

INSIGHT

# Transforming the eCommerce experience with flexible digital infrastructure

DELIVERING EXCEPTIONAL UPTIME AND  
PLATFORM SCALABILITY





# INNOVATIVE TECHNOLOGY IS AT THE CORE OF THE RETAIL INDUSTRY'S TRANSFORMATION

Flexible digital infrastructure is essential to cope with unprecedented eCommerce growth and rapidly changing consumer behaviour.

eCommerce has become mainstream and the competition for customers' attention has never been greater. But the battle for hearts and minds is not fought on the product offer alone. Every element of the buying process is important, product presentation, platform responsiveness and the reliability of the underlying infrastructure can all make a significant difference.

Digital technology has become a critical element for the retail industry. The sector has been influenced by a number of factors including the rise of eCommerce, omnichannel, changing customer behaviour, hyper personalisation, and growing supply chain complexity. These trends have increased the pressure on retail profitability.

A flexible technology infrastructure can enable retailers to increase performance. However, most organisations are not making sufficient transformational progress and as a result opportunities are being missed. Few retailers have built true omnichannel offerings and harnessed data at scale.

Future success depends on an organisation's ability to push beyond traditional approaches and continue their platform innovation and increase agility. This allows businesses to

rapidly introduce new technology, develop and deploy digital content and react quickly to seasonal changes. Agility enables immediate digital fulfilment and it is recognised as one of the most important transformation initiatives in eCommerce businesses. Transformation is at the heart of digital business and the ability to easily scale IT infrastructure is essential.

Being agile also helps deliver an enhanced shopping experience. eCommerce businesses need to quickly incorporate changes across platforms and create personalised experiences that encourage customers to return.

Retailers can harness technology as a core enabler across all aspects of their operations. Technology supports the seamless integration of online and offline channels with smart digital services that facilitate end-to-end customer decision journeys. Solutions include advanced real-time management, cross-channel order management and automated logistics. A flexible technology platform can help to generate additional revenues, diversify customer touchpoints and increase customer data intelligence.

Outages are expensive for eCommerce companies and downtime brings business to a standstill, so it is essential for eCommerce companies to protect their business from downtime. Online retailers typically rely on complex architecture, from fulfilment, to security, ability to scale and payment processing. There is a lot to go wrong which can impact revenue and damage customer trust. If an eCommerce site isn't 100% online, it's losing revenue.

The most common reasons for downtime are human error, hardware/software failure, device configuration, bugs, cybersecurity threats and natural disaster recovery. As hosting and server play a major role in keeping the website alive, finding the right partner is an imperative.

## ECOMMERCE TECHNOLOGY CHALLENGES & SOLUTIONS

Customer demand can be extremely volatile and transaction volumes can vary dramatically depending on a number of factors. The key to success is balancing rapid changes in demand with the cost effective expansion and contraction of capacity.

Whilst scaling is important, even more critical is ensuring that the platform is always available and responsive. Even the most loyal customers will quickly find alternative ways to purchase if their favoured site is unavailable.

Market leading online retailers make careful decisions around infrastructure and hosting, because this drives cost savings, platform stability, security and scalability. In addition it improves reliability, sustainability and the ability to continuously update functionality.

Many eCommerce organisations have addressed these challenges by building their platforms in the Cloud. However, this approach has had some unintended consequences, including higher than necessary costs. If fixed load elements are deployed in private cloud then significant cost savings can be realised.

In practice, the best solution is to opt for a hybrid cloud strategy, where variable load is placed in flexible public cloud and fixed workloads in professional colocation, where the Cloud lives.

A new approach is to optimise these environments by using Composable Infrastructure. This treats compute, storage and network devices as pools of resources that can be provisioned as needed. It's an emerging category of infrastructure that's aimed at optimising IT resources and improving business agility.

## SCALABILITY

There is a 90% chance that visitors will abandon an eCommerce site if it takes longer than 5 seconds to load. The ability to easily scale to meet growing demand without impacting performance is crucial.

## UPTIME

If large online retailers have an outage the impact can be millions of dollars. Ensuring that an eCommerce platform is continuously available is critical.

## CONNECTIVITY

High speed, low latency networks ensure that shoppers benefit from a frictionless buying experience which saves time and is more enjoyable.

## SECURITY

Trust is foundational to the eCommerce model. Customers expect that payment details and Personal Identifying Information are handled securely.

## SUSTAINABILITY

Today's consumers expect eCommerce organisations to be environmentally responsible. Minimising a retail platforms carbon impact is important for brand reputation.

## BENEFITS OF VANTAGE CARDIFF COLOCATION

# RELIABILITY



Exceptional access to power ensures high resilience and reliability. Direct, private 400kV super-grid connection.

# FLEXIBILITY



Virtually unlimited room to grow. 46 acre site with 3 data centres and 2M sq. ft. of space.

# NETWORK



Exceptional connectivity. Wales - London in less than 1.5 ms, LINX Wales internet exchange on-site onsite plus Cloud Direct Connect services which provide easy access to all major cloud providers.

# UPTIME



Unrivalled data centre availability. Proven track record of service continuity since opening in 2011.



## CLIENT BASED USE CASES

# 1

### Exponential growth

#### PROBLEM STATEMENT

Our recently launched product range has resulted in an incredible increase in sales and significant growth in our cloud platform expenditure.

#### SOLUTION

Place fixed workloads in lower cost professional colocation and volatile requirements in flexible public cloud.

#### BENEFITS

Save money by optimising the blend of costly cloud capacity and fixed private cloud infrastructure.

# 2

### Technology transformation

#### PROBLEM STATEMENT

With customer expectations changing rapidly, we need more flexibility than ever to deliver 'wow' customer experiences.

#### SOLUTION

A colocation data centre offers the modularity and flexibility to build composable infrastructure.

#### BENEFITS

Ultra high reliability, superb connectivity and room to grow.

# 3

### Ensuring uptime

#### PROBLEM STATEMENT

Our eCommerce platform experienced a significant outage which resulted in a considerable loss of revenue.

#### SOLUTION

Migrate workloads to a professional data centre environment that ensures exceptional service continuity.

#### BENEFITS

Better customer experience, improved brand reputation and increased revenue.



Vantage Data Centers power, cools, protect and connect the technology of the world's well-known hyperscalers, eCommerce platforms, cloud providers and large enterprises. Developing and operating across five continents in North America, EMEA and Asia Pacific, Vantage has evolved data centre design in innovative ways to deliver dramatic gains in reliability, efficiency and sustainability in flexible environments that can scale as quickly as the market demands.

**T:** +44 (0)1633 988 021

**E:** [info@vantage-dc.com](mailto:info@vantage-dc.com)

**W:** [vantage-dc-cardiff.co.uk/](http://vantage-dc-cardiff.co.uk/)