

## THE FUTURE OF WIRELESS CONNECTIVITY



Seamless in-building wireless connectivity is here

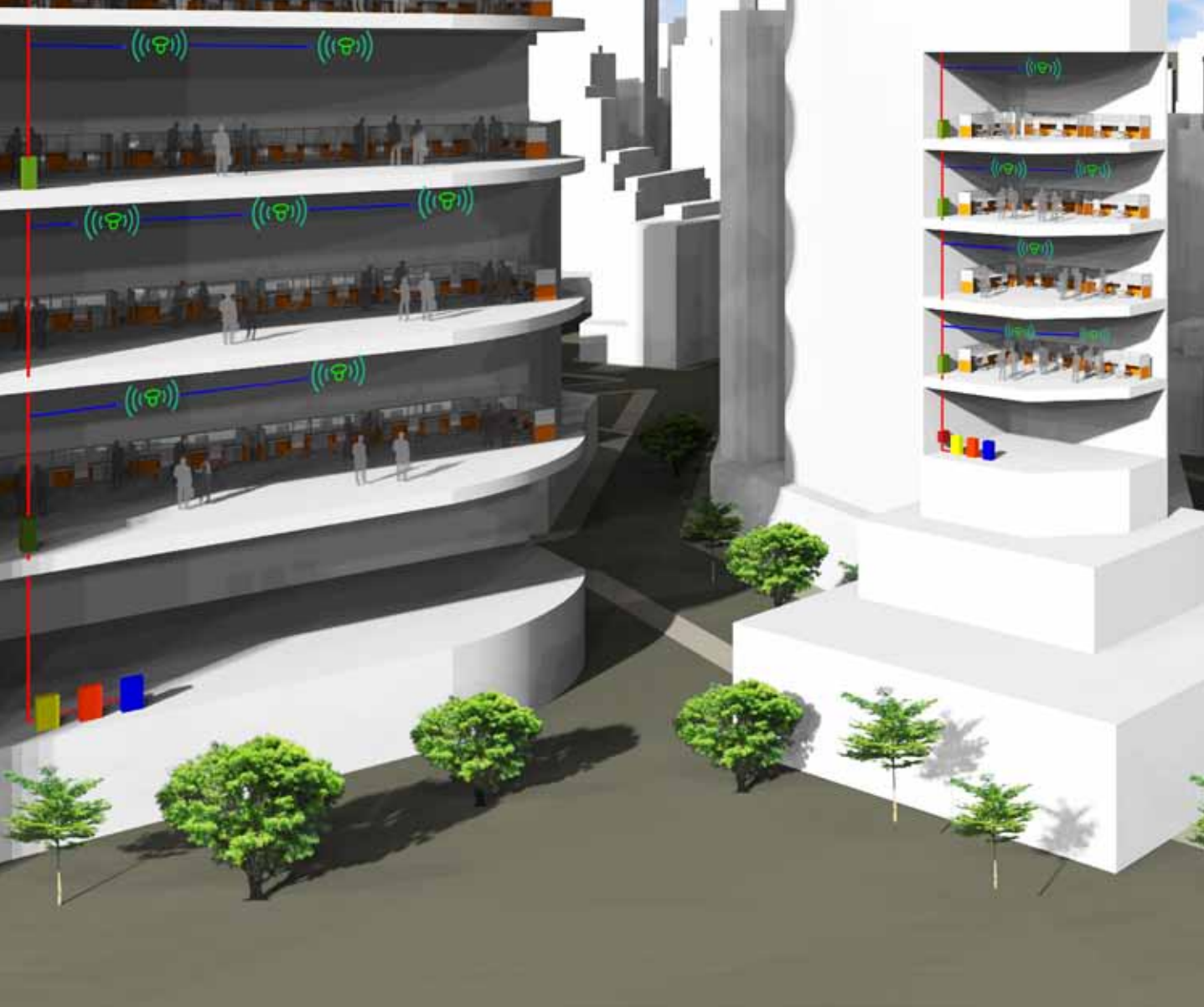


## A smarter building starts with seamless connectivity

The world is becoming increasingly mobile. Your occupants will continue to demand faster and more reliable wireless connectivity. However, blind spots and interference within the four walls can affect performance, causing users to experience poor voice quality, low data throughput, even dropped calls.

