## VP David Shacochis outlines the synergy between the Lumen platform and the promise of the 4th Industrial Revolution.

## By David Shacochis, Vice President of Enterprise Technology and Field CTO

I still have vivid memories of the Intel commercials from the late 1990's – lab technicians in head-to-toe "bunny suits" dancing and partying to the soundtrack of the dot-com boom. It was always clear that what truly made them cool was open standards, partner interoperability and "measuring what matters." Their decades of innovation helped usher in the third industrial revolution driven by widely adopted microprocessors.



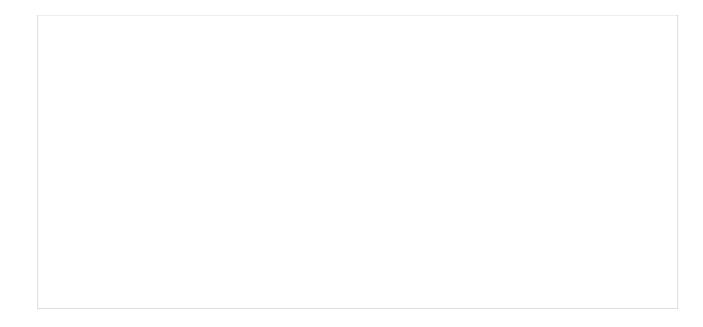
As we stand here at the dawn of the fourth industrial revolution, it's easy to see examples of companies forging the next phase of digital business through driverless transportation, customized manufacturing, advanced telemedicine and deep personalization. What all these next-generation scenarios have in common is wide harnessing of enterprise data to make a continually-improving system. And some of the same forces that drove the microprocessor-inspired third industrial revolution will also drive the next one, with these important additions:

- Open standards around networks, clouds and software runtimes
- Interoperable tools that enable best fit for each particular solution
- Adaptive network connectivity from core to edge, with heretofore unseen combinations of ultra-high bandwidth, super-low latency and global geographic reach

At Lumen, we're skilled, passionate and committed to all three of those principles – we exist to power the fourth industrial revolution. We believe that enabling these new types of systems will require ample behind-the-scenes work to enhance the three imperatives of digital innovation:

- **Acquire** data from all parts of the value-chain using *software-defined networks* to reach all data-producing endpoints on a hybrid mix of wired and wireless technologies.
- **Analyze** for actionable insight, using the right mix of *diverse computing* venues, whether in the cloud, embedded in the network, or resident on the enterprise premises.
- Act against production applications with orchestrated services that put enhanced business logic to the right execution venue, on the right network, with the right secure operational controls.

In June 2020, we partnered with Quadrant Strategies to survey more than 2,400 global IT decision makers\*. Among the key findings, nine in 10 IT decision makers worldwide say that the seamless integration of applications and their network is a top IT priority, and seven in 10 agree that having a global network provider is necessary to meet modern business needs. In addition, four in five say that a centralized cloud model cannot support their workload demands, and nine in 10 global C-Suite leaders say fiber infrastructure is essential to connect to a distributed cloud network. What this survey data tells us is that, when the entire world is a "motherboard" for next-generation business applications, a global fiber network becomes vital for making the system work together.



The Lumen Platform is designed to address each layer of this digital business model:

- High Performance Dynamic Connections interoperable with a unique range of on-net enterprise locations, multi-tenant datacenters and public cloud on-ramps
- Hybrid Cloud Infrastructure integrated with computing and storage options across public cloud, network edge and customer premises, compatible with a range of software defined datacenter standards for agile development
- Service Orchestration & Automation a software-defined managed services framework capable of deploying workloads to a range infrastructure venues and network connections through most common configuration management models

As customers explore digital business initiatives that require deterministic latency, high data volumes, geographic diversity and operational autonomy, it's important to find the right partner who can keep your strategy consistent yet flexible. At Lumen, our platform provides customers with a lightweight model they can use to drive benefits from global cloud core to distributed cloud edge:

- Increased Performance running workloads on the computing platform best suited for their individual requirements
- Controlled Costs increased efficiency as the number of locations supporting application deployments expand
- Innovation Velocity faster time-to-value using standard cloud-native computing models
- Partner Co-Innovation a range of integrated technologies already compatible with our open and interoperable standards

While many customers are still in the early days of digitizing their business and expanding the velocity of their *acquire-analyze-act* cycle, we're already seeing customers starting to benefit

from the ways the Lumen Platform moves workloads closer to digital interactions:

- Gaming industry companies dynamically scaling servers in regions where they see increased demand
- Financial services firms building low-latency trading networks which connect to sources of liquidity and counterparty transactions
- Transportation and logistics companies driving productivity out of their asset-intensive business models
- Smart venues and manufacturing facilities performing machine-learning and realtime analytics on production environments

By securely combining multi-cloud, market edge and on-premises capabilities for high-performance, low-latency solutions, the Lumen Platform offers enterprise customers unprecedented IT agility. Organizations get broad capabilities to deploy next-generation technologies and applications with 5ms or better latency through numerous edge market nodes and dynamic connections to more than 2,200 public and private data centers around the world.

While our name may be new, our history is not. Lumen is already inside of some of the largest digital businesses in the world. Years of investment have been poured into our software-defined platform to help business leaders choose the right network locations, computing venues and management model for their applications. As the digital landscape expands, history has shown us that a commitment to open and interoperable technology integration can lead to revolutionary things.



<sup>\*</sup> In July 2020, Lumen sponsored a Quadrant Strategies online quantitative survey with 2,464 Senior IT Decision Makers and C-suite executives from large and midsize organizations in the US, UK, Germany, France, Australia, Argentina, Colombia, Brazil, Singapore and Japan.