

# Act on data wherever it lives

What does edge processing look like in real life?  
Here's a glimpse into 4 industries: healthcare,  
manufacturing, retail, and finance.



Organizations run on data and the insights they generate. Today, sparked by the rise of increasingly distributed enterprises and the deluge of connected devices, companies must be able to process and analyze voluminous data created at the edge. This in turn empowers the data-first business without the usual inefficiencies, costs, and latency headaches.

Gone are the days when applications and data only reside in data centers or public cloud platforms. Today, sensors, internet of things (IoT) equipment, mobile devices, applications, and computing resources deployed in local stores, factories, or even remote sites are generating valuable data that needs to be acted on in the moment.

By the year 2025, IDC predicts there will be an estimated 55.7 billion connected IoT devices on the planet.<sup>1</sup> At the same time, Gartner expects more than half of enterprise-managed data to be created and processed outside the data center or cloud.<sup>2</sup>

When harnessed in real time, edge data and the resulting insights enable actions and business decisions that were simply not possible before. This can give companies tremendous competitive advantage.

“The edge is where business happens, where it all comes to life,” says Hande Sahin-Bahceci, global marketing lead, HPE GreenLake at HPE. “The edge delivers the power of real-time insights because you’re analyzing data where it’s created. There’s no latency when you’re not sending data back and forth.”

What does edge processing look like in real life? Here is a glimpse of how edge capabilities can transform industries and common business practices:

- **Healthcare:** Real-time data and insights allow practitioners to quickly identify maladies, stay abreast of health changes, and personalize treatments, among other things. The ability to process data from wearables, imaging tools, and other diagnostic tools at the point of care —at the edge — can be a game changer for patient treatment.
- **Manufacturing:** Automated and autonomous factories increasingly use cameras, compute resources, and data at the edge. The list of potential benefits is a long one: optimize efficiencies, reduce product defects, enable more predictive and proactive asset maintenance, fine-tune factory floor performance, and handle supply chain issues before they’re a problem.
- **Retail:** Retail operations can use data at the edge to enhance both customer and employee experiences. For customers this could mean tailored signage, highlighted deals, or assistance finding additional products. For employees, retail organizations can use local edge data to help identify stock, share product knowledge, and offer recommendations. Retailers themselves can also benefit from real-time analytics, such as fraud detection at checkout counters and omni-channel programs. And retailers that integrate online and in-store shopping can simplify the customer experience, further differentiate themselves, and set the stage for growth.
- **Financial industry:** Edge capabilities can help financial institutions better secure online transactions, initiate rapid fraud detection, and offer enhanced customer service and problem resolution.

<sup>1</sup> IDC Worldwide Global DataSphere Forecast, 2021–2025: The World Keeps Creating More Data—Now, What Do We Do with It All? March 2021, David Reinsel, John Rydning, John Gantz

<sup>2</sup> Predicts 2022: The Distributed Enterprise Drives Computing to the Edge, October 20, 2021, Gartner—Bob Bill and Tom Bittman—ID G00757917

## Making edge work

The edge is best supported by an optimized edge-to-cloud network and real-time, distributed data management capabilities. This enables organizations to process and analyze data where it's created versus continually moving massive amounts of data between data centers and hybrid clouds. This solution can also help unify disconnected data silos to speed decision-making.

This new networking model must conform to changing business needs instead of the business conforming to the network. This serves as the foundation to connect data to users, customers, employees, contractors, apps, analytics, and other on-site data aggregators. With data geographically distributed across many sites, holistic management tools can reduce complexity to simplify the network view from edge-to-cloud and from wireless to SD-WAN.

AIOps, a method of managing and analyzing data from an application using machine learning technologies, plays a critical role in simplifying the complexities of edge-to-cloud networks.



AIOps helps cut through the noise, identifying trends, detecting anomalies, and predicting future behaviors — all in pursuit of simplifying management of IT operations and automating problem resolution. Through AIOps, IT organizations can detect security threats faster, predict and optimize user experiences, and dynamically adjust bandwidth to reduce latency issues for key operations. AIOps also quickly uncovers the root causes of network problems and self-corrects for maximum uptime.

## Connect your edge with HPE GreenLake

HPE GreenLake for Networking is a network-as-a-service solution that helps enterprises deploy a network worthy of digital transformation. The HPE GreenLake flexible consumption model and scalability ensure networking, compute, and storage solutions can be quickly deployed across thousands of edge locations. Once deployed these sites can be centrally managed by the organization, HPE, or an HPE partner.

HPE GreenLake is more than just networking at the edge. Organizations can dynamically plan and expand their edge footprint to accommodate changing business needs, paying only for what's deployed and scalable through flexible, adaptive use models. Data is managed across sites as a single logical infrastructure, ensuring it is accessed seamlessly from edge-to-core-to-cloud with enterprise-grade governance.

With edge, there is no one-size-fits-all-solution. HPE has the breadth and depth of expertise, partnerships, and services to help organizations make the edge the engine of data-first business.

**For more information, visit**  
[www.hpe.com/edge](http://www.hpe.com/edge)