

Revolutionizing the Future with Edge Computing - XChange Best of Breed Conference Keynote

Article

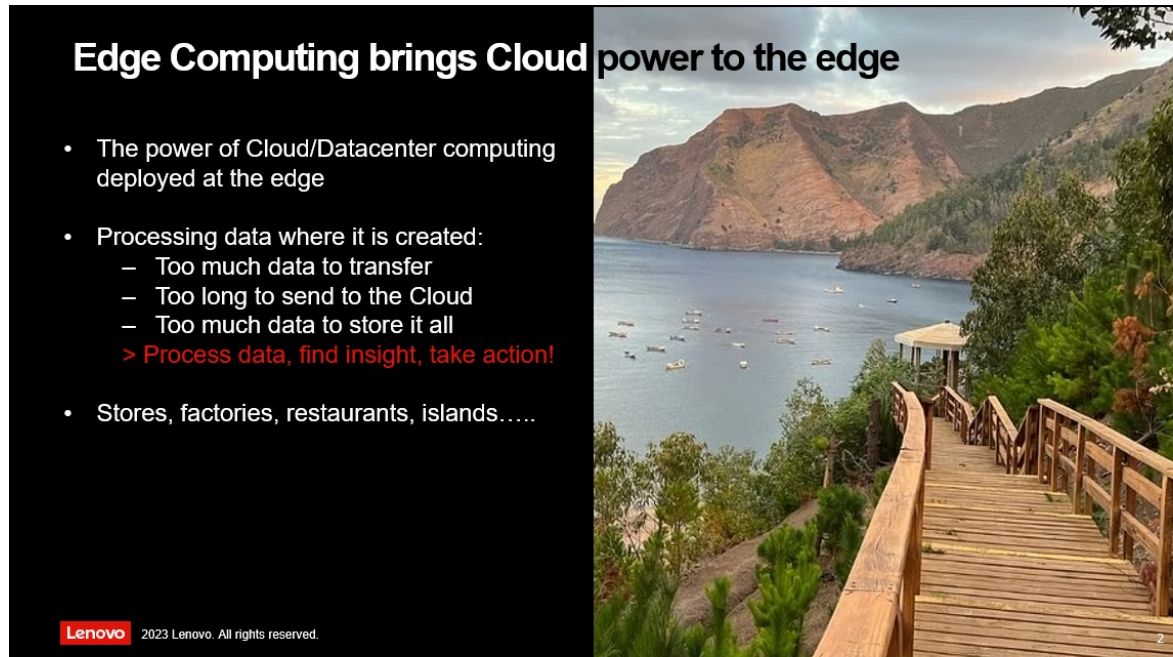
In a dynamic keynote at the [XChange Best of Breed Conference](#) in October 2023, Charles Ferland, Lenovo Vice President and General Manager of ThinkEdge & CommSP, shed light on the transformative power of edge computing and its pivotal role in shaping the future of technology. The conference, an exclusive gathering of IT channel leaders and top technology vendors, provided a platform to share Lenovo's vision and innovations in the realm of edge computing.



Figure 1. Charles Ferland presenting at the Change Best of Breed Conference in Atlanta, October 2023

The Edge Computing Paradigm

Charles began by emphasizing the paradigm shift in computing, predicting that over 80% of future revenue will stem from Artificial Intelligence (AI) deployed at the edge. The driving force behind this shift is the realization that the massive amounts of data generated at the edge – in stores, restaurants, factories, and more – cannot efficiently be transferred to the cloud due to issues of time, cost, and sheer volume.



Edge Computing brings Cloud power to the edge

- The power of Cloud/Datacenter computing deployed at the edge
- Processing data where it is created:
 - Too much data to transfer
 - Too long to send to the Cloud
 - Too much data to store it all
 - > Process data, find insight, take action!
- Stores, factories, restaurants, islands.....

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Figure 2. The Edge Computing Paradigm

Consolidation and Acceleration

Two key factors, consolidation, and acceleration are propelling the edge computing industry forward. The need to consolidate various devices, each serving a specific purpose in diverse environments, has led to the development of compact edge servers. Charles highlighted the importance of consolidation in streamlining operations and reducing the complexity of managing multiple devices.

