Project Controls – Is Covid19 actually the antidote?

'Never let a good crisis go to waste' Sir Winston Churchill

Bleak though times are in construction, with the coronavirus fundamentally changing our operating practices and the threat of outbreaks and HSE closure on every project risk register, there remains one aspect of the crisis for which we can be grateful. The adoption of technology to support remote working, to better collaborate, to go digital together has arguably accelerated more than two years in just two months!

Traditional tech adoption curves have been redrawn with our whole industry, facing insecurity, suddenly acknowledging that they can now access that information remotely and join that Teams meeting to remain effective and productive. Despite pockets of typically youthful enthusiasm among our contractors for this 'new way of working', adoption has been slow. We needed a diktat; we needed an event.

Coincidentally, Project Controls; the dark art of establishing a good plan and monitoring it from miles away, has oft suffered from its own infection culminating in a physical amputation of the planner/controller from site itself. Instead, sitting in head office (or now at home) s/he endeavors to control multiple projects from afar. Symptoms and complications can later present as follows:

- Planned and actual schedules that grow increasingly out of sync
- Change is not incorporated well.
- Site data can be as much as six weeks behind the game.
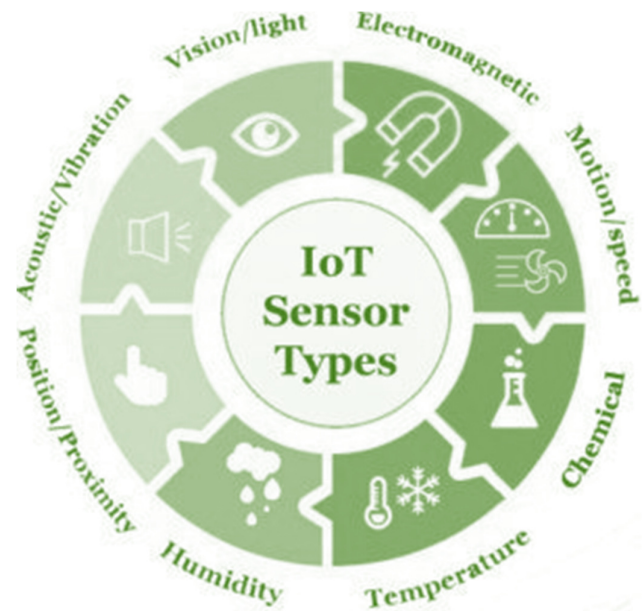- Project Controllers can end up reporting when they're best placed supporting.

Figure 1 – IoT – Most Common Sensor Types

Perhaps you suffer, or know a project suffering from this ailment?

Perversely, and respectful of those lost to it, one could argue that COVID is just the antidote we have been waiting for.

In a world where we are all so well connected in our personal lives through our smartphones does it not seem odd that we accept this data disconnect in the workplace?

It is surely the time, whilst we have a receptive culture to remote working and monitoring, to embrace and embed technology that connects to our live workplace performance data as standard.

Time to Get Better Connected

The Internet of Things (IoT) refers to a network of Internet-connected objects able to collect and exchange data typically providing performance insight.