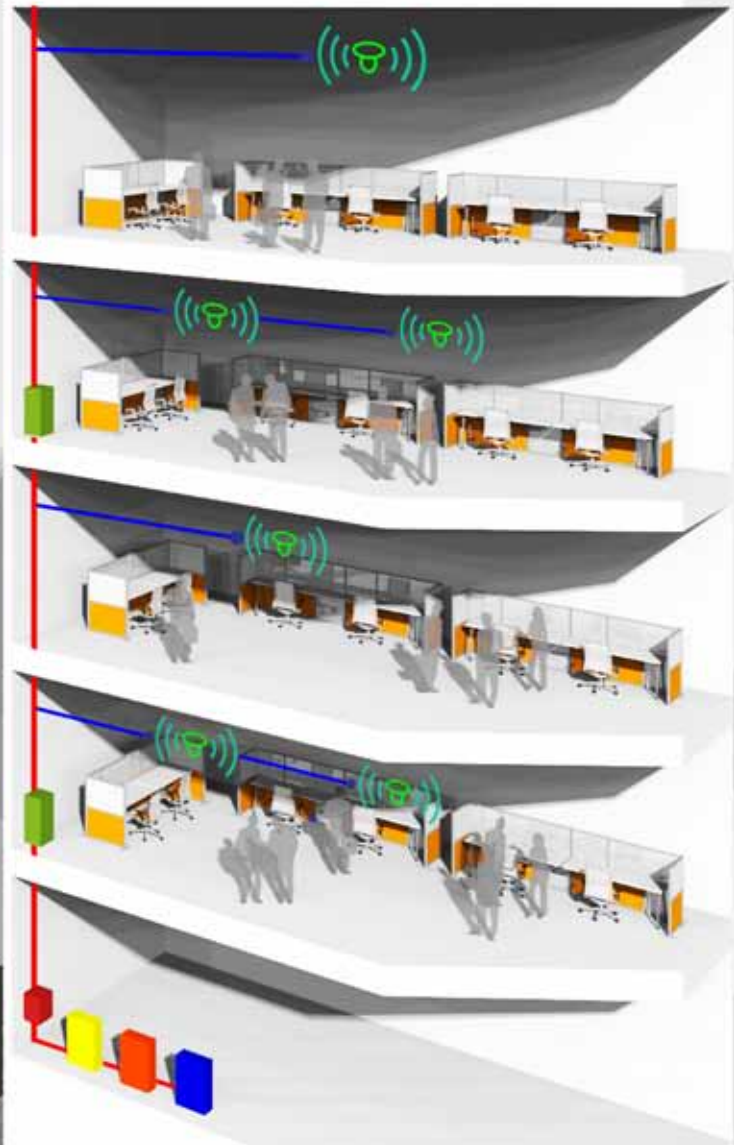
At edotco, we partner with Mobile Network Operators (MNOs) to equip your building with high quality, secure and seamless wireless coverage. Through our expertise in designing and engineering scalable mobile infrastructure, we can tailor a solution to meet your current requirements as well as future proofing your buildings for the next generation of mobile technologies.





## Towards Smart Building Development

With In-building Solutions (IBS), we offer a dedicated mobile service for indoor environments such as offices, shopping malls, hospitals, airports, transportation hubs, stadiums, sports arenas, convention centres, commercial hubs, universities, hotels and indoor theme parks.



The IBS offers:

- Reliable connectivity to mobile users when moving indoors
- The capability to meet the demands of mobile high-speed data and voice services
- MNOs delivering the promise of high quality and dedicated mobile coverage

This dedicated indoor mobile network coverage can increase speed, user capacity, improve mobile performance and lower latency - ensuring a seamless mobile connectivity with superior mobile user experience within a building.

The IBS implemented for mobile networks can serve as an enabler platform for buildings and smart initiatives application.

## Our Commitment to Operational Excellence

By combining best-in-class services with a holistic operational approach in our infrastructure to create innovative solutions and end-to-end managed services, we offer a shared success with all of our partners.

We are committed to bridging the gap between building owners and MNOs, by partnering closely together every step of the way, to ensure a safe installation of the IBS solutions with minimal disruption.



### Phase 1 - Evaluation

A feasibility study will be carried out on a suitable mobile network coverage for the selected location or area.



### Phase 2 - Planning

Experts will tailor solutions to address key in-building coverage challenges and business objectives.



### Phase 3 - Design

A multi-technology system design supporting 3G, 4G and potential 5G in various frequency bands will be implemented.



