# **IBM Power** A powerful, reliable and flexible platform for retail innovation

For decades, Meridian IT has helped retailers run their core systems on IBM Power servers. Today, the latest-generation IBM Power10 platform offers even greater security, reliability and performance to help retailers deliver frictionless shopping experiences across all channels and delight customers with personalised offers.





www.meridianit.co.uk

## Keeping pace with change

Retail is evolving rapidly as new technologies emerge to make shopping even easier and more convenient. Following the initial boom years of ecommerce, hybrid shopping is now the most popular and profitable business model in the sector. Blending mobile, web and in-store services, the hybrid approach empowers consumers to combine the convenience of online shopping with immersive in-store experiences—enabling shoppers to browse online at any time and then evaluate and collect products from nearby physical stores.

At the same time, the continuing growth of e-commerce is also providing retailers with a treasure trove of data on consumer behaviour that they can use to provide personalized experiences and offers. However, to deliver the seamless hybrid journeys and truly personalized experiences that customers want, retailers need scalable, reliable and secure IT infrastructure underpinning their operations. As we'll explain in this article, IBM Power10 is the perfect platform for retail, offering the resiliency to keep large-scale store networks and online services running smoothly, and the flexibility to support nextgeneration innovation.

### Why Power10?

Meridian IT can help your business boost growth and innovate with IBM Power10 technology to:

- Establish a reliable foundation for always-on ERP, transaction and supply chain activities.
- · Analyse vast amounts of customer data quickly to delivered prompt and tailored offers.
- · Protect sensitive business and customer data from cyberattacks.
- · Develop innovative AI and AR-driven services that enhance the shopper experience.

## **Power and performance**

Unlike commodity server hardware, IBM Power is designed to "run hot"—using shared pools of processors that applications can access on demand for intense bursts of data processing. This makes it ideal for retailers that need to process huge volumes of online and in-store transactions quickly and reliably, while also keeping vital supply chain and ERP operations running smoothly.

What's more, by making intelligent use of available processor cores and memory, IBM Power can both increase hardware utilisation rates and reduce total resource requirements—helping to reduce IT costs and optimize existing hardware investments. For retailers struggling with shrinking margins, IBM Power can deliver the savings the businesses need to continue offering competitive prices.

Meridian's IBM Power-certified technical experts can help companies get even greater benefit from their IBM Power investments by continuously analysing and tuning your workloads to make the best use of available resources.

## **Proof points**

- **50% resource savings:** One IBM client is using just 25 Power cores to handle database workloads that used to require 50 Intel processors—dramatically reducing per-core software licensing costs.
- **30% faster batch:** Another company has also reduced the batch window for vital processes by a third by upgrading to latest-generation IBM Power10 servers.
- **80% hardware utilisation:** The IBM Power 1080 is designed to run with 80% processor utilisation, ensuring companies get maximum value from their hardware investment.

"It's clear that Meridian knows everything there is to know about IBM Power servers, and we have every confidence in their advice."

Kevin Packard, Application Services Team Leader, Bernard Matthews

## **Reliability and availability**

If the IT infrastructure supporting your retail operations goes down, it can have a devastating impact on your business and the customer experience. Customers who are unable to make a purchase, update delivery details or return an item because of technical issues will be quick to abandon their baskets and turn to your competitors. If downtime persists, it could lead to reputational damage too, with frustrated shoppers posting about their delay and dissatisfaction on social media.

The IBM Power platform is legendary for its reliability, with highly sophisticated data replication and clustering technologies that enable instant failover between machines and across data centres. This helps retailers dramatically reduce and mitigate the risk of unplanned downtime—especially important during peak times in the retail calendar, such as Christmas, the January Sales, and Black Friday.

Meridian's managed services can help retailers take availability to the next level with 24/7 monitoring, infrastructure and application management.

### **Proof points**

According to ITIC's annual Global Server Reliability Survey: i

- **14 straight years at #1:** IBM Power servers and IBM Z mainframes consistently deliver the highest availability of any enterprise platform.
- 5-6 nines availability: 93% of IBM Power users experience just one minute of unplanned downtime per month.
- **40x less downtime:** Compared to commodity x86 servers, IBM Power servers were up to 40 times more reliable.

