

IoT

THE INTERNET OF THINGS

IoT devices are opening up unlimited possibilities for businesses to easily access necessary information in real-time, from anywhere they're working.



Common IoT Use Cases

- Monetize WiFi access by charging for connectivity
- Intelligently deliver targeted promotions to encourage repeat business
- Analyze traffic patterns for intelligent product placement and driving foot traffic
- Utilize wayfinding capabilities to provide real-time directions to key venues and activities
- Object detection, real-time route and distribution tracking, and monitoring temperature-sensitive foods
- Location-based messaging for safety notifications and to react quickly to incidents

What is IoT?

The Internet of Things (IoT) describes the network of physical objects, or “things”, that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the Internet. Such devices include daily tech gadgets such as smartphones and wearables, smart home devices such as smart meters, as well as industrial devices like smart machines.

These smart connected devices are able to gather, share, and analyze information and create actions accordingly. Each device collects data for a specific purpose that may be useful to a buyer and/or user and impact the wider economy by increasing efficiency and capabilities.

Telesystem Pillars of IoT



Connectivity - Empowers the devices in the IoT ecosystem to communicate vital information to stakeholders.



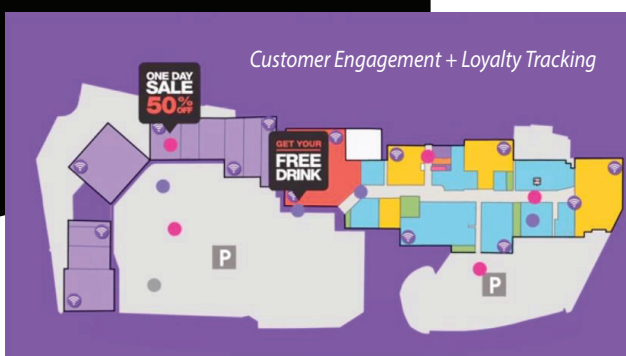
Monitoring + Alerts - Provides dashboards and reports to display metrics on the status of IoT devices and notifications that allow administrators to act on events occurring in real time.



Analytics - Utilize the data that is presented from the IoT devices to provide data analysis which help decision makers adjust their environment to maximize efficiency.



Devices - The physical IoT devices/objects that improve business efficiency and capabilities.



Securing the Internet of Things

Many IoT devices will require the collection, analysis and transmission of potentially sensitive data which makes Security the most important aspect of an IoT solution and the foundation of the pillars. Ensuring the network is secure from threats that could impact operations is a key component of a successful IoT implementation. It is essential that this data is adequately protected at all times.

IoT Security is the family of techniques, strategies, and tools focused on protecting connected devices and networks in the Internet of Things. Allowing devices to connect to the Internet opens them up to a number of serious vulnerabilities if they are not properly protected. A common IoT device can be used to infiltrate and attack the larger network. Since IoT is such a broad space, covering devices from smart watches to thermostats to refrigerators, IoT Security must be even broader to cover the variety of devices and methods used to connect these items to the Internet. Application Program Interface (API) security, public key infrastructure (PKI) authentication, and network security are just a few of the methods used to combat against increasing cyberattacks. To ensure that the data is secure and future-proof, organizations should consider managed security solutions along with their IoT strategy.

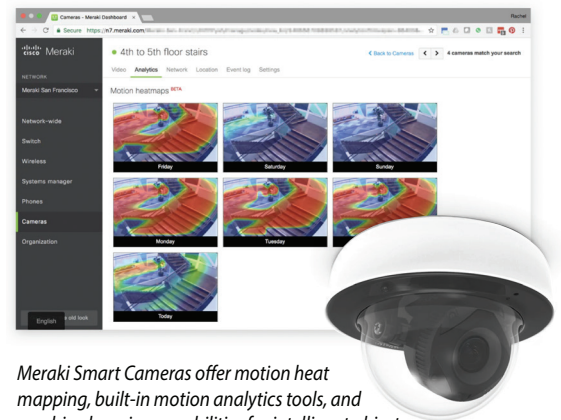
Telesystem IoT Hardware Offerings

Telesystem offers a number of Managed WiFi hardware solutions which include Bluetooth Low Energy (BLE) radio enabled wireless access points (AP). BLE radios have the ability to transmit as well as scan and locate Bluetooth devices. The BLE scanner can hear other beacons, asset tags, and devices that communicate using BLE data protocols. Available Bluetooth Location APIs allow for third-party applications to provide asset tracking and analytics using Bluetooth enabled devices.

Telesystem IoT Software Offerings

Telesystem Managed WiFi dashboards offer analytics and reporting information which give administrators access to information such as:

- Client usage information
- Number of clients connected
- Location Heatmaps
- Splash Login Statistics
- Location Analytics
 - Proximity tracking
 - Engagement tracking
 - Loyalty tracking



Meraki Smart Cameras offer motion heat mapping, built-in motion analytics tools, and machine learning capabilities for intelligent object detection - all centrally monitored in a secure cloud dashboard built for flexible and secure viewing.

Our WiFi Engagement and Analytics solution helps physical venues survive and thrive through optimizing safety, enhancing the visitor experience, and driving revenue. This is achieved through connecting multiple data sources such as WiFi, sensors, and Bluetooth beacons, to their cloud-based platform. Businesses get a complete view of what is happening in their space, allowing them to make informed decisions and drive meaningful experiences through several built-in intelligent space solutions. Our solution offers businesses:

- Enterprise WiFi
- Wayfinding
- Presence & Location Services
- Custom Development