In the last decade, intelligent technology has improved the lives of many, whether through simple time savings or AI-enhanced analytics. While technological advances haven’t been instantaneous, the industrial internet of things (IIoT) is at a point where implementation can have far-reaching effects within a facility and its parent corporation. Fluke has termed this path “Connected Reliability”.

**What is Connected Reliability**

Connected Reliability is the simple concept that all systems, machinery, and people should be able to easily and effectively communicate with each other. By bridging the gap between people and databases or assets, maintenance and reliability (M&R) teams receive actionable data and companies’ business value increases.

“For automation, control, and processes management, the industry has been collecting data and using it to inform actions for years,” said Kevin Clark, VP, Fluke Accelix. “The ‘newness’ of the IIoT is where the data can be stored (such as in the cloud), how it is analyzed, and then the capability to do something about it.”

Connected Reliability is comprised of three main ingredients:

- Comprehensive data collection
- End-to-end connectivity
- Empowered teams

Data just sitting around does nothing. When people analyze data, they’ll have the information needed to take action.

**What does it do?**

When people have the right data to do their jobs, when asset data is available across operational systems, when reliability is achieved through the correct actions at the correct time—that is Connected Reliability.

“How does it improve existing programs?”

A Connected Reliability program will take reactive strategies down the path to predictive (PdM) and, later in technological advancement, prescriptive (RxM) maintenance. Current technologies can aggregate information from handheld tools, wireless sensors, SCADA or PLC systems, EAMs and CMMS software, and other forms of industrial data.

When handheld tools or always-on sensors upload data to the cloud, data transcription errors or manual measurements are decreased. Information that is accurate and accessible allows teams to make better data-based decisions.

Furthermore, many programs are available on smart devices, such as Android or Apple phones. M&R professionals that have the data they need to complete the task in the palm of their hand aren’t wasting time.

“Integration of data from multiple sources allows for faster and better maintenance decisions,” said Gregory Perry, (CMRP, CRP) Senior consultant, Accelix. “Ultimately, the [existing systems] should have the ability to integrate with machine data that provides actionable, event-driven processes.”

Whether a worker is at an asset, behind a desk, or even at home, they should still be able to find the information they need to complete the task at hand without any data silos or gaps. To do this, one needs an open architecture system that takes information from original equipment and third-party manufacturers, or from disparate databases created by different software corporations.

**APPLICATION NOTE**

As the industrial internet of things permeates facilities, connected reliability is how M&R professionals can bridge information from systems and machinery.

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**Why Connected Reliability?**

As the industrial internet of things permeates facilities, connected reliability is how M&R professionals can bridge information from systems and machinery.
Why do I need Connected Reliability?

Industry 4.0 is coming. Just as steam irreversibly changed the face of factories in the 1700s; just as science and mass production changed industry in the 1900s; just like the invention of computing power allowed humans to travel to the moon; the Fourth Industrial Revolution will change the way people interact with their day-to-day jobs.

Companies that were late to adopt technologies of previous revolutions were left behind. Even today, companies that don’t rise to meet the challenges of changing technology don’t make as much money.

A 2017 SAP study indicates that IIoT innovators are “more likely to be world-class manufacturers… more likely to be an IoT leader in their industry… and far more likely to have increased profits in the past year from IoT…” than those who did not take advantage of IoT devices.

While a full-blown Connected Reliability reality isn’t here yet, the framework that will evolve into connected reliability is already on the market.

Accelix Connected Reliability Framework

Fluke, the 70-year veteran creators of reliable test and measurement tools, is ready to face the coming challenges of Industry 4.0 with the Accelix Connected Reliability Framework. The Accelix Framework collects and organizes data from industrial sources, integrates it seamlessly into existing databases, and delivers information to workers in real-time and while on the go via smart devices.

“From an overall market trend standpoint, there is a growing demand for tools which do more than simply provide measurements,” said Frederic Baudart, (CMRP) Senior product application specialist, Accelix. “Fluke is addressing this category through its Accelix Connected Reliability Framework, which includes connected tools, sensors, and the integration of data (including data from third-party devices and systems).”

Accelix is intended to be the “Working Man’s” IIoT—technology that gets dirty and keeps on ticking; technology that doesn’t replace people but enhances their ability to be productive. Fluke Connect always-on sensors and handheld tools upload measurements to the cloud, making routes easier and more reliable, or even eliminating them all together.

Fluke wireless devices, such as the 3540 FC Three-Phase Power Monitor or 3561 FC Vibration Sensors, automatically send data to the cloud. Fluke Connect™ Condition Monitoring software allows teams to access data via smart devices from anywhere there’s an internet connection. They also provide alarms when assets deviate from user-chosen thresholds.

Connect2Assets sends and receives data from existing SCADA, PLC, EAM, CMMS, or other industrial sources and integrates it into a comprehensive system, while Connect2Mobile delivers it to the palm of M&R professional’s hands.

Industry 4.0 is coming. Do you want to be a leader in the industry or be swept away with the tides of time?

To speak with a Fluke representative about Connected Reliability, please head to www.Fluke.com.