### Phase 4 - Implementation

Our engineers will create a network based on fast deployment and high performance. Our main focus is to ensure a safe installation with as little disruption as possible.



### Phase 5 – Maintenance & Monitoring

Leveraging on our regional expertise and best practices from across our footprint, we provide end-to-end management of active and passive managed services.



## edotco's In-Building Wireless Coverage Solutions

Our wireless network solutions provide fully managed infrastructure solutions needed to deliver the best possible mobile wireless experience throughout any building or venue—from offices, hotels, stadiums, sports arenas to larger entertainment and retail arenas.

### **We offer flexible, high-quality and secure wireless infrastructure solutions that support:**

- Multiple MNOs, so all building tenants and customers can enjoy superior in-building wireless coverage with shared mobile network infrastructure.
- Multiple mobile technologies and next generation of connectivity, allowing building owners to take advantage of building automation and the Internet of Things (IoT), as a building's usage evolves and modern occupants expect up-to-date facilities and services.

### **Our Solutions to Match Your Building's Needs**

- **Proposal:** We provide a full suite of professional services, starting with analysis and network.
- **Design:** We offer a holistic approach that includes installation, integration, testing, monitoring and ongoing maintenance.
- **Scalability:** We adapt our solutions to suit buildings and venues of any size and type.
- **Collaboration:** We work closely with MNOs to design and develop mobile networks that best suit everyone's mobile coverage objectives.

## Future Trends in Wireless Communications

In-building mobile wireless service is on the rise as mobile users increasingly seek data-hungry applications and services within populated indoor areas. The need for superior IBS wireless access will only increase and prove to be a key differentiator for your buildings and properties.



of mobile calls now  
originating indoors

(Source: CISCO)

By 2022 the global smart  
building market is expected  
to reach

**US\$31.7 billion**

at a compound annual  
growth rate (CAGR) of 33.7  
percent from 2017 to 2022

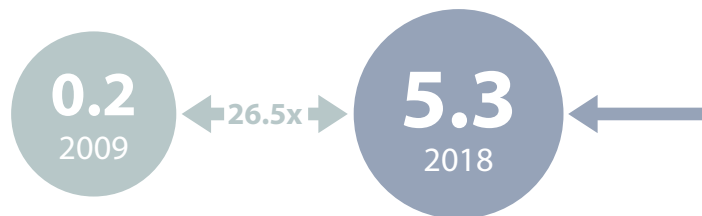
(Source: MarketsandMarkets)

**0.67  
billion**

of 5G connections across  
Asia Pacific by 2025,  
accounting more than  
1/2 of global total for 5G.

(Source: GSMA, 2018)

Mobile data traffic  
(GB per sub per month)



(Source: GSMA, [www.visualcapitalist.com](http://www.visualcapitalist.com))





**US\$1.8  
trillion**

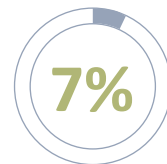
Mobile Industry  
contributions to Asia Pacific's  
GDP by 2022

(Source: GSMA, 2018)

**3.9  
billion**

smart phone connections  
in Asia by 2025

(Source: GSMA, 2018)



Smart buildings will make up  
7 percent of the total global smart  
city market in 2025

(Source: Frost & Sullivan)

4.5x →

**24.0**

2024

**33%**

of IoT smart building market  
will be powered by AI  
technologies by 2023

(Source: Research and Markets, 2018)

## The Right Expertise for Delivering the Right Solutions

### Advantages of IBS for a building

- Seamless mobile network connectivity within the building
- Tenants, owners, visitors enjoy quality mobile high-speed data services
- Enabling IoT and enhancing lifestyle

### edotco's value add to the Developers

- Zero infrastructure investment
- Longer tenant retention
- Increase in property value
- Ability to mitigate the wastage of time and cost in providing quality mobile high-speed data services
- Provide extensive mobile network coverage within the buildings
- Neutral hosting - network sharing solution for mobile coverage within a building by multiple MNOs



Multi operator, multi-technology IBS solutions are catered for coverage to increase mobile speed and provide the capacity where required.

- 1 KL Sentral, Kuala Lumpur
- 2 Arena Stadium, Kuala Lumpur
- 3 Mandalay Airport, Myanmar
- 4 The Bridge, Cambodia



## edotco's offerings and value propositions

Our value proposition covers a suite of end-to-end solutions with single point of contact, offering comprehensive mobile network infrastructure within and around buildings.

