Navigating the new normal with digital service technology

Adrian Guggisberg, Division President of ABB Motion Services, believes digital solutions will shape new service delivery models as industries across the world adapt to working in the “new normal”. Traditionally, many industrial companies have relied on their service providers to help keep their operations running profitably, safely, and reliably. The need for this relationship remains, but the challenge is how to perform service and maintenance duties amid current and future lockdowns, travel restrictions, and social distancing.

The move to digital

Maintaining service levels for customers during these highly unusual working conditions has prompted service providers to adapt their approach. No longer able to perform standard maintenance operations in person, customers are more willing to embrace this new way of working.

A catalyst for data sharing

The global disruption brought about by the coronavirus has become a catalyst not only for digital innovation but collaboration too. As connectivity is the key enabler for remote services, it requires a significant change in how technicians connect with customers and remotely access critical equipment. This enables service engineers to perform diagnostics and preventative maintenance, thus reducing the risk of costly failures.

One approach that quickly found favour is remote services, such as installing, commissioning, and maintaining equipment without any engineers on site. Using digital technology to allow service experts to connect with customers remotely offers considerable benefits in terms of reducing health and safety risks. Because travel is reduced, remote services also allow for a faster response. For these reasons, customers seem more willing to embrace this new way of working.

Long-term trends

Another major change will involve the business model for services. The traditional model where the service provider is paid for its material and work provided on-site, will change to an outcome-based business model driven by new digital solutions.

The focus will shift from how quickly we can get people on-site and how long it takes to find a solution to one of avoiding risk. Furthermore, customers will also demand that their service providers deliver guaranteed levels of reliability, availability, and productivity. The economic benefit of this new approach is that OEMs like ABB already have the in-depth knowledge and expertise to optimize their products’ lifecycle and performance. Therefore, they will shoulder the responsibility for keeping plant running smoothly, rather than the asset owner, as is the case currently.

Customers will always be at the heart of a service business, but the nature of service may change. Insurance companies and investment funds could participate within a new service ecosystem. For example, a highly energy efficient motion solution might be installed and financed by a pension fund, operated by an industrial group, and a service provider ensures that it meets performance and reliability targets.

As every device becomes part of a connected world, the trend in connectivity is bound to continue. This can support better decision making that provides a firm basis to achieve improved results. Interestingly, some of the remote predictive monitoring services we are deploying now were technically feasible 25 years ago, but they were expensive and hard to implement.

With the advent of cheaper yet more sensitive wireless sensors, more developments in virtual reality (VR) and augmented reality (AR) or virtual reality (VR), that enables service engineers to have effective telepresence.

In the longer term, energy efficiency will also be an immense opportunity. By monitoring a customer’s equipment remotely, we can see where it is performing well or where it’s inefficient. For example, electric motors might be uprated to the highest efficiency levels, such as IE5. Ineffective methods