

# Reimagine End to End Architecture with Edge Computing

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Now Micro



# About Now Micro

- Now Micro serves as a premier provider of digital signage and related solutions to organizations across a range of industries including education, government, banking, hospitality and retail.
- Now Micro helps customer optimize their investment in resources and technology through carefully designed products, automation and deep understanding of your solution requirements.
- Through superior customer service and reliable, quality product and software solutions, Now Micro has been a trusted advisor to numerous companies in the vertical market of Digital Signage for more than 10 years.

# About Me

- Too many years of infrastructure, security management and software development
- Prior to Now Micro, a Security Architect at a Fortune 500 company
- VP, OEM and Product Development – Leading a team that creates IoT and Digital Signage products and solutions with a focus on automation, manageability and security.



# Value at the Edge

Organizations are increasingly finding value beyond traditional visual communications

- Customer analytics
- Operational automation
- Interactive experiences

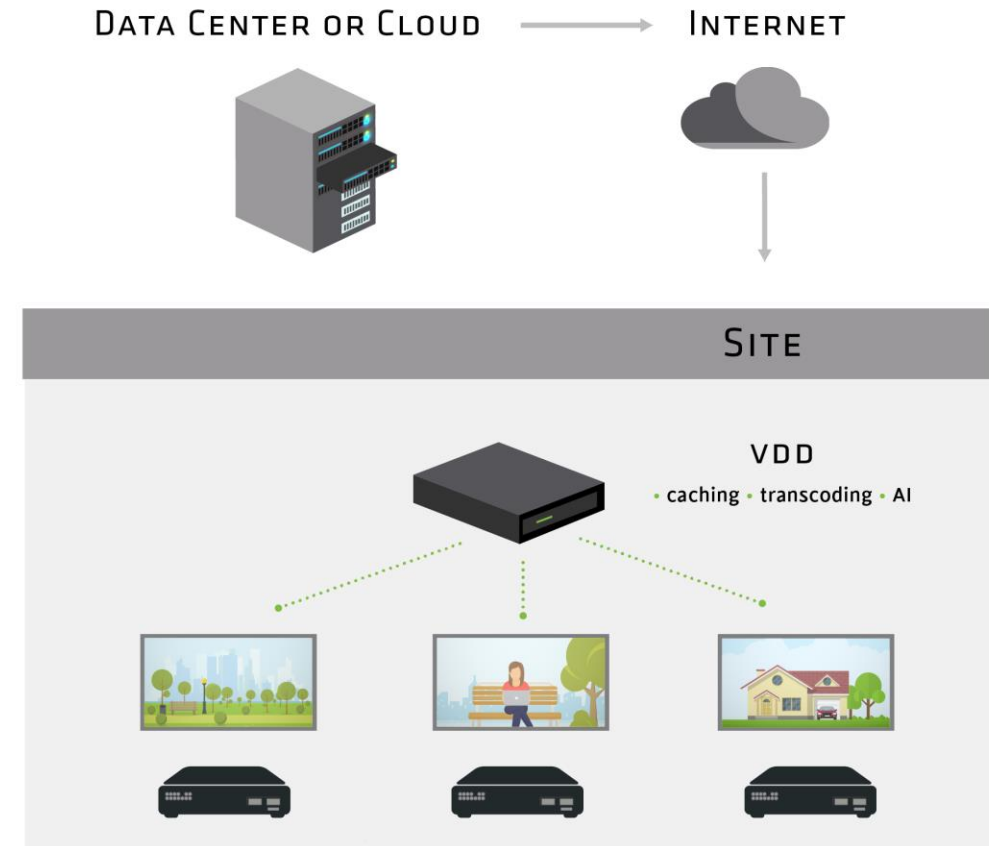
Result: Reimagining of edge architecture

- New workloads
- Higher density installations
- Cost of sending everything to the cloud/over WAN

# New Workloads

- ▶ Remote Maintenance
- ▶ Log Consolidation
- ▶ AI/Machine Learning
- ▶ Video Processing/Caching/Transcoding
- ▶ **Video Analytics**

## POWER CAPTIVATING EXPERIENCES WITH VDD





# Platforms

- ▶ MQTT -> LoRa Bridge
- ▶ MQTT -> BLE Bridge
- ▶ Video analytics consolidation
- ▶ Video transcoding/segmentation
- ▶ Azure IoT Edge
- ▶ Container workloads



# Building Platforms

- ▶ A common story- building a platform for a concrete benefit, but then finding it enables unimaginable value and innovation

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Franchise Times News / April 2019 / IOT in Action at Chick-fil-A