### Heterogenous Network Planning

- Neutral host - multiple MNOs offering coverage with multiple technology
- Comprehensive RF planning
- Various technologies from 2G, 3G, 4G and 5G enabled

### Proactive Site Acquisition

- Collaboration with reputable developers
- Advanced planning and future proof mobile technology implementation

### Fast Deployment and Implementation

- Relationship with key authorities and regulatories
- Fast deployment
- Site access management

### Service and Maintenance

- Site SLA monitoring
- Scheduled service & maintenance
- Corrective maintenance

## About edotco

edotco has a regional portfolio of more than

**29,500**  
towers.



We collaborate with all major **Mobile Network Operator (MNOs)** and non MNOs across the region, providing end-to-end solutions to get communities connected.



edotco has a regional presence in

**8 countries;**

Malaysia, Myanmar, Bangladesh, Cambodia, Sri Lanka, Laos, Pakistan and Philippines.



More than

**400**

IBS sites regionally.

# 1 stop solution

as single point of contact.



Mobile Network Operators (MNOs)



Non MNOs



enabling connectivity



Ground Based Towers



Special Structures



Rooftops



Temporary Structures



In-Building Solutions



Small cells



Fibre

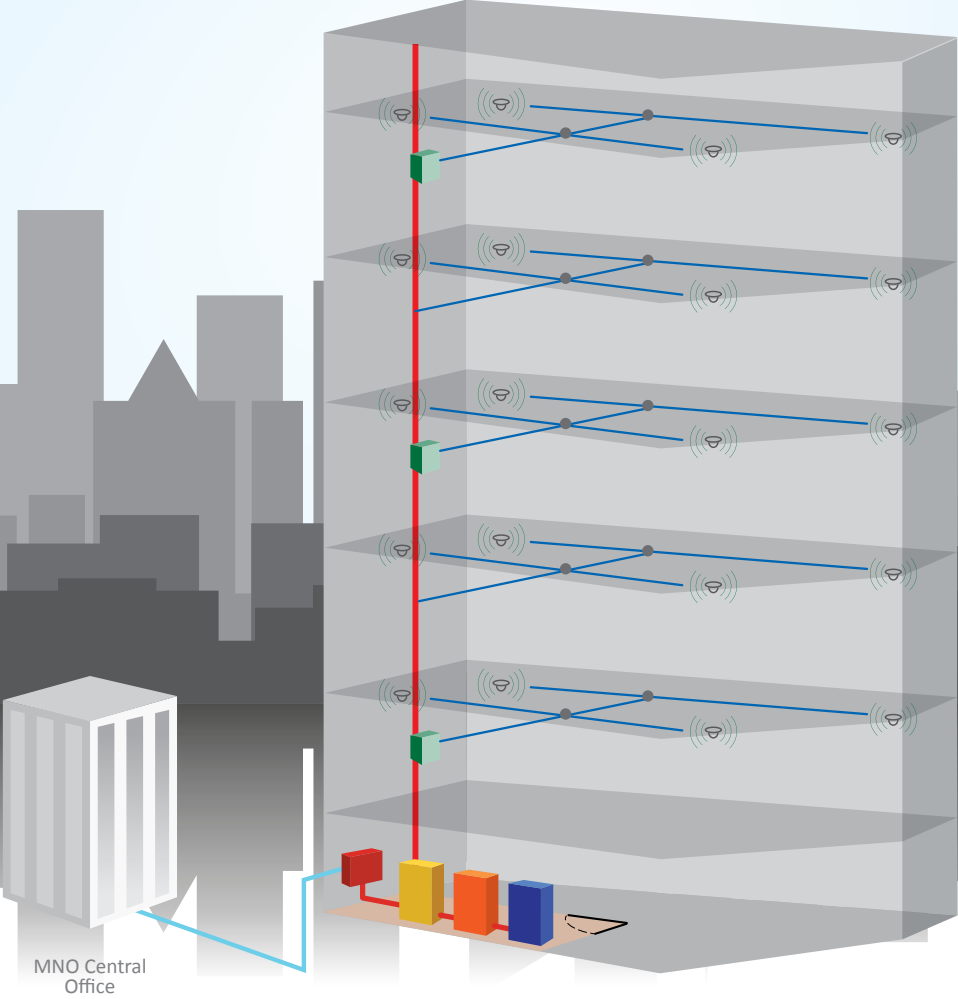


Energy

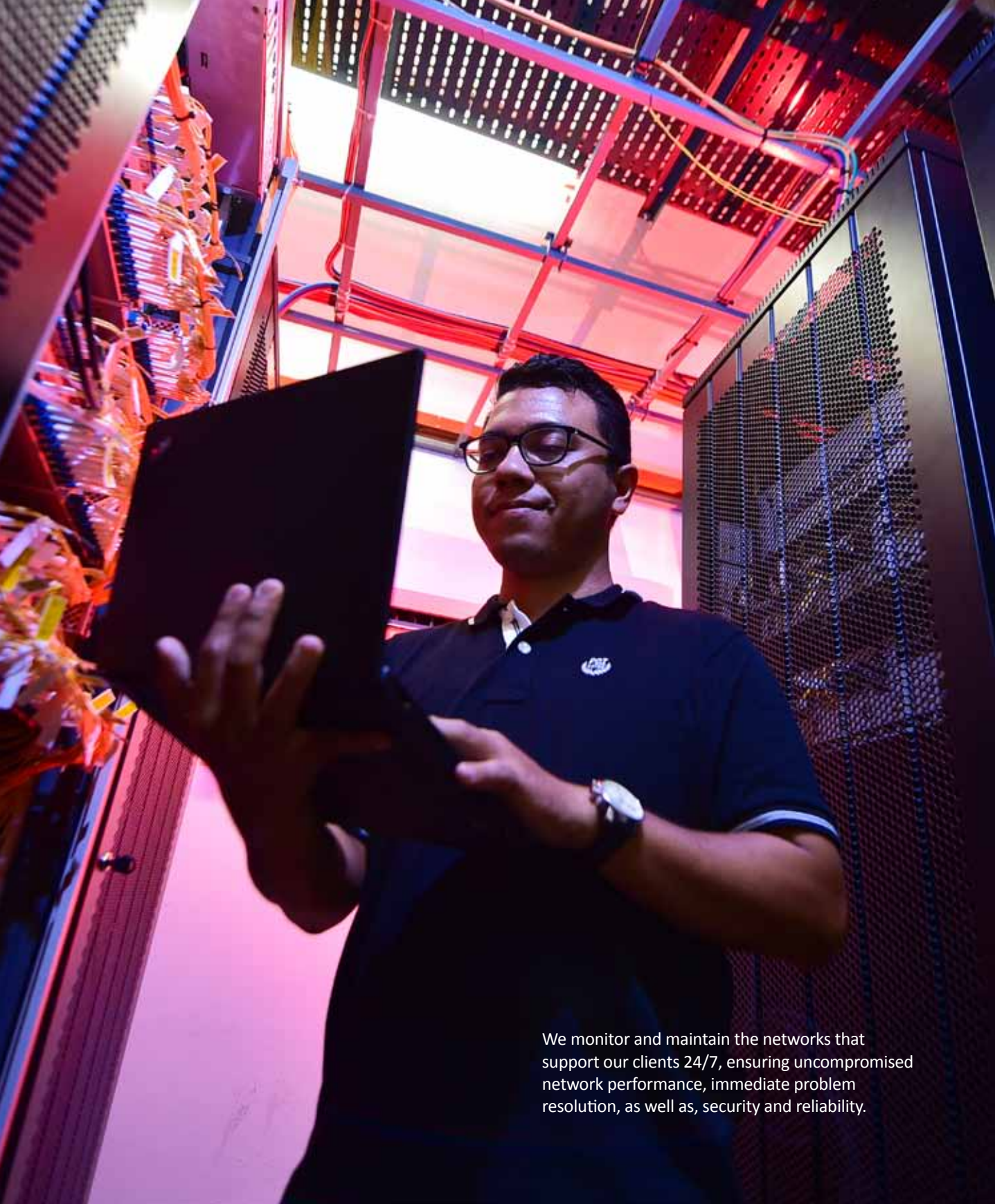


Managed Services and O & M

# edotco's In-Building Distributed Antenna System



		
Fiber Optic Cable	Backhaul Cable	Indoor Antenna



We monitor and maintain the networks that support our clients 24/7, ensuring uncompromised network performance, immediate problem resolution, as well as, security and reliability.

Connect with us at:  
[www.edotcogroup.com](http://www.edotcogroup.com)