BORN TO BE INTELLIGENTLY COMPILED

Incorporating IoT can move companies from simply having a 'product' to having an 'intelligently connected product.' While it may be the buzz concept of the moment, there is a real benefit to introducing an IoT system when objectives are clear and the team creating it is skilled and experienced: it can revolutionise a company's efficiencies, significantly increase savings and improve operations.

Being all too aware of this, Future Motors Limited, the official European suppliers of the Turntide Smart Motor System, joined forces with Solid State Supplies to offer its customers a smart *and* intelligent motor solution designed to cut customers' costs and help them reach their carbon targets much quicker.

Future Motors replace wasteful electric motors with energy and operationally efficient ones that are 12.8% more reliable than their traditional induction counterparts. Not only are Future Motors' products helping companies march towards their net zero targets and save them money on their energy bills, they also typically pay for themselves in one to three years.

"Everything we do is customer-led," explains Rob O'Keeffe, Operations Manager at Future Motors. "We could easily just supply customers with our motors and leave it at that. That alone would allow them to make 40-60% savings on energy. But we wanted to go further and be able to provide an intelligently connected offering to customers. To do that, we needed a reliable supplier with in-depth IoT systems knowledge."

That's where Solid State Supplies came in. The Redditch-based company works with organisations all over the country to plan, develop, and execute bespoke IoT ecosystems. Its team of industry experts guides customers through the complex IoT landscape to help them access, realise the value of, and make use of data in their business.

"Our motors are designed for maximum efficiency, which alone is a huge benefit for our customers who want to save money, reduce downtime, and improve their green credentials," says O'Keeffe. "But many, quite rightly, want to be able to achieve more than that; they want 4G connection, so that they can be alerted to a potential issue before it happens and receive the precise data they need to fix it, which in turn significantly reduces servicing time and associated costs."

Being alerted to a problem before it

happens and having the ability to fix it promptly and in one visit reduces the need to spend hours and miles on the road travelling between sites.

Through partnering with Solid State Supplies to build a reliable IoT solution, Future Motors was able to offer a major advantage to its customers. Connecting a customer's motor system to a Cloud network means that data from the motors can be collected at a granular level and communicated to the customer in real time. This allows a company to control their environment better and use energy only when needed.

"It could be something as simple as a belt on a motor that is coming loose," says O'Keeffe. "The loosening would cause a reduction in measured torque that would be picked up through the IoT system and used to alert the monitoring team. The system would be able to pinpoint the exact site and the nature of the problem, giving the team all the information they need to instantly understand what part needs replacing. Sometimes it's even simpler than that. We've had customers who, prior to the instalment of the IoT connected motors, assumed their systems were being switched off at night. The IoT data told them otherwise, which immediately enabled them to make a huge cost and energy saving."

The motors can be controlled as well as closely monitored via the IoT system. Speed and fan direction, for example, can be altered remotely, resulting in companies being able to make more informed decisions about how best to use their resources and spend. In a nutshell, the IoT connection means that companies can pull meaningful data from the motors and choose how to influence them as a result – all via the Internet.