



real time data. real time decisions.™



## About Aware360

**Founded in 1993, Aware360 began its real time decision-making focus in 2005, working with the Province of Alberta to create digital connectivity for monitoring Commercial Vehicle Enforcement Branch Officers.**

**Aware360 is at the center of today's Internet of Things developments, providing real time monitoring that help our customers manage their people, places and things with optimal efficiency.**

**We integrate our advanced real time monitoring technologies into virtually any real-world scenarios via modem, smart phone, sensor or other device.**



# We meet our clients' most demanding needs.



**30000**

Events per day



**15000**

People, places and things



**115**

Clients

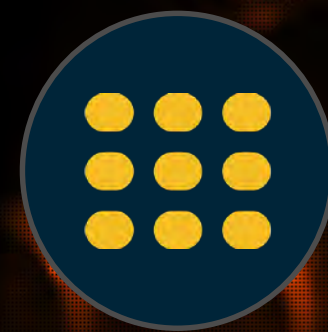


**50**

Employees



✓ Lone Worker



✓ Asset Tracking



✓ Equipment Health



✓ Journey Management



✓ Fleet Management

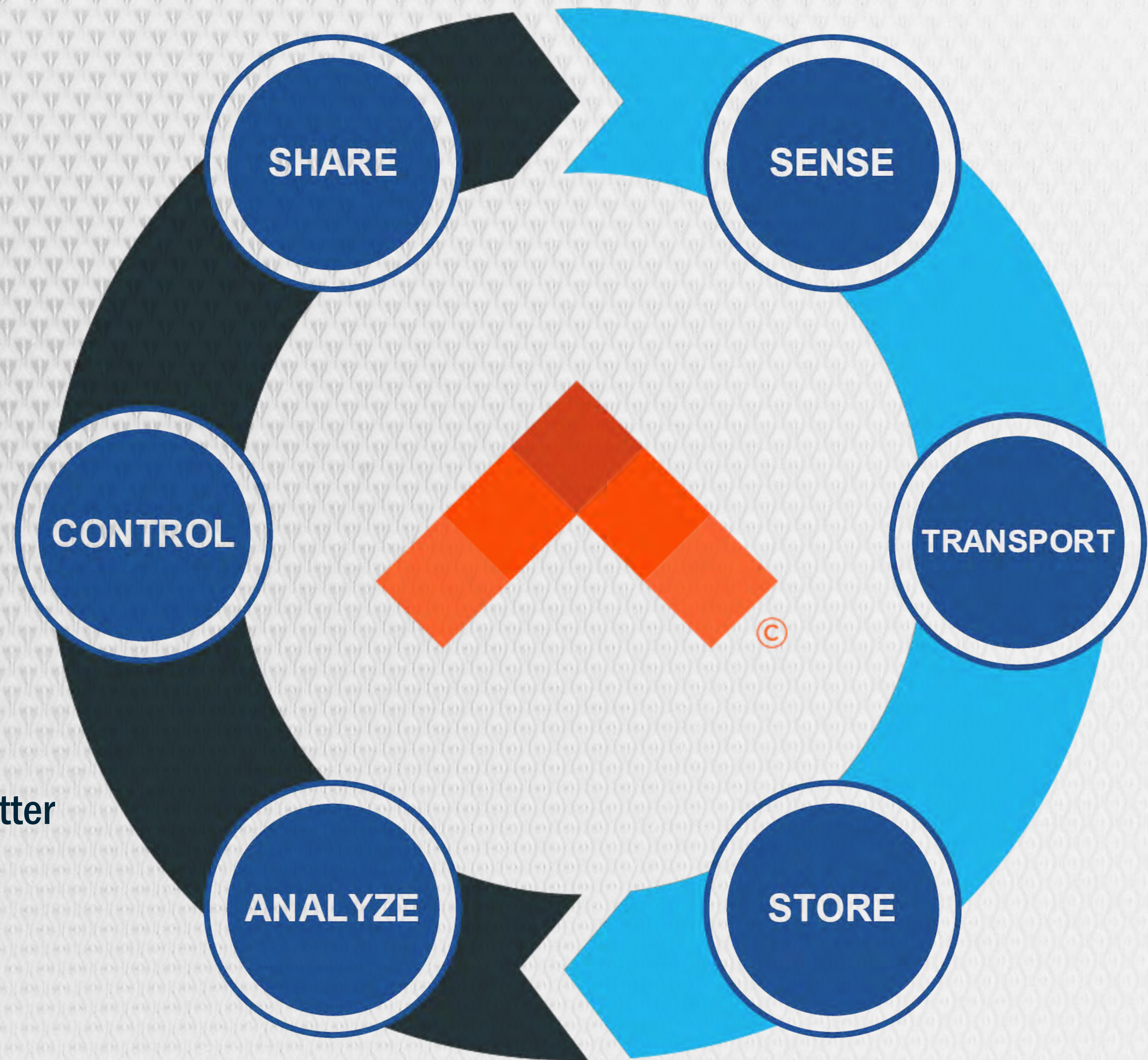


✓ Video Analytics



# | The Internet of Things

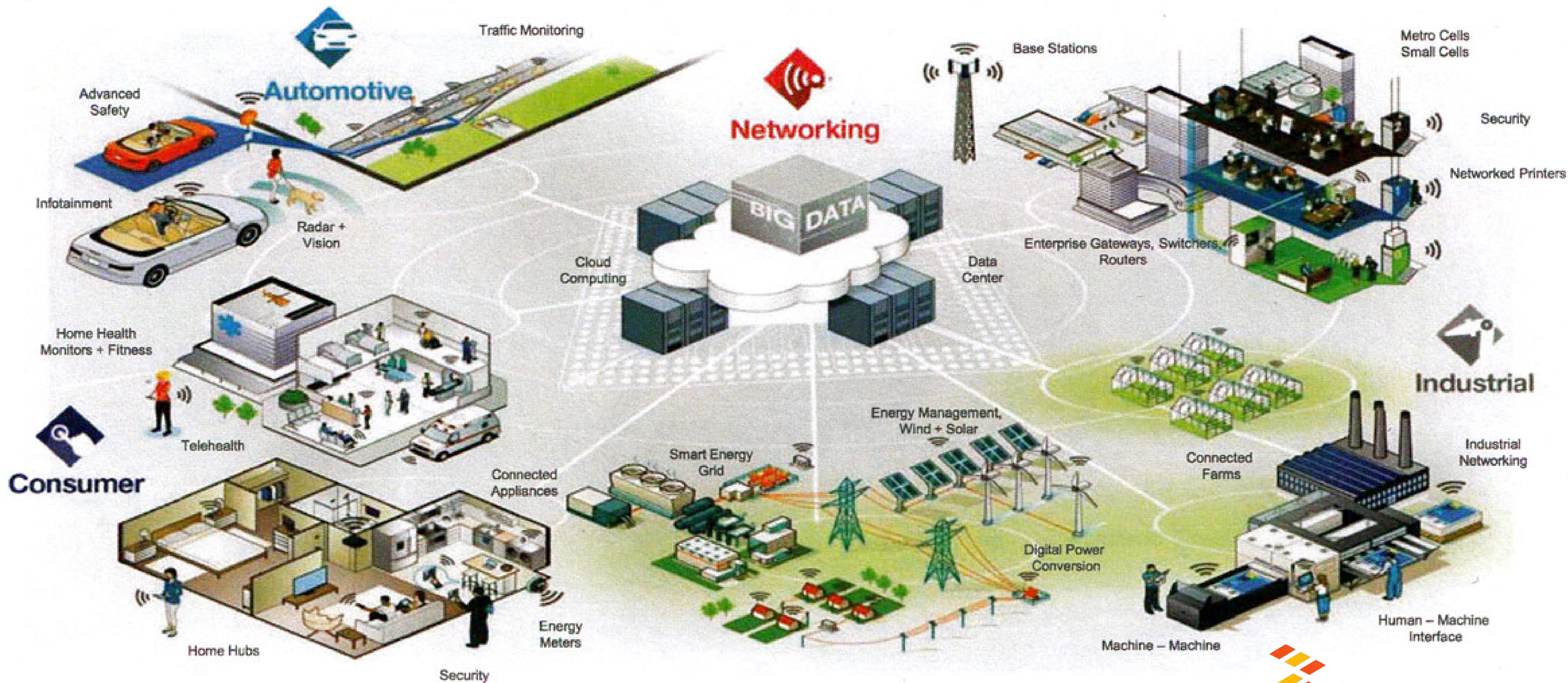
- ✓ “A connected asset must be able to sense something about it’s surroundings, this might be location, proximity, altitude, temperature, vibration, humidity, light levels, or motion.”
- ✓ “The data processed from a connected asset must be transferred to a central location or processing application automatically.”
- ✓ “IoT isn’t just about gathering data; it’s about using it to make better decisions.”
  - ✓ It must be actionable!





