

## Meet the challenges of the emerging world of Internet of Things

Collectively called the *Internet of Things* (IoT), over nine billion devices, including computers, tablets, industrial equipment, consumer appliances, and smartphones around the world are currently connected to the Internet. This number is expected to increase to between 28 billion<sup>1</sup> and 100 billion in the next decade, with an economic impact of \$2.7 trillion to \$6.2 trillion annually by 2025.<sup>2</sup>

### Key Industry Challenges

- Concrete use cases and compelling value propositions
- Data security and anti-tempering
- Privacy and trust
- Diverse data sources
- Evolving architectures, protocol wars, and competing standards

### SENS Benefits

- Leverages new sensor data to transform business operations
- Engages and connects customers
- Reduced waste and eliminates inefficient operations
- Provides innovative services and business models
- Our of box machine learning and AI for sensor data

### Making SENS™ of IoT

There is a proliferation of IoT (devices), especially in Industrial Internet, connected cars, and wearables for healthcare. This sprawl of IoT devices needs analytics and real-time data processing to convert data into actions. Data from countless sensors needs to be classified, organized, and used to make automated decisions; and those decisions, in turn, need to be fed back to IoT devices to act on insights. Managing such far-flung data sources from real world, merging all this data in real time, and predicting the next best action to make value out of this data have never been attempted at the Internet scale of billions of connected devices. Will Internet and enterprise systems survive this onslaught of IoT data?

Examples of IoT data are real-time sensors, identity, condition, geolocation and status change data, such as data captured from a city bus, or a baby incubator in the Pediatric unit of a hospital. This data is often messy, noisy, incomplete, unstructured with video, voice, images, and text, not valuable in isolation, has temporal and spatial gaps, and needs sensor fusion to build context.

Sensitel SENS processes streaming data from connected machines, meters, sensors, mobile phones, and other connected devices (IoT) and from cloud data sources, such as weather and traffic information services, and provides contextual feedback and actionable recommendations based on predictive and physical models.

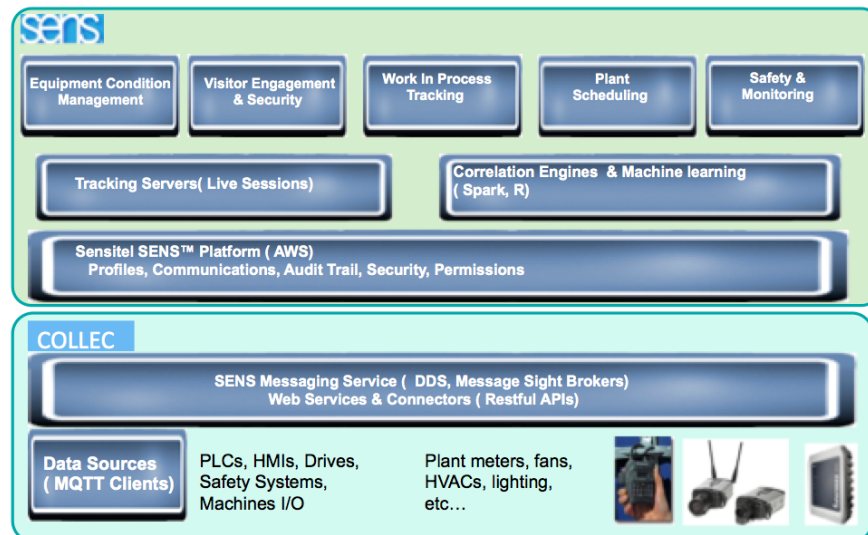


Figure 1. SENS for Internet of Things

<sup>1</sup> "The Internet of Things: Making sense of the next mega-trend," Goldman Sachs Equity Report, September 3, 2014.

<sup>2</sup> "Disruptive technologies: Advances that will transform life, business, and the global economy," McKinsey Global Institute, May

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