Acceleration, on the other hand, involves deploying advanced AI applications to optimize operations. Lenovo's approach differs from competitors, as we focus not only on reducing the size of data center servers but also on adapting them to challenging environments. This adaptability includes operating in extreme temperature ranges, addressing issues of vibration in warehouses, and combating airborne debris in retail environments.

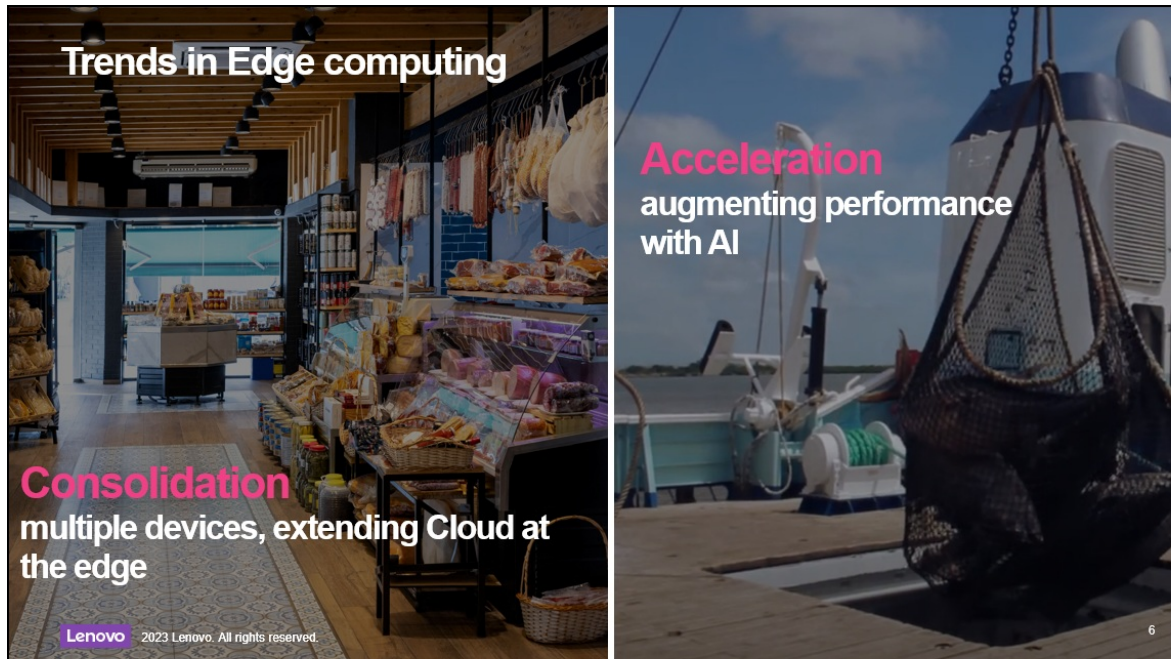


Figure 3. Consolidation and Acceleration

Innovation Beyond Hardware

Lenovo's commitment extends beyond hardware innovation. The ThinkEdge portfolio includes features like smart filtering to notify about reduced air intake, acoustics optimization for sound levels below 50 decibels, and robust security measures, including encrypted hard drives and motion detectors.

Charles emphasized Lenovo's comprehensive portfolio, spanning from small edge servers to the data center like ones, addressing diverse environments, use-cases, and price points. The active ecosystem of partners ensures solutions cater to logistics, retail, quick-service restaurants, hospitality, and beyond.

Edge computing has unique requirements... **ThinkEdge**

Environmental	Security	Continuity	Management
<ul style="list-style-type: none">• Wide temperature• Shock & vibe• Dust filtering & fanless• Low acoustic• IP protection	<ul style="list-style-type: none">• Encrypted data• On-site authentication• Movement & tamper detection• Physical Security	<ul style="list-style-type: none">• Diverse connectivity• Optimized performance• Redundant operation	<ul style="list-style-type: none">• Single tool for DC & edge• Automate deployment• Lifecycle Management

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Figure 4. Innovation Beyond Hardware

Edge Computing: Bringing Compute to the Data

Summing up, Charles stressed that edge computing brings compute power to the data, eliminating the need to move vast amounts of data to data centers. It doesn't replace the cloud; instead, it opens new possibilities by enabling innovative service models.