<sup>i</sup>https://itic-corp.com/itic-2022-global-server-reliability-results/

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## Security, privacy and encryption

When customers visit your stores or make a purchase via your app or website, they are trusting you to protect their valuable financial data and personal information. With cyberthreats constantly evolving, securing vital operational and customer data is more challenging than ever.

Failing to act can lead to tremendous costs and reputational damage. Thousands of retailers have been targeted in recent years, often leading to huge data breaches. In 2018, a malware attack exposed Forever21's customer credit card data to criminals, and a similar attack cost Target a staggering \$290 million in 2014.<sup>ii</sup>

IBM Power10 helps retailers resist cyberattacks and protect their data with a layered security model that spans from the application level down through the operating system to the underlying hardware.

Meridian provides security services designed specifically for IBM Power environments, with 24/7 monitoring by security experts at our state-of-the-art Security Operations Centre (SOC).

### IBM Power10 zero trust security model

- 2.5x faster encryption with built-in cryptographic cores.
- · Quantum-safe cryptography to protect against next-generation attacks.
- · Highly secure hypervisor with a superior security track record to major competitors.
- · Built-in multifactor authentication with IBM PowerSC.

"https://arcticwolf.com/resources/blog/10-major-retail-industry-cyber-attacks/

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Artificial Intelligence (AI) and augmented reality (AR) are both rapidly advancing, and leading retailers are using the technologies to provide game-changing shopping experiences, whether by harnessing AI to analyse vast amounts of customer data to personalize promotions or enabling shoppers to try on products virtually form the comfort of their homes.

Delivering AI- and AR-driven experiences effectively will require a significant uplift in processing power, and IBM Power10 is well suited for the task. With four Matrix Math Accelerator (MMA) engines mounted next to each core, IBM Power10 brings AI and AR to where your data lives. Instead of moving datasets to a separate GPU cluster for machine learning, you can run real-time inferencing directly on the same machine.

Meridian's AI practice can help you take full advantage of IBM Power10 AI capabilities, integrate new machine learning models into your core applications, or even embed AR features into your existing digital offerings.

### **Case study**

Oxford Cancer Biomarkers uses AI to analyse digital images of tumours and help improve diagnosis of colorectal cancers. Meridian hosts the solution on IBM Power servers running in the Meridian Power Cloud.

## Read the full story on ibm.com

"Since Meridian helped us to move our (IBM Power) applications to Skytap on Azure, all of the systems have been running seamlessly."

Suresh Kumarasan, Manager, IT, Cloud Infrastructure Service, Gate Group

## **Modernisation and portability**

Many retailers have run their core systems on IBM Power for decades—and will continue to do so for many years to come. With IBM Power10, there's no need to regard these battle-tested systems as legacy applications, because you can seamlessly integrate them with modern, open-source applications and container platforms all on the same box.

Running IBM i, IBM AIX and Red Hat Enterprise Linux on the same server means you can skip costly network infrastructure and high-latency connections and build microservices architectures where the apps live right next to the data—transforming performance.

Designed to support cloud-native, containerised applications, IBM Power10 also gives you portability, so you can move workloads seamlessly between your data centre and the Meridian Power Cloud, or any other public or private cloud you choose. This allows you to experiment with hybrid cloud operating models, while significantly reducing risk.

Meridian's managed services and software development teams can help you take the next steps on your modernisation journey—combining the best features of your core IBM Power applications with the flexibility of a modern microservices approach.

## Why Meridian?

Today, Meridian IT is home to one of the world's largest teams of certified IBM Power experts. Outside of IBM, few organisations can match our breadth of expertise in the IBM Power platform, the depth of resources in our technical team, or our years of experience in delivering projects large and small.

We work with a wide range of UK and international retailers and ecommerce companies to help them maximise the benefits of their IBM Power infrastructure today—and modernise their systems to meet tomorrow's challenges.

### **Client testimonials**

• "With Meridian, you know there are experts available on each of the services. It frees up my time and my resources to provide more vision for the company and my department and to take a more active role in the company as well."

## Jared Hotop, Vice President, IT and Retail, Buchheit

• "We are already starting to see the benefits of the new hardware. Our batch processes run up to four times faster, and daily backups take about 60 percent less time than before."

## Andy Jobin, IT Manager, Chandlers Farm Equipment Ltd

Reach out to us today at info@meridianit.co.uk to discuss how we can help your firm achieve its goals.



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