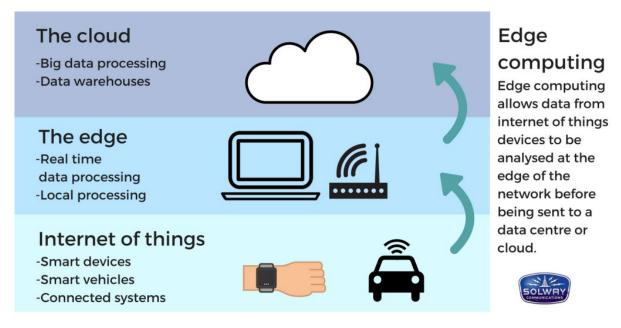


## **NEWSLETTER**

JUNE 2019 ISSUE #6-VOLUME 2

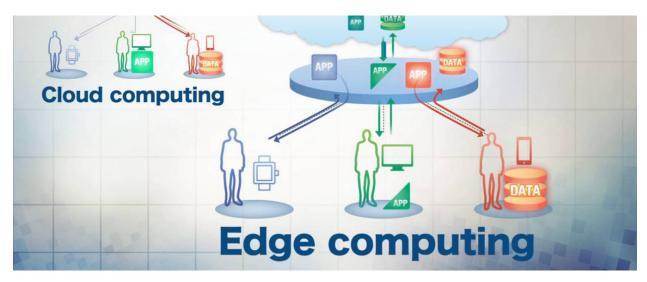


As a society we are in an era that technology's moving faster than ever. Every time we start to grasp a new aspect of technology it transforms overnight with the new and improved. The IoT is data harvesting to make us more efficient in our daily processes, but now the cloud is evolving to feed a new source of information called Edge Computing. The web site Circuit Breaker has an article written by Paul Miller about this computing and its future. Here are some of the feature points and a link to the complete article.

# What is Edge Computing?

The Future Of Software Will Be Managed

By Paul Miller – @futurepaul May 7, 2018



## WHAT IS EDGE COMPUTING?

The word edge in this context means literal geographic distribution. Edge computing is computing that's done at or near the source of the data, instead of relying on the cloud at one of a dozen data centers to do all the work. It doesn't mean the cloud will disappear. It means the cloud is coming to you.

#### **LATENCY**

One great driver for edge computing is the speed of light. If a Computer A needs to ask Computer B, half a globe away, before it can do anything, the user of Computer A perceives this delay as latency. The brief moments after you click a link before your web browser starts to actually show anything is in large part due to the speed of light. Multiplayer video games implement numerous elaborate techniques to mitigate true and perceived delay between you shooting at someone and you knowing, for certain, that you missed.

# **PRIVACY AND SECURITY**

It might be weird to think of it this way, but the security and privacy features of an iPhone are well accepted as an example of edge computing. Simply by doing encryption and storing biometric information on the device, Apple offloads a ton of security concerns from the centralized cloud to its diasporic users' devices.

But the other reason this feels like edge computing to me, not personal computing, is because while the compute work is distributed, the definition of the compute work is managed centrally. You didn't have to cobble together the hardware, software, and security best practices to keep your iPhone secure. You just paid \$999 at the cellphone store and trained it to recognize your face.

#### **BANDWIDTH**

Security isn't the only way that edge computing will help solve the problems IoT introduced. The other hot example I see mentioned a lot by edge proponents is the bandwidth savings enabled by edge computing.

For instance, if you buy one security camera, you can probably stream all of its footage to the cloud. If you buy a dozen security cameras, you have a bandwidth problem. But if the cameras are smart enough to only save the "important" footage and discard the rest, your internet pipes are saved.

Almost any technology that's applicable to the latency problem is applicable to the bandwidth problem. Running AI on a user's device instead of all in the cloud seems to be a huge focus for Apple and Google right now.



## WHAT ARE WE GIVING UP?

When the devices in your home and garage are managed by Google Amazon Microsoft Apple, you don't have to worry about security. You don't have to worry about updates. You don't have to worry about functionality. You don't have to worry about capabilities. You'll just take what you're given and use it the best you can.

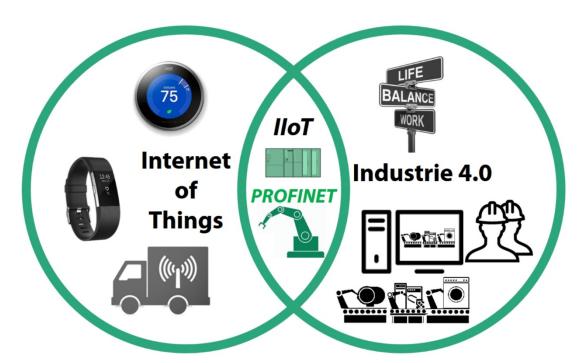
In this worst-case world, you wake up in the morning and ask Alexa Siri Cortana Assistant what features your corporate overlords have pushed to your toaster, dishwasher, car, and phone overnight. In the personal computer era you would "install" software. In the edge computing era, you'll only use it.

It's up to the big companies to decide how much control they want to gain over their users' lives. But, it might also be up to us users to decide if there's another way to build the future. Yes, it's kind of a relief to take your hands off the steering wheel and let Larry Page guide you.

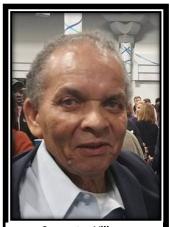
To see the complete article follow the link below:

https://www.theverge.com/circuitbreaker/2018/5/7/17327584/edge-computing-cloud-google-microsoft-apple-amazon

# **Enter Digital Industrial Transformation**



In GE Digital's blog it talks about the productivity techniques of the 80's and 90's to what the lows of productivity in technology are today. To combat this decline, companies are seeking new ways to increase productivity using Cloud and Edge Computing. And while cloud computing is a major enabler of industrial transformation, edge computing is rapidly becoming a key part of the *Industrial Internet of Things* (IIoT) equation to accelerate digital transformation.



Computer Village Executive Director - Don Holt

Don has been on the battle field for youth development and education for over 30 years. Retirement from Xerox only gave him more time for his passion. Don Holt is an "Unsung Hero" and advocate for youth, education and the black community.

"Don continues to stress the importance of IoT as a major component for the growth of young people associated with job stability and economic success in our community."



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