As the industry witnesses the convergence of innovative hardware, seamless deployment, and creative AI partnerships, Lenovo emerges as a key player in driving edge computing across various sectors.

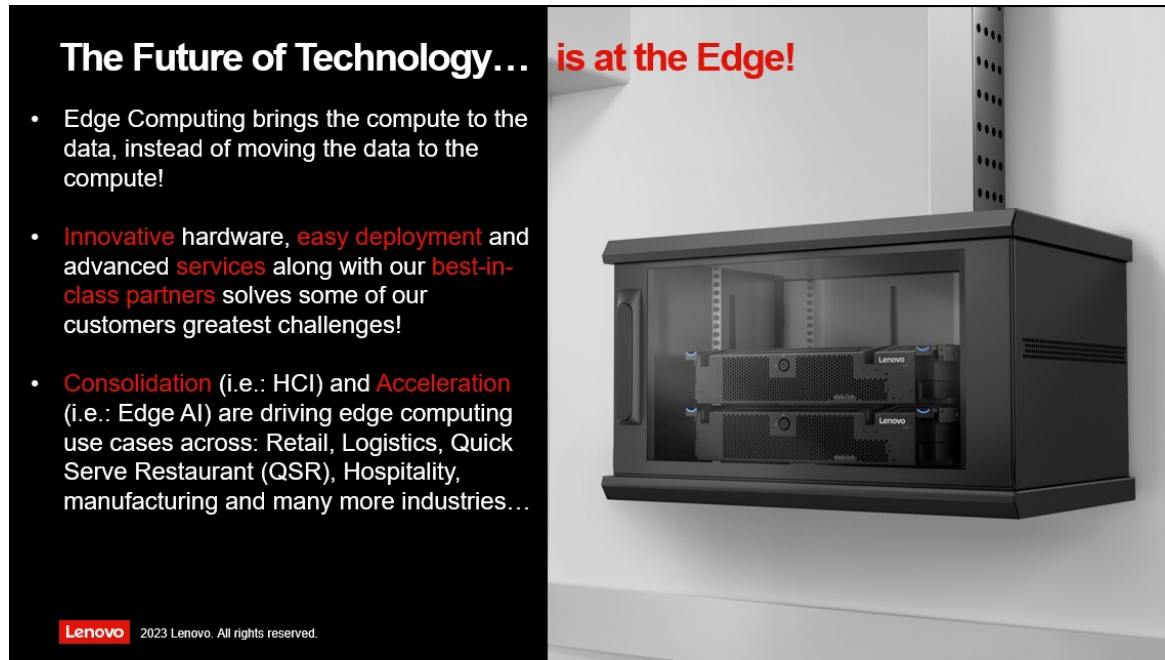


Figure 5. Edge Computing: Bringing Compute to the Data

About the Conference

The [XChange Best of Breed Conference](#) serves as a nexus for the IT channel's leading solution providers, technology vendors, and distributors. This exclusive, invitation-only event facilitates networking, CEO interviews, solution provider spotlights, trend sessions, executive panels, and peer-to-peer interactions.

In conclusion, Charles Ferland's keynote not only elucidated the significance of edge computing but positioned Lenovo as a pivotal partner for organizations looking to harness the potential of this transformative technology. Edge computing, with its focus on consolidation, acceleration, and innovative solutions, is set to redefine the landscape of industries ranging from retail to manufacturing. The conference provided a valuable platform for industry leaders to explore and embrace these transformative trends.

For more information

Watch the [full keynote presentation](#).

Explore Lenovo's cutting-edge solutions and join the forefront of technology transformation. Discover how our ThinkEdge portfolio is revolutionizing industries through innovative edge computing. Visit our website now to learn more and embrace the future of computing at the edge.

<https://www.lenovo.com/us/en/servers-storage/solutions/edge-computing>

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Related product families

Product families related to this document are the following:

- [Artificial Intelligence](#)
- [Edge Servers](#)

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