An IoT sensor/feed could be almost anything. If you can imagine it there is almost certainly a sensor to monitor and report on it.
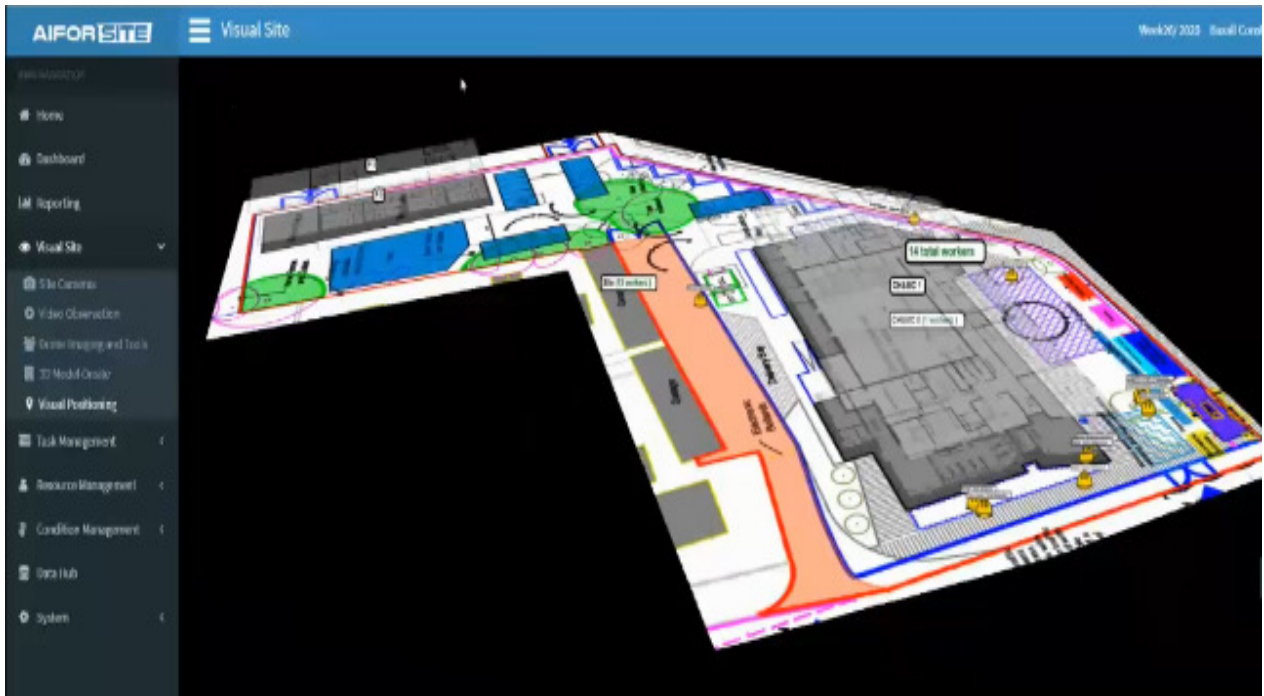
Figure 2 – Locate labour and plant resources in real time on your private site network.

Typically, people tend to think about environmental condition sensors recording temperature, humidity, acoustic/vibration, light, and/or chemical data.

This is useful in several contexts such as concrete curing, optimizing strike times, proving compliance with environmental limits etc.

However, perhaps more exciting for the Project Controls community is the emergence of private *Track and Trace* networks which are secure, simple, and inexpensive.

Wearable technology from Finland is already helping UK contractors to not only comply with government safe working guidelines to **provide a** *'COVID Secure'* **workplace**, but also to gain useful productivity insights from site data to **track, audit and manage resources by location.**

Systems that aggregate, access and report all this workplace data in one dashboard are available now in the UK for a monthly cost equivalent to the average operative.

Think about the impact on productivity…

Knowing how many steel fixers, plasterers, electricians are on site, on any day is good information, but to know where they are working right now and throughout the day, any day, for how long they were productive is data that can be gathered through simple wearable technology today. It becomes powerful information when checking work is being executed as planned, evaluating productivity rates, forecasting, and negotiating with sub-contractors. Not to mention just finding people and equipment when you need it!

Commercially, there has never been a better source of irrefutable evidence than the visual records and historic data these platforms record.

Figure 3 – Remote Supervision – **'Be There'** with 360 camera feed, pick a location from the 'snail trail' and look around with ease and HD clarity. Take Measurements, Review Progress, Delegate Tasks and Note Conditions from any day in the site history.

Think about the impact on safety culture…

By combining with video feed from CCTV and/or from your own daily **360-degree camera tours** (See Fig.3.) you can simply connect to site and virtually *Be There*.

Reduce non-essential visits and travel but maintain your highest standards with remote supervision, safety tours even use artificial intelligence (AI) to police your rules on your behalf, (e.g. Facemasks, Eye Protection).

It is noticeable and logical that sites with better monitoring routines, including camera feed, foster greater accountability, display better overall productivity and safety behaviors.

It must be time to swap the site photographer budget with the modern equivalent – Better for less.

Think about the impact on quality…

Virtual visits and inspections can be just as effective embracing the 360 camera records. Identifying and delegating tasks during the walk through.

Bring everyone's expertise, scrutiny, and spontaneity without the driving - Saving time, money and reducing your carbon footprint.

Conclusion

The emergence of IoT is revolutionizing just about every industry it touches and construction is ripe for it especially with new proximity and location tracking capability.

As many return to work at the time of writing, I hope we will not return to the past but go back to the future?

Want to be better connected to your workplace? Then please get in touch or register for free webinar content and demos at www.rapid-dbs.com

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