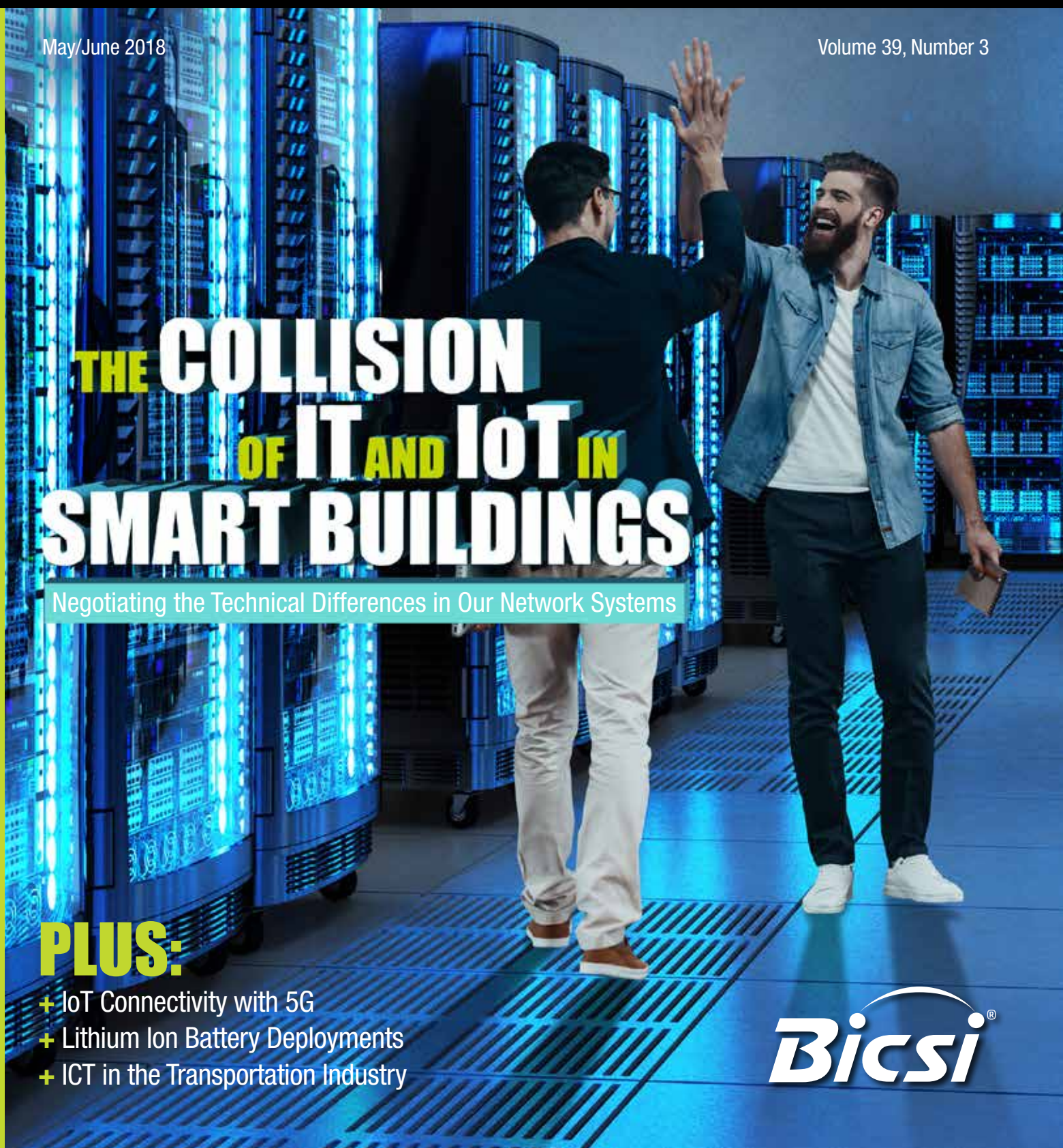
ICT TODAY

THE OFFICIAL TRADE JOURNAL OF BICSI

May/June 2018

Volume 39, Number 3



THE COLLISION OF IT AND IoT IN SMART BUILDINGS

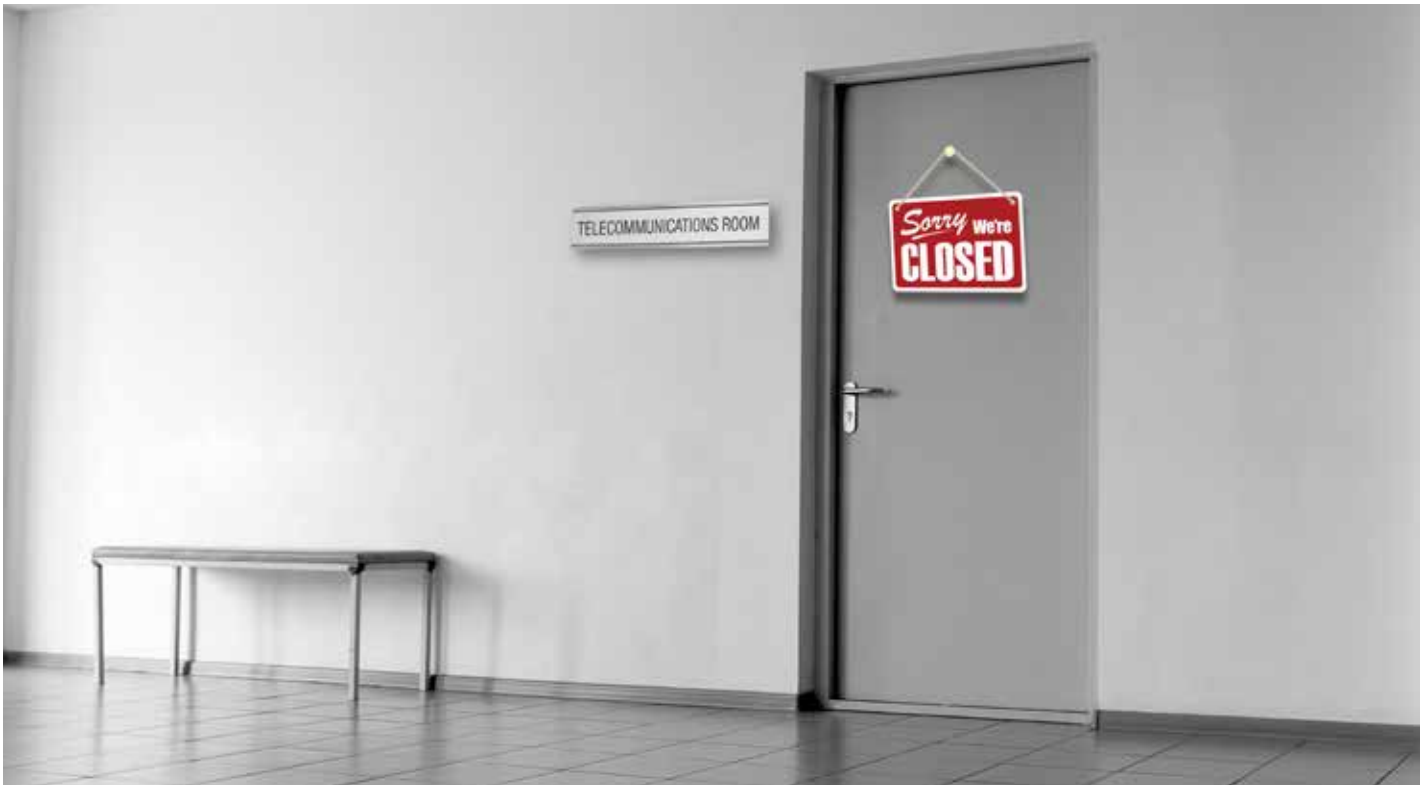
Negotiating the Technical Differences in Our Network Systems

PLUS:

+ IoT Connectivity with 5G
+ Lithium Ion Battery Deployments
+ ICT in the Transportation Industry

BICSI®

By Duke Robertson



Considerations for Storing and Securing Emerging Technologies

OUTSIDE THE TELECOMMUNICATIONS ROOM

The rise of the internet of things (IoT) and smart building integration has spawned many new technologies across every industry. These emerging technologies have increased the need to properly store and secure ICT equipment in a wide range of locations.

Data storage and security along with faster and more reliable connection speeds are all paramount to success in the age of IoT. Augmented and virtual reality (VR) technologies are good examples of potential game-changing technologies that will be ever more commonplace over the next several years.

Several large companies are already using VR for employee training. In the health care industry, VR goggles are helping doctors increase quality of life. The manufacturing industry is increasingly adopting VR to improve inventory management, design, assembly line training and factory floor planning.

Broadband connection speeds and reliability are two critical elements of the IoT demand for real-time data. According to the CISCO Visual Networking Index, average speeds in North America are expected to double within the next three years.

Network densification is a key capability to enable increased network capacity and reliability, and the need for multiple access point architectures and Wi-Fi configurations is requiring some infrastructure to move outside the traditional telecommunications room. Thus, infrastructure must evolve along with these new technologies to meet the demands for data storage, transmission speed and computing power.

Bridging the Gap Between Technical Furniture and Telecommunications Room Infrastructure

Office spaces, conference rooms and classrooms are a few examples of the many areas that will see a huge boom in IoT deployment. Floor space is oftentimes limited in these areas, making full-height data racks, cabinets, and enclosures impractical. In many cases, a wall-mount cabinet offers much of the same functionality as its floor-standing counterparts, but in a much more compact and space-efficient package.