# Estimated Value of IoT by 2025: \$3.9 to \$11T US

## Across 9 Use Cases





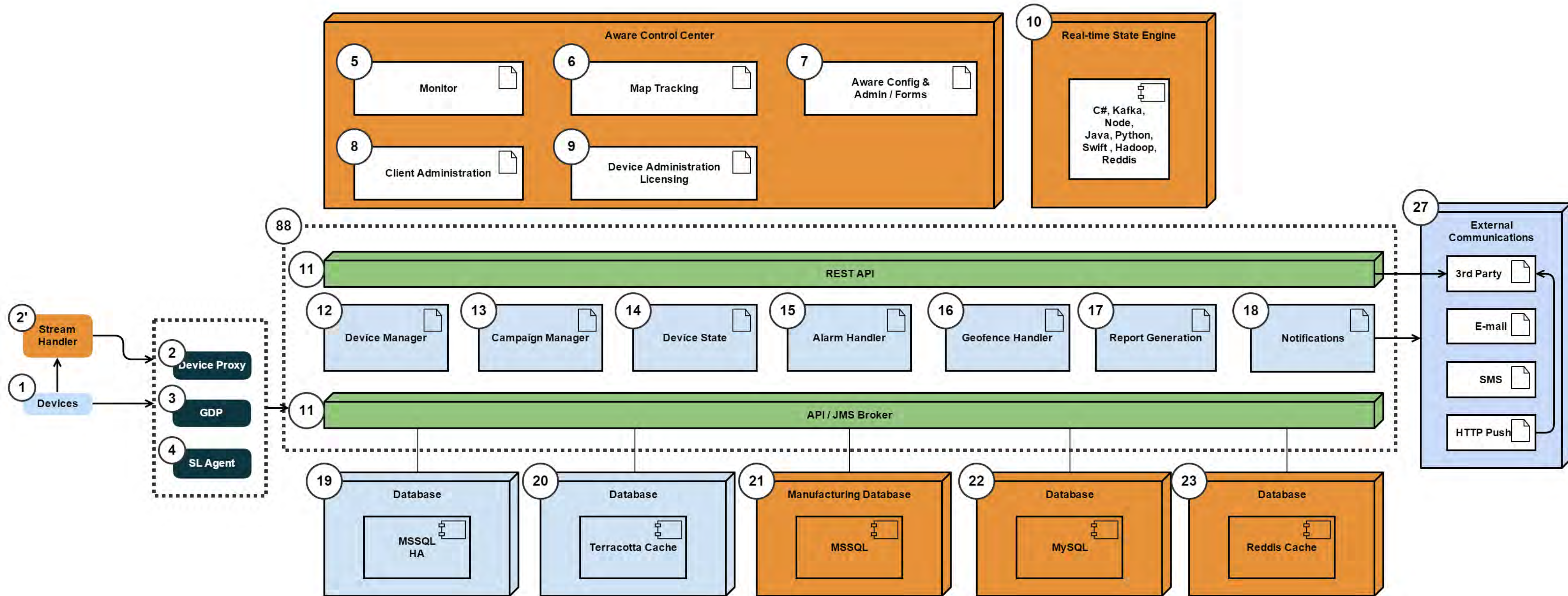
# Implementation Challenges in IOT Deployments



- ✓ Many different standards
- ✓ Lack of integrators for solution implementations
- ✓ Security and privacy blockers
- ✓ Development of use cases and return on investment
- ✓ Involvement of IT and OT
- ✓ Changing the way companies approach problem solving
- ✓ Understanding of available technology



# Our architecture enables us to quickly meet customers' needs







# Standards – Not a “One Size Fits All” World

- ✓ MQTT – light weight pub/sub, IBM/Eurotech
  - ✓ CoAP - Constrained Application Protocol, is a doc transfer protocol with small packet sizes
  - ✓ REST API
  - ✓ AMQP
  - ✓ STOMP
  - ✓ Avro – used by Hadoop as internal protocol
  - ✓ Thrift – created by FB now Apache licensed
  - ✓ GPB – Google Protocol Buffers
  - ✓ Proprietary
  - ✓ Etc, etc, etc, etc.....
- ✓ **Processing Required – And Where**
  - ✓ **Connectivity to the Software**
  - ✓ **Power of the Device – BLE etc.**
  - ✓ **Small CPU – Light Weight Protocol**
  - ✓ **Problem to be Solved**
  - ✓ **Communication Chosen**





# Security – This Will Make or Break IoT in Your Company



- ✓ Facility security SSAE 16 SOC1
- ✓ Two firewalls – HW and SW
- ✓ Segmented VLANs for public and internal traffic
- ✓ Command-and-control traffic restricted by port and IP
- ✓ Encrypted VPN only
- ✓ 128-bit minimum encryption on data at rest
- ✓ System monitored 24x7x365
- ✓ Encryption on data in transit to the edge device



# Become Aware today.

## We are here to help you be successful with your clients.

Put the power of Aware360's solutions to work for you.

1.877.352.8522 | [Aware360.com](https://Aware360.com)

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**ROBERT FORGET – [robert.forget@aware360.com](mailto:robert.forget@aware360.com)**

Executive Vice President