Who is Adform?
Adform develops software that automates the intricate buying and selling processes of digital advertising. Founded in 2002 in Copenhagen, Denmark, Adform employs some 700 people, who serve more than 30,000 global clients from 25 international offices, supported by eight data centers worldwide.

Omnichannel complexity
For advertisers, the days of simple billboards and TV shows have long gone, replaced by complex omnichannel, highly targeted campaigns, known as ‘programmatic’ advertising. As consumers view web pages, social media, video channels and more, programmatic campaigns deliver relevant advertisements at the individual consumer level in real time. The millions of buyer and seller transactions that this process generates can only be managed by automation – and Adform develops software for this huge, growing, global market.

At peak times, the Adform platform handles around 5 million transaction requests each second, generating around 60 billion daily events, which in turn results in more than 30 TB of new data every day. These huge volumes offer the opportunity to train algorithms against massive data sets, and use machine learning to help advertisers and media owners optimize their strategy to achieve the highest possible ROI.

Dr. Jochen Schlosser, Chief Strategy Officer, Adform, explains, “The right balance of human and artificial intelligence, fueled by a powerful analytics warehouse, enables advertisers to serve prospects and customers with tailored offerings, timed to when they are more likely to convert. The combination of human and artificial intelligence helps companies maximize advertising ROI in an omnichannel world, based on scalability, relevance, and efficiency.”

To support its software, Adform relies on Vertica Premium Edition from Micro Focus for data analytics, delivering essential client reports and feeding the internal data science team. Typically, the Vertica solution processes more than 500,000 requests each day, with a response time of less than 0.5s for 95% of ad-hoc analytics requests.

Forecasts had shown that by midsummer 2020 the Vertica solution would be handling more than 400 TB – but then early in 2020 the COVID-19 pandemic hit, impacting the advertising marketplace in unpredictable ways. How could Adform manage an unknown future, keeping costs low while enabling the flexibility to scale up and maximize growth opportunities?

Massive Big Data growth
To provide sufficient capacity for long-term growth, Adform looked to increase its Vertica Premium Edition enterprise license agreement (ELA) by 100 TB. Mindful of the economic uncertainty of the pandemic, Micro

At a Glance

Industry
Technology

Location
Denmark

Challenge
How could Adform – a unique global omnichannel advertising technology platform – manage explosive data growth while maximizing client opportunities?

Products and Services
Vertica Analytics Platform

Success Highlights
+ Scales to more than 400 TB
+ Enables pricing to match demand
+ Delivers embedded AI-based analytics

Case Study
Analytics and Big Data

Adform uses Vertica Advanced Analytics Platform to give its clients sophisticated control, management and reporting capabilities that maximize their ROI from programmatic advertising

"The analytics and machine learning capabilities of Vertica enable Adform to help advertisers navigate the omnichannel world, based on scalability, relevance, and efficiency."

Dr. Jochen Schlosser
Chief Strategy Officer
Adform
Focus introduced Hewlett Packard Enterprise Financial Services (HPEFS) to create a tailored solution that matched the commercial realities faced by Adform. The ELA enables Adform to plan its Vertica costs and capacity in advance, while the HPEFS package delivers financial predictability.

Vertica is designed for big data analytics workloads such as those in place at Adform, where speed, scalability, and simplicity are critical to success. Vertica Enterprise Edition includes application programming interfaces (APIs) for user-defined aggregates, analytics, and multi-phase transform functions, integrated with leading big-data frameworks and platforms such as Apache Hadoop and Apache Kafka.

Dr. Jochen Schlosser comments, “Vertica enables us to analyze very large sets of structured, semi-structured, and unstructured data in real time, and includes machine learning capabilities that help us drive our offer to both media owners and their advertisers. The HPEFS solution has enabled Adform to adapt to the very volatile economic situation, while also taking up the additional 100 TB future capacity ELA.”

**Scalability, relevance, efficiency**

The Adform platform provides its clients with sophisticated control, management, and reporting across all their advertising operations, supported by the Vertica advanced analytics platform. The embedded machine learning capabilities help reveal the mechanisms that generate profitable advertising results, enabling both media owners and their advertisers to fine-tune their strategies.

“With the scalability and sheer capacity offered by Vertica solutions, Adform is able to stay ahead of rapidly increasing data volumes. For example, the World Economic Forum predicts that by 2025, 463 exabytes of new data will be created every 24 hours, worldwide, and a significant proportion will be driven by advertising traffic,” comments Dr. Jochen Schlosser.

“The analytics and machine learning capabilities of Vertica enable Adform to help advertisers navigate the omnichannel world, based on scalability, relevance, and efficiency.”

Dr. Jochen Schlosser concludes, “Working with Micro Focus and HPFES gives Adform the ability to grow capacity in the most cost-efficient manner and build success for the next generation of omnichannel advertising.”