

How does a retailer better understand and serve its customers without the presence of brick-and-mortar stores? By forensically understanding customers and their behaviours, creating digital fingerprints across online channels.

As a 100% pure play digital retailer, The Very Group knows the value of its data. With one of the UK's oldest, richest, and deepest consumer-focused data sets, The Very Group turns data and insights into actions, delighting customers and helping families get more out of life. The online retailer calls this DNA: Data, iNsight, Action – a data strategy that powers more relevant, timely, and personalised experiences.

Selling fashion, home decor, electronic devices, household appliances, and everything in between, The Very Group sees an array of customers shopping its sites with ever-evolving behaviours. The Very Group even offers financial services products to help families on a budget.

"We really want to understand our families. How they shop, where they shop, at what time they shop, where they live, how they value product, price, promotion, delivery – the quantitative side of data. But also, the qualitative side of data – attitudes to risk, to life, what they need from an online retailer – so we can better understand the customer and offer better products and services to those families on a budget," says Steve Pimblett, chief data officer of The Very Group.

The Very Group by the numbers

2,000

Brands sold

4.4M

Active customers

160K

SKUs

2.2M

Daily website visits

Understanding customers needs data.

The Very Group's single customer view arms the retailer with robust data and a greater understanding of its customers. This improves customer satisfaction and advocacy by better planning product assortment, better predicting demand to ensure product availability, and tailoring financial services products.

"When it comes to understanding customers, we seek to understand which categories, products, brand preferences, shopping frequency and recency, value, and customer lifetime value. We think about how the flow of data across the organisation can lead to value creation for our customers. Whether that's through better pricing, promotion, offers, delivery, and even customer-centric marketing. Our usage of data is very much to delight customers." Pimblett continues.

Being a digital retailer, The Very Group's channel is digital – desktop, mobile, web, and native apps. Teradata partner, Celebrus, captures and contextualises customer interactions to detect intent and opportunity signals, feeding interaction data to Teradata to create real-time individual-level personalisation.

"The digital experience is really complex. Between Teradata and Celebrus, our data strategy enables us to understand the customer, treat them and their data with respect, and offer a great personalised experience. Ultimately, this translates to being able to understand trends such as browsing, stock, and volume of baskets flowing through our digital experience" explains Pimblett.

Shifts in browser consumer privacy rules have led organisations to devise digital strategies for a future without third-party cookies. Celebrus' first-party and noparty cookie solution supports organisations, like The Very Group, across digital channels to create a digital identity of the customer that further supports delighting customers, accelerating growth, and maintaining compliance with regulations.

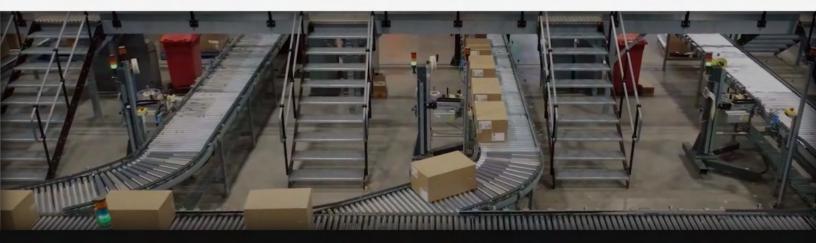
However, Pimblett shares it's more than delighting customers or achieving growth. "Why is it so important to have digital fingerprints that can understand an individual on a device? Well, we can start to spot fraud, where we think the person using the mobile device isn't the customer that we believe it is and flag that as potential fraud. The same Celebrus and Teradata solution can be used in different ways to protect our customers — in addition to offering them the better experiences."

ClearScape Analytics unleashes unlimited intelligence by operationalising machine learning at scale.

Understanding the customer and their behaviours is one half of the equation. The other half is in ensuring the right products are in stock and ready to ship to meet the wants and needs of the customer.

More accurate insights on future product demand optimises product availability. This drives better customer experience by reducing broken promises and increasing revenue, simply by not running out of in-demand products. The solution involves developing a set of demand forecast models that feed insights into the stock replenishment process.

"There's nothing worse than going to a retailer when something's out of stock. Out of stock normally means you've got your forecast wrong. We've developed machine learning analytical models to help us better predict the demand of the future for 2,000 brands and 160,000 SKUs across every product size and colour you can imagine, to make sure that we optimise availability for that customer," Pimblett shares.



With ClearScape Analytics, complex machine learning functions are easily integrated into analytic pipelines – a collection of related operations that go from data preparation all the way through modelling and deployment – and packaged together to address specific problems.