There are a variety of wall-mounted solutions for cable and equipment storage in the market today, but very few combine all the features and elements needed to address the broad range of aspects required to store and support emerging technologies in these more public spaces, outside of traditional telecommunications and computer rooms.

Here are some features to consider when looking for a wall-mounted cabinet solution:

- **Full Access to Equipment:** A hinged, swing-out center chassis provides easy access to the front and back of equipment, saving valuable floor space.
- **Security:** The cabinet door style will depend on your needs and environment. A solid (opaque) door keeps internal equipment private whereas a door with a viewing window provides a means to monitor equipment without opening the enclosure. Access to the cabinet should be limited and controlled with a single keyed lock.
- **Safety and Reliability:** A UL 2416 listing ensures a robust cabinet design that meets strict safety requirements and is thoroughly tested well beyond manufacturer's advertised load-ratings.
- **Cooling Without Disruption:** Cabinet-mounted fans are commonly used to keep heat-producing equipment within operational temperature ranges. Consider fan options that operate at noise levels that will not disrupt work environments. While decibel (dB) ratings can be subjective, consider fans with dB ratings operating in a near whisper-quiet range of 20 to 30 dB. Equally important is a fan's primary function of keeping equipment cool. In addition to silent operation, look for fan solutions with ratings of at least ≈2.8 cubic meters (100 cubic feet per minute).
- **Retrofit Capability:** Often overlooked is how disruptive adding an enclosure to an existing installation can be. Consider designs with retrofitting in mind to reduce implementation time with minimal disruption to your network and environment.
- **Visual Design:** Metal boxes hung on a wall can be an eyesore. Look for wall-mounted cabinets with contemporary aesthetics and visual appeal that will not look out of place in offices, meeting rooms and classrooms.

Evolving Infrastructure

We are increasingly surrounded by technology in our everyday lives. Bringing emerging technologies to our offices, classrooms and work environments is no small task. As IoT and smart building integration grows, so too will the demand for solutions that can accommodate the necessary infrastructure required to store and manage all the associated equipment. In these technological times, selecting the right infrastructure is equally important as the equipment it houses. With careful product consideration and due-diligence, selecting the right wall-mounted enclosure for your environment will meet your needs now and well into the future. ■

AUTHOR BIOGRAPHY: Duke Robertson, Product Manager of Open Systems, joined Chatsworth Products (CPI) in December 2007 and has more than 20 years' experience in a broad range of disciplines including design, manufacturing, product management and product development. In his role at CPI, he focuses on developing tailored solutions for customer-specific applications, utilizing CPI's unique and extensive design and manufacturing capabilities. He can be reached at drobertson@chatsworth.com.

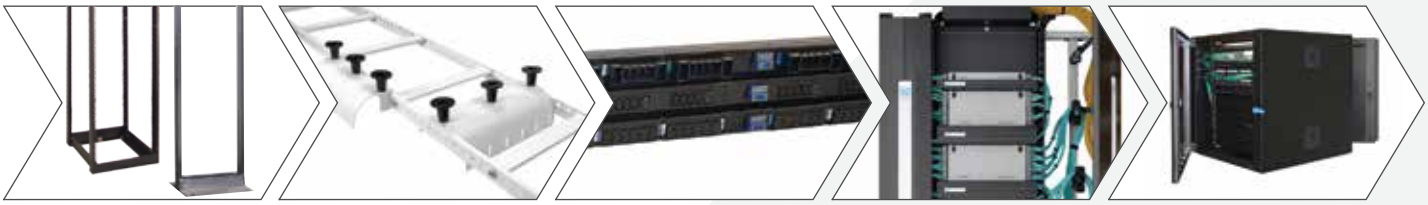
I simplify.

Are you concerned about supporting new technologies in your premise network? It doesn't have to be so difficult.

New technologies are challenging you to deliver highly performing and reliable networks. The partner you select to help you support them—and deliver on that promise—plays a critical role. Chatsworth Products (CPI) provides you with a single source, complete solution that gives you the structural support you need for successful network upgrades.

Regardless of where you are in the process, CPI will work alongside you to provide a seamless experience and comprehensive portfolio, including novel cable management, tool-less accessories, cable runways, racks and bonding products you need to achieve enhanced network availability and speed.

I support. I connect. I monitor. I organize. I protect.



Two- and Four-Post Racks | Adjustable Cable Runway | Metered eConnect® PDU | Motive® Cable Management | CUBE-iT™ Wall-Mount Cabinet

Visit www.chatsworth.com/i-simplify to download the white paper on new networking technologies to consider for upgrades as you simplify and transition your network.

CHATSWORTH PRODUCTS

Protecting your technology investment.