Suunto
Suunto unlocks fitness coaching market with Big Data project.

Overview
Suunto, a subsidiary of the Amer Sports Corporation, manufactures and markets sports watches, dive computers, compasses and precision instruments helping consumers technologically connect to their active and adventurous lives. Based 19 kilometres north-east of Helsinki in Vantaa, Finland, the company handcrafts the devices at a purpose-built factory and exports to over 100 countries.

Challenge
Driven by technology improvements over the last decade, data-driven personal devices such as activity or fitness trackers have become increasingly popular amongst both professional and amateur athletes as well as sports enthusiasts. These wearables monitor and track fitness-related information such as distances travelled, altitude climbed, dive depth, heartbeat and calories consumed. Many users frequently link their devices to smartphones for long-term data tracking.

"Over recent years, our market has changed considerably as cloud-connected devices became more prevalent," explains Janne Kallio, performance business digital leader, Suunto. "With every measurement entering the cloud, we've an opportunity to analyze this data and bring new value to our customers. We aim to create innovative products by using Big Data as a differentiator in a very competitive market."

Suunto wanted to enrich the customer experience and build brand awareness of its extreme sports watches and outdoor instruments by analyzing all the data generated by these devices. For example, analyzing fitness data in real-time allowing users to gain valuable insight into their training.

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JANNE KALLIO
Performance Business Digital Leader
Suunto

At a Glance

Industry
Electronics

Location
Vantaa, Finland

Challenge
Required a high-performance database to ingest and analyze massive data volumes created by customers’ coaching solutions and enhance the user experience.

Solution
Adopted Vertica Analytics Platform to analyze customer fitness data and boost customer experience.

Results
+ Manages and analyzes massive data volumes rapidly and reliably via a highly structured database, eliminating the limitations of traditional data warehouse technology.
+ Constantly updates the data pool, generating highly accurate progress and performance information to users.
+ Boosts brand awareness and enhances the user experience substantially, delivering a competitive edge in a highly aggressive market.
Solution
In 2010, Suunto launched Suunto Movescount, an indigenous cloud solution that connects to a range of Suunto devices.

After Suunto customers had stored several years of tracked data into Movescount, the company sought a technology to analyze the massive data volume. The goal of the project was to build a data-analysis setup that analyzes, stores, groups and feeds back the data to downstream systems via the Representational State Transfer (ReST) architecture in real-time. The database continues to grow every time somebody runs a Suunto connected product.

Suunto opened the discussion with HPE Software (now part of Micro Focus) partner Eficode by asking how it should tackle this vision of Big Data based training insights. “When we embarked on this Big Data journey we adopted a completely open mindset as we knew the data would lead to the solution,” says Kallio. “HPE Software (now part of Micro Focus) and Eficode had a similar open attitude and we liked how Vertica fitted into the equation. It adopted a bold approach by saying its solution could do all the things we wanted. And it certainly does. It’s extremely fast and readily processes the vast amount of data generated by our devices every time there’s a new training session.”

The Vertica Analytics Platform is a highly scalable column-orientated relational database that handles modern analytic workloads with high-performance query analytics functionality. The advanced analytics solution drives all features of Suunto’s movescount.com application, with millions of training sessions entering the system weekly.

“With the data stored in Vertica, we easily pull out current facts about how people are training and hundreds of thousands of people now benefit from the tools we provide based on this Big Data analysis,” reveals Kallio. “Analysis has yielded one billion data points and, as the database grows, it becomes increasingly accurate, leading to better training feedback.”

Results
Today, with the help and support of Eficode, Suunto runs the Vertica Analytics Platform to deliver a multichannel experience to users over watches, mobile applications and the movescount.com website.

Users log into the site and they can compare their performance instantly against peers, creating virtual competitions. The company’s database currently contains details about more than a hundred million sports exercise sessions, which it has analyzed to create new value for users.

“Customers want to know whether they’re making progress with their fitness regime or how good they are performing against other users. We’re using Big Data to help them train more effectively,” continues Kallio. “Instead of using a coach or research to understand physiology, we’re analyzing customer data from every exercise session.

“With Vertica in place, we’ve the ability to build a comprehensive understanding of each individual runner or cyclist and how they progress over time. This capability gives us a considerable competitive edge,” concludes Kallio.

Suunto also employed the platform to support the launch of the next-generation Suunto Spartan product range. Research suggests that the market expectation is huge for these new coaching solutions as they will readily satisfy customer expectations and enhance the user experience by delivering additional value.

The cost-effective software analytical database also helped Suunto to resolve several cloud service challenges. The data analysis supports the many different types of device across a wide range of users providing a level of quality and the ability of offering the features 24/7 globally.

“For long distance triathlon athletes like me, trying to understand how to get faster is very important. This usually involves conducting performance checks such as lactic acid threshold testing while running,” states Kallio. “With our coaching solutions and software technology, testing is no longer necessary as athletes gain an all-embracing view of each training session.”
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