Peter Murty, head of technology - data platforms & governance, describes one example of ClearScape Analytics' integration with AWS SageMaker for machine learning forecast models.

"We use AWS SageMaker around forecasting by adopting an AWS forecast solution. SageMaker brings the model governance and, behind that, the data for those forecasting models is powered by Teradata VantageCloud."

Every week, 160,000 SKUs are forecasted using the AWS SageMaker machine learning models with Teradata VantageCloud on AWS. Product forecasts predict the next 26 weeks of demand. Its outputs include forecast accuracy and key drivers behind trends. These forecasting models leverage data sources such as:

- Transactional data
- Pricing events
- Promotional events
- Future pricing

- · Calendar events
- Item attributes
- Hierarchy information
- 3 years of data for all SKUs

ClearScape Analytics gives The Very Group the ability to continuously score complex ML models at scale, scoring its customer and product data in minutes instead of hours and days. Resulting in a rapid acceleration of insights and decisions, fuelling growth and exceeding customer expectations by preventing out of stocks.

The Very Group's retail teams act on insights when the forecasting models are combined with business rules and data relating to buying decisions that generate recommendations.

Business users consume these recommendations through a Replenishment App to place more-informed stock orders on a weekly basis.



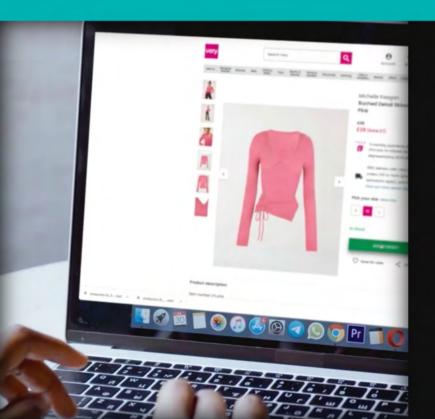
Modernising the stack leads to exceptional performance, controlling cloud costs, and increasing business value.

None of this is possible when data is fragmented and inaccessible. The Very Group's first task was to modernise its IT stack. Moving its data platform from on-premises to the cloud provides the connectivity to an extensive ecosystem of integrations and powerful data analytics capabilities to drive innovation and provide the insights needed for customer experience, retail, supply chain, marketing, finance, and financial services team to take action.

Teradata VantageCloud on AWS delivers a next-generation, cloud-native deployment and expanded analytics capabilities. The flexible and elastic cloud data and analytics platform provides industry-leading price-performance due to superior workload management, cost optimisation, and QueryGrid capabilities. One such example is VantageCloud's integration with AWS S3 for native object storage connectivity.

"Experiencing native object store [with AWS S3] was eye-opening. It gave us the ability to move less-used data into cheaper storage, freeing up storage in the Vantage Analytics Database for more relevant use cases" "For example, our clickstream data produces 30 terabytes of data per year. The realisation that we could offload that data into AWS S3 and connect to Teradata with NOS, we can now keep up to six months of fresh data in the Analytics Database and keep many years of historic data in NOS. It's a brilliant achievement from our point of view," explains Murty.

However, the cloud's promise of infinite elasticity and flexibility comes with concerns over financial governance through cost controls, without sacrificing performance. Nowhere is this more applicable for retailers, whose narrow margins and flerce competitive pricing demands cost control and best-in-class price-performance.



Achieving financial governance with VantageCloud

"We're a commercial organisation that needs to get the most out of our money. We are a really lean, efficient business. Total cost of ownership and efficiency is really important to us. It's easy to innovate in cloud by throwing money at it to scale. Platform thinking, economies of scale, and reuse across our businesses is how we think about it," says Pimblett.

Murty adds how The Very Group is achieving financial governance with VantageCloud, "we can control the amount of compute, so it gives us a cost governance, and we can control the scalability. So that when we choose to scale, we can make that financial commitment and choice."

Pimblett describes further, "everybody wants scale and flexibility, but they still want that total cost of ownership and financial governance. Teradata just brings that naturally. If we can be more efficient, we can pass those savings on to our customers."

About Teradata

Teradata is the connected multi-cloud data platform company. Our enterprise analytics solve business challenges from start to scale. Only Teradata gives you the flexibility to handle the massive and mixed data workloads of the future, today.

The Teradata Vantage architecture is cloud native, delivered as-a-service, and built on an open ecosystem. These design features make Vantage the ideal platform to optimize price performance in a multi-cloud environment.

Our experience working with thousands of customers and partners around the world, across a wide range of verticals and industries, makes us the most effective platform for delivering business outcomes and unlocking unlimited value by turning data into your greatest asset. Learn more at **Teradata.com**.