. “The Vertica platform has become an integral part of the company, without which the business could no longer be successful,” Syusyukalov comments.

Panshin believes that the main outcome of the project is the creation of a data warehouse that provides employees with any information that they require in the most convenient form.

“Analytics has allowed us to embark on the qualitative improvement of business processes and to start the fight against user fraud, which has provided huge savings. In addition, employees of business units have access to metrics they can understand, which enables them not only to assess the current state of the company, but also to make sufficiently accurate forecasts,” emphasizes Panshin, summarizing the implementation results. “The warehouse has become the data center that consolidates information from many disparate systems operating in our divisions, which is priceless! We can understand our customers better, solve their pressing issues, and improve our core product so that it fully meets the requirements of the modern market.”

Delimobil intends to further develop and improve their analytics capabilities, achieving greater data transparency for users. The main goal is to improve the culture of data handling and to ensure its full democratic transition, which will increase employee productivity. In addition, there are plans to improve corporate data management processes (data governance) and data tracking (data lineage).

“We closely monitor what is happening in the analytics industry; we collect open source information and communicate with other customers, but there seems to be no worthy alternative to Vertica,” concludes Syusyukalov.