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Bring More to Your Business with Intel's Data Centric Solutions ([Bring More to Your Business with Intel's Data Centric Solutions – Connected IT Blog (connection.com)](#)**)**

Shannon Barnes December 4, 2020

Today's business landscape is flooded with the growth of data generation and consumption. Reinforcing flexibility and the quick scale of modernized data centers is imperative as networks are being tested with the increased scale of cloud computing, 5G networks, artificial intelligence, and data-centric workloads across a distributed computing landscape. To create a productive, cost-effective data analytics strategy that gets results, you need high performance hardware that's optimized to work with the software you use.

I was lucky to have an in-depth conversation with two experts who understand how to get the most out of your hardware, software and solutions. I met with John Kuzma, Industry Technology Specialist from Intel, and Cameron Bulanda, Connection's VP of Technical Sales, to discuss the importance of addressing data center technology to achieve not only great results today, but to move your business into the future.

In his role at Intel, John advises executives, strategy leaders, and IT teams on design and deployment of state-of-the-art energy efficient data center solutions. Cameron leads a team of Field Sales Specialists who assess a customer's data center needs, and then works with our services teams to design the best solutions to meet their organizational vision.

Q: What is Intel doing to help businesses better utilize data?

John: Three or four years ago, organizations started to move to a more data-centric infrastructure after realizing that data was going to be the driving force for most enterprises. We pivoted by making sure our strategy and roadmap matched that pillar to answer the questions:

- How do you take in data?
- How do you make it useful?
- How do you get purposeful analytics from long stagnant data?

We've found that more and more customers are starting to use analytics to go out and mine data to find what's critical and what they need to be acting upon. Our technology is present in a number of those areas, whether you are referring to CPU technology, storage technology, or even some of the new memory technology. We're starting to see, as data sets are growing larger, that we need to be able to process larger volumes, at quicker speeds, and closer to the CPU. That's why we've come out with **Intel® Optane™ solid state drives** as well as **Intel® Optane™ persistent memory**. That's going to keep on growing moving forward. That is how Intel has pivoted on not just being a CPU company anymore. Storage, networking, and analytics are now able to be embedded in our solutions.

Q: Cameron, how are people looking at utilizing these technologies? What are they asking when they're talking about designing solutions?

Cameron: While we still work with our clients on what I'll call the traditional issues and challenges around storage, the four V's—volume, velocity, veracity, and variation—are at the forefront of the conversation. The goal is to take those ones and zeros that our clients are collecting in their files—videos, screenshots, and everything else—and put them into a format where data then becomes information. That information can be acted upon and help our clients make sound decisions around investments, new product launches, and things of that nature. We look to Intel, OEM data center providers, and other compute platforms to provide the environments that are needed to crunch those numbers so that the top layer of the organization can tangibly see the importance of data.

Data center management is not just about the investment. You need to make sure you can manage it appropriately. But you need to make sure your folks have the necessary skill as well. Or that you're partnered with somebody that can do the data science piece and work with the AI solutions and the machine learning solutions that are out there from Intel and these other compute vendors.

I think a big value that we can bring to the table is helping our clients understand how all these technologies work in concert with each other—and ways to avoid potholes.

Q: What are the defining characteristics of organizations that are utilizing data well?

Cameron: The successful utilizers of data are organizations where executive commitment is present. Very often, you're going to be talking about data evaluation of multiple departments or divisions within an organization. And with that you will find an executive sponsor who understands the value of turning

those ones and zeros into knowledge and who is prepared to do some heavy lifting and break some glass. The top-level commitment is critically important because it's not always easy to make IT happen.

When addressing the landscape of change, the older the systems are, the harder they are to try to wrangle and align effectively. The older things are—whether it's an application, a workload, or your data—the more challenges they present when you want to try to go faster, include more data sources, and move business forward. We see challenges with organizations who grew via an acquisition for example, because they can't effectively manage the data from two different organizations. They don't have the right platform, they don't have the right security, and they don't have the right approach. So, having conversations early always drives benefit. If you can't go and execute against that order, or implement, or add the services, it leads to frustration. So we try to have that comprehensive conversation as early as we can, with as many people as we can, and take all of those perspectives back, turn them through the system, talk to folks that have been helping clients in similar situations, come back with a proposal that shows them where they're at, and how we're going to get them to where they want to go.

Q: John, how are your best customers taking your technology and utilizing it to make a good data centric organization?

John: Some of the characteristics that we're seeing is that data is a competitive advantage. If you don't use it, your competition is going to figure out how to use data to be better. They'll be able to understand their customer base, and their buying patterns, and will be enabled to sell specifically to those customers. So, the companies that can gather those insights—and are able to act on them—are the ones that have a competitive advantage.

For Example: When we introduced Intel® Optane™ Persistent Memory last year we expected memory-intensive workloads like AI/analytics, databases, virtualization environments, and content delivery networks would benefit from PMem.

The underlying technology needs to allow you to act on information in a fast and secured platform—whether it's local, in the public cloud, or wherever. All those types of sources will help them drive that data by making sure they have the right technology that's able to respond to their needs, turn around the data in a timely manner, and act on it. The organizations that see the value in data—and view it as mission critical—stand apart and come out ahead.

AI analytics have been slow for many organizations to adopt. Many organizations don't have the resources necessary to meet the requirements—such as having data scientists involved who can understand the data. However, there are a lot of partners in the market who can help complement that type of person. I think those companies are starting to understand that if they don't pivot, and they don't position themselves to be able to take advantage of it, their competition will, and will then overtake them.

As more and more data is generated by edge devices, as much as 75% by 2021, an enterprise's data journey can't be siloed any longer, it needs to be a flowing system, where data can be moved, stored, and processed wherever it's needed. You cannot expect to tap into machine learning and deep learning without first getting the rest of your data pipeline in working order. To expand data analytics capacity,

enterprises need an end-to-end strategy that addresses inefficiencies in the data pipeline, optimizing software, hardware, and libraries at every stage of the data life cycle (ingest, prepare, model, deploy).

Lastly, IT organizations have moved to the forefront of the enterprise charge toward digital transformation. IT's role is quickly moving from merely managing infrastructure to delivering the agile, flexible, and responsive systems that enable success. To make this change, IT organizations must leverage new infrastructure that is more efficient and agile. For example, during a server refresh, the underlying architecture can be upgraded to hyperconverged infrastructure (HCI) to meet a digital business's changing demands for new products and services. The industry is recognizing HCI as the critical foundation for a hybrid cloud architecture. As HCI has expanded beyond compute and storage to include the complete set of software-defined services for compute, storage, networking, security and cloud management. HCI incorporates all major data center functions, delivering a single solution from edge to core to cloud. That's one example of digital transformation happening today.

Key Takeaways

Data driven decisions need to be made to successfully move business forward. Before diving into understanding what data center technology is available and how it can be tailored to meet specific organizational needs, start by asking yourself these four questions:

- Where are you today?
- Where are you going?
- How are you approaching it?
- What are your top three priorities?

Data center design can provide the information necessary for mission-critical decisions. With Connection and Intel as your partners, you'll get a design tailored to your needs that helps you meet your goals. If you want to connect with a specialist, reach out. We're here to help, no matter where you are in your data center journey.

[1]https://www.gartner.com/smarterwithgartner/what-edge-computing-means-for-infrastructure-and-operations-leaders/