## IOT in Action at Chick-fil-A

BY NICHOLAS UPTON

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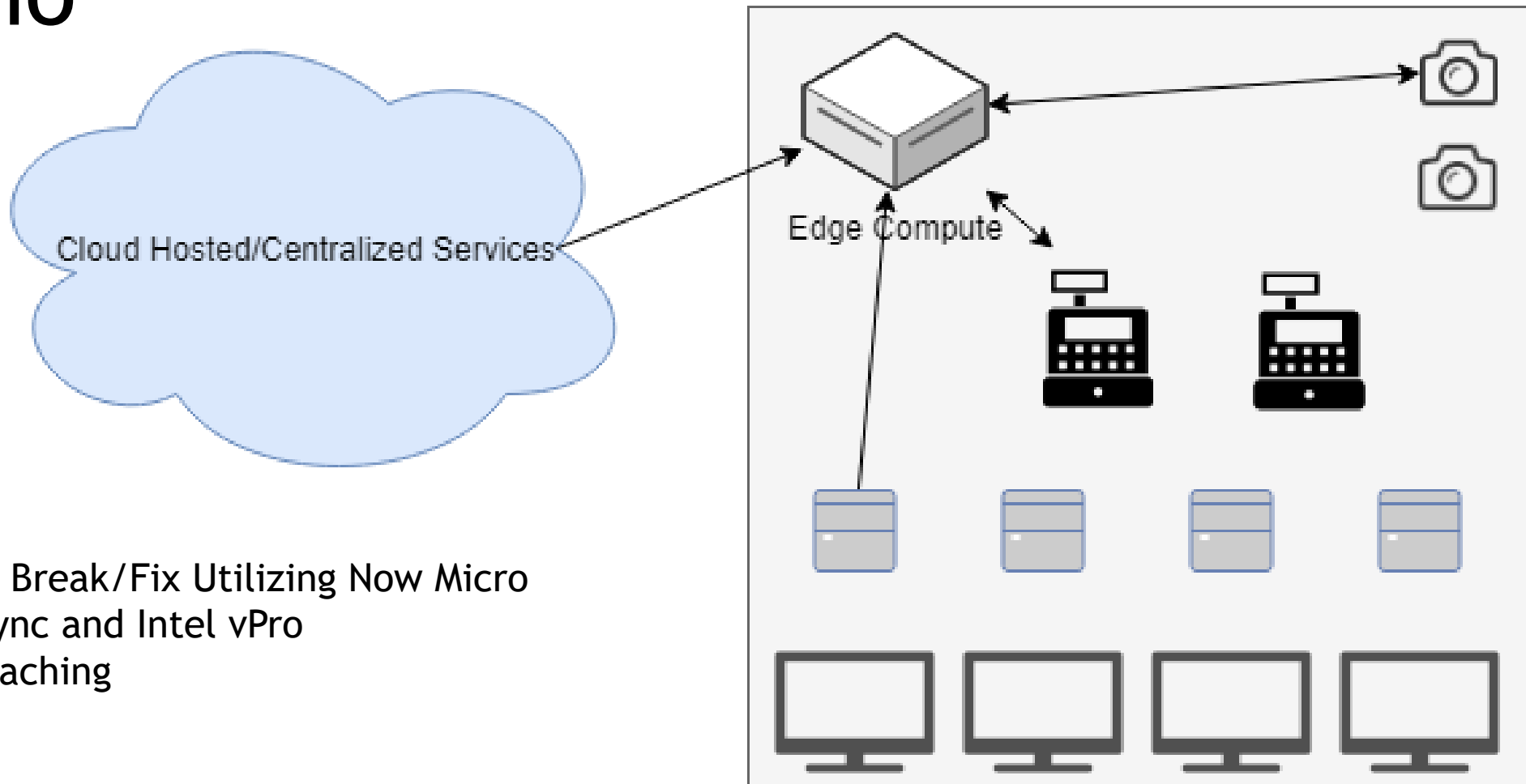


The Internet of Things or IOT, has a big problem: it's pretty abstract for a lot of industries. In the restaurant industry especially, there are a lot of "what ifs." But more companies are sharing their tricks or strategies to tap into the sensors, data and clouds that make up the burgeoning technology.

During the 2019 IOT Fuse Conference dedicated to [exploring the Internet of Things](#), Chick-fil-A shared some of its tricks (and a few what ifs) as it aggressively pushes toward a truly connected restaurant.

Brian Chambers, the director of enterprise architecture and chief technologist at Chick-fil-A, laid out his IOT thought process and one of projects he oversees inside the restaurants. He said it all starts at version "1," when companies just need to do something. To get a good start, some kind of data has to be flowing so the use case can be identified.

# Demo



- ☐ Remote Break/Fix Utilizing Now Micro ImageSync and Intel vPro
- ☐ Video Caching



# Edge Computing Hardware

- ▶ Flexible platforms available in scalable form factors
  - ▶ Intel NUC
  - ▶ VDD Specification Devices (2U/4U)
- ▶ Common features
  - ▶ Intel vPro
  - ▶ Scalable
  - ▶ Diverse operating system options

## DMPN-7i3/7i5

- Industrial design
- Based on commercial NUC platform
- Hardware serial port





- 2U, short depth device.
- DMPU-2011Q
  - Intel Core i5/i7
- DMPU-2010C
  - Intel Xeon E3-1200

DMPU-2011Q/DMPU-2010C

## DMPU-4010C

- Industrial design
- Xeon-W family processors with up to 18 cores
- Uncompromised ability to add additional workload accelerators





- <https://nowmicroplayers.com>
- Twitter: @nowmicro

# Thank You

# Featured Devices



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PLAYERS

- <https://nowmicroplayers.com/Embedded/Product/DMPU-2011Q>
- <https://nowmicroplayers.com/Embedded/Product/DMPN-7i3-7i5>
- <https://nowmicroplayers.com/Embedded/Product/DMPN-2200>
- <https://nowmicroplayers.com/Embedded/Product/DMPU-4010C>



# What's Different About Intel VDD Specification?

These use cases have always  
existed



Intel VDD Specification gives us

A place to  
consolidate these  
workloads

Reliability and  
predictability

An established  
place to land  
future technology