9 Core Components of the Modern Network **‡ insight**

Secure wireless/LAN/WAN

Create resilient, reliable connectivity — from site surveys to RF network designs to implementation and network redundancies.

Cabling

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Ensure infrastructure efficiency with cabling services from survey and design to installation and remediation of all cable types.

SD-WAN

Improve remote user experiences for SaaS applications with SD-WAN and Direct Internet Access (DIA) for dedicated bandwidth.

Router/switch modernization

Modernize wireless hardware for improved range, stronger signal and better overall performance, plus infrastructure unification and management efficiency.

Network segmentation

Use custom segmentation strategies like Virtual Local Area Networks (VLAN) and IP segmentation to bolster access control and reduce the risk of cyberattack.

Perimeter security

Maintain access control and data protection for workers in the facility and in the field with advanced security solutions.

Power backup systems

Empower business continuity with power backup systems that keep networks up and running even in emergency circumstances.

Physical security

Secure your physical location with connected video and physical access control systems to monitor personnel activity.

Cell amplification and private LTE

Provide cost-effective indoor/outdoor RF Networks with small cell technology and provide high-powered coverage for large areas with Distributed Antenna Systems (DAS) using Private LTE.



A Guide to Distribution and Manufacturing Network Modernization



Insight has an expert team of network modernization professionals who specialize in transforming networks for distribution and manufacturing sector clients. This group is seasoned in architecting, designing, and implementing reliable and robust networks needed to support critical functions in product supply chains and meeting the need for secure transport services at regional facilities.

Network modernization benefits



Internet of Things (IoT)-enabled networks

Reliable wired and wireless networks

✓ Increased production uptime



- Increased bandwidth
- ✓ Reliable wireless connectivity with increased coverage
- Less network congestion
- ✓ More secure network







Seamless integration with other technologies and systems



Holistic and requirements-driven approach to security

Why Insight



Deep expertise

Our expertise results from successful transformations of networks supporting critical business services at more than 1,000 distribution and manufacturing sites throughout North America.



Fit-for-purpose physical designs

Our physical designs address a holistic set of network requirements for each location:

- ✓ Final wireless design and AP placement
- ✓ Detailed network closet design
- ✓ Networking Bills of Materials (BOMs)
- Cabling BOM
- Detailed implementation instructions per closet



Knowledge of local conditions on a national scale

Our teams are able to leverage experience of challenges faced in transforming facility network infrastructure across all 50 states and Canada, including:

- Weather/extreme weather
- Transport routes
- ✓ Local policy/legislation



Knowledge of manufacturing and distribution sectors

Our expertise includes mapping common types of business systems, processes and practices to the network infrastructure required to support them.





Proven state-of-the-art methodology

Our methodologies involve standardized, proven processes, with a high degree of flexibility to customize design and delivery to best meet the individual needs



of each client.

Leveraging tailored templates

These templates use proven methodology and are adapted to meet client needs.

- ✓ Survey templates
- ✓ Design templates

Targeted surveys and assessments

Surveys and assessments are focused on current and future needs of the client and facility:

- ✓ Predictive wireless design
- ✓ Wireless surveys and remediation recommendations
- ✓ Wireless design validation (on-site)
 - AP placement
 - Cable pathways and lengths
- ✓ Current infrastructure
 - Closet surveys - Cabinets (size/depth), network devices
 - Cabling – Copper matrix and fiber identification
 - Environmental – Electrical, AC/heat, lighting
 - Backup power



Dedicated and highly experienced implementation team for network modernization

Our traveling teams are familiar with adjacent systems such as:

- Automated picking devices
- ✓ Forklifts
- ✓ Wearables
- IoT devices
- ✓ Radio Frequency Identification (RFID)
- ✓ Bluetooth[®] Low Energy (BLE)
- ✓ Automated Motorized Vehicles (AMVs)
- ✓ Scales
- Automated packaging systems
- ✓ Low voltage cabling
- ✓ Physical security installation

Team members are experienced, trained and certified in





