

## *Power-Wire America Insights - Chapter 4*



### **Securing the Internet of Things (IoT)**

The coming ubiquitous availability of 5G broadband is going to make the connection between the physical and digital world ever more powerful, complex, intertwined, and if not handled properly, dangerous. Making sure IoT devices function seamlessly and securely will be a critical dimension in realizing the potential of the Power-Wiring of America – especially in light of the vulnerabilities revealed by the recent hacking of some of our most sensitive government and commercial systems. This Insights Chapter explores the emergence of new forms of cybersecurity to empower the build out of the new broadband economy.

The mass proliferation of the Internet of Things (IoT), Machine to Everything (M2X) and Vehicle to Everything (V2X) devices will transform the way we live, work, play and travel. And these transformations will dramatically increase our demand for energy, and cybersecurity. This vast new Internet of Things is going to require the rapid development and deployment of new communication platforms and component technologies. They will need to securely support an infinite variety of machines, motors, remote sensors, batteries, building and commercial control systems, and myriad other smart devices in an ever-expanding IoT, M2X and V2X universe. While offering enormous benefits, this expanding universe is going to present formidable challenges in terms of energy consumption, bandwidth usage and security. In short, it will simultaneously empower us, challenge us and, unless we build it securely, make us more vulnerable.

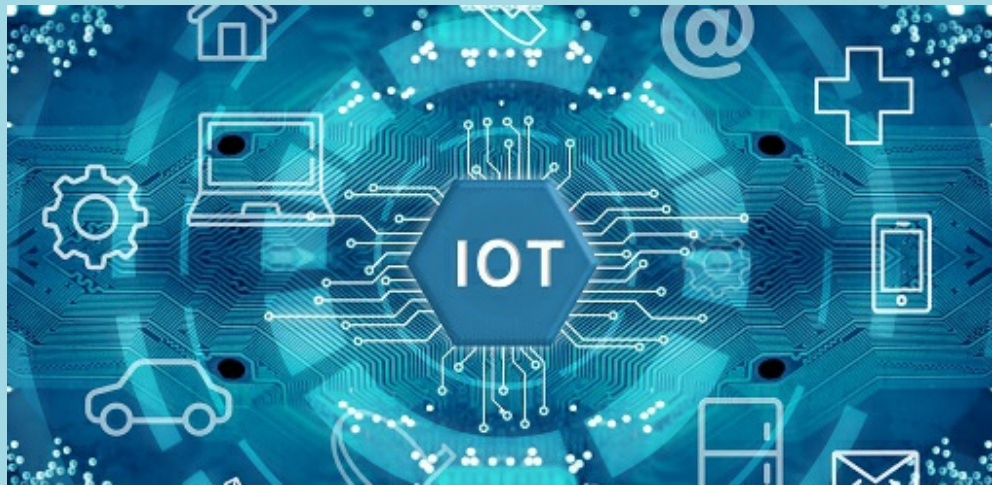
---

### **Passive Multicast Technology**

To address these challenges, new forms of secure device interaction will be required.

Traditional methods of host-to-device interaction have limitations when contemplating the power, bandwidth and security needs of many billions of IoT devices.

Passive syndicated multicast technologies offer secure data transmission platforms that enable sensors, machine controllers, tracking devices, and alert and warning systems to acquire and react to data both anonymously and autonomously without identifying or betraying their nature, function or geographic location.



---

## Billions and Billions of IoT Devices

By design, passive multicast technology is inherently secure and efficient in terms of energy consumption and bandwidth utilization. Passive multicast technology is positioned to be an important component in the build out of the new enterprise systems for smart city infrastructure, public safety, criminal justice, alerts and warnings, power grid management, telehealth, on-line education, the remote delivery of essential goods and services, driverless vehicles, automated agriculture, weather reporting, – the list is endless. As such, it represents one of the critical new component technologies that will need to be quickly integrated into IoT, M2X and V2X devices to facilitate the roll out of 5G and enhanced energy systems as part of any large-scale economic stimulus initiative like the Power-Wire America Post-COVID New Deal.



---

## Building an Efficient, Cost Effective and Secure IoT Future

The rapid proliferation of 5G broadband is going to create abundant opportunities to automate the activities and functions that we will increasingly rely on as the basis for living and working in the post-COVID economy. Inherent in these expanded capabilities is the requirement that we do so efficiently in terms of cost, energy generation and consumption, spectrum utilization and security. Since incorporating these essential tools at the time of initial deployment is orders of magnitude less costly than attempting to retrofit after the basic

systems are built, the requirements for passive multi-cast technology should ideally be incorporated into the specifications for the new 5G broadband economy.

McCreightPartners professionals are looking forward to partnering with client leaders in the communications, energy, healthcare, education, transportation, public safety and national security sectors of the U.S. economy as they evaluate their options, and implement sound, scalable and sustainable strategies for a power-wired future.

*This PWA series was written by a team of two extraordinary Alliance Partners.*



*Elysa Jones*



*Matt Walton*

---

## ***Power-Wire America Insights Series***

In case you missed a past article, click on the link below.

[Chapter 1 - New Precedents for Unprecedented Times](#)

[Chapter 2 - A Post-Pandemic New New Deal](#)

[Chapter 3 - 5G and National Security](#)

**McCreightPartners *Insights* are intended to be valuable to our clients as the voice of our Alliance Partners and Research & Operations Center (ROC) professionals. We welcome your thoughts and experiences.**

---



**Meet John McCreight**

***Founder & Chairman of McCreightPartners***

**info@mccreightpartners.com  
203.594.7300**





# McCreightPartners

[ABOUT US](#)

[LESSONS](#)

[INSIGHTS](#)

[SECTORS](#)

[CONTACT US](#)

[info@mccreightpartners.com](mailto:info@mccreightpartners.com) | [203.594.7300](tel:203.594.7300) | [www.mccreightpartners.com](http://www.mccreightpartners.com)

© 2021 McCreightPartners. All Rights Reserved.  
Email by Solutions for Growth.