Situational Awareness
Unlocking Interoperability + Holistic Decision Making via the IoT
Industry 4.0, are you ready?
Are you ready to consume the tidal wave of data arriving from the Industrial Internet of Things (IIoT)? Are you cultivating system interoperability or supporting further data silos? What if you could holistically visualise and analyse all your disparate data, without rip or replacing legacy systems, and achieve true 360° ‘awareness’.

What is Situational Awareness?
Situational Awareness (SA) is a basic design principle that aims to provide you, the user, with contextualised data at the right time.

On a basic level, we should expect our data to be presented ergonomically, ordered and in a structure that allows users to logically navigate the system and act accordingly. But what happens when we have more data points than our systems were originally designed to manage? What happens when our data gets lost in software vendors, versions and screens? Other than creating mazy system architecture diagrams, we begin to hoard data whilst simultaneously losing insight.

It’s surprising how few of our industrial systems, especially in modern control and automation are actually meeting our basic design expectations. SA from ICONICS, alleviates the need to replace existing software or systems. SA is an overarching and complimentary solution that provides intuitive visual displays required for informed analysis and decision making.

This application provides organisations with an unprecedented level of condition based monitoring for their assets, from a top level view to an individual valve. There are no limitations on data, ICONICS support open standards, uniting databases, real-time systems, IoT devices, spreadsheets, web services and much more.
As more plant-floor devices come online through the Industrial Internet of Things (IIoT), interoperability and smart data management needs to be at the core of our systems and people. Situational Awareness for Manufacturing is a completely customisable environment where any organisation can aggregate a variety of data sources, and industrial systems, in a single visual and analytical location. The business value lies in the fact that organisations become hyper ‘aware’ of their assets and thus make smart, business holistic decisions as data sources are no longer in silo.

Born out of the SCADA and HMI world of control, Situational Awareness for Manufacturing unites real-time alarms, work orders, customer service requests, GIS mapping, flow rates, weather feeds and much more into one enterprise system. These data sources can vary, and be configured completely based on your requirements. Existing systems begin interact and our data analytics technology applies the intelligence.

**Industrial Internet of Things (IIoT)**

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**Feature Highlights**
- Ergonomic KPI Displays
- Advanced Alarm Aggregation and Filtering
- Open Connectivity Standards

**Commercial Benefits**
- Transform operational visibility
- Reduce downtime and Engineering Costs
- Unlock the power of the Internet of Things (IoT)

**Use Case: Manufacturing**

What could Situational Awareness look like in Industrial Manufacturing?

**Use Case: Water Authority**

What could Situational Awareness look like in Water Management?

**Smart Water and Sewage Management**

Water companies are collecting more and more data from out in the field due to the increased adoption of IoT sensor technologies and water loggers. Some of our most successful implementations of top-level SA, have been in the UK water industry.

The business value lies in the fact that Water authorities become hyper ‘aware’ of their assets through data interoperability. The business can make smart, holistic decisions a lot faster.

Born out of the SCADA and Telemetry world of control, GENESIS64™ is able to unite real-time alarms, work orders, customer service requests, GIS mapping, flow rates, weather feeds and much more into one enterprise system. These data sources can vary, and be configured completely based on your requirements. For now, imagine being able to see and control all your asset and business data in one intelligent dashboard.

Situational Awareness is a flexible solution that can scale to your Asset Management Plan (AMP) period objectives, existing infrastructure (cloud or on premise) and future technology roadmap.
Augment Reality

ICONICS launched the world’s first 3D Holographic Machine Interface (HMI) using Microsoft’s HoloLens self-contained holographic computing device. The technology delivers virtual elements and data as an overlay to the real world. Our augmented reality features also allows users to automatically load and display data based on their location and proximity to devices. Including:

1. QR Codes
2. GPS (global positioning system) - renders a map and information associated with that location. Mobile users can view information preconfigured for a user’s physical location.
3. OCR (optical character recognition) - derive information from scanned standard alphanumeric characters.
4. Barcodes
5. NFC – near field communication – create a connection to any supported device without the need for a physical connection

HTML-5 Technology

MobileHMI™ supplements Situational Awareness by addressing the growing need for connectivity away from the control room, allowing personnel to access information from anywhere and reducing the time it takes for issues to be recognised and fixed. The fully HTML5-ready mobile solution provides executives, managers and engineers the ability to stay connected to all their real-time data wherever they may be. Automatically render screens and displays that scale to any Apple, Android or Windows device.

System Scalability

Situational Awareness is built upon the ICONICS GENESIS64™ platform, providing users with a modern, secure, highly configurable data collection, logging, visualisation and analytics toolset/system. GENESIS64’s modularity and cloud connectors offers scalability from the ground up.
Interested in Seeing More?
We'd love to show you the true power of Situational Awareness

www.iconics-uk.com/solutions/situational-awareness

Book a Live Demo
Spend half an hour with one of our expert consultancy engineers, and open the product

Click Here

Contact us
If you have any questions, or would like to learn more, we'd love to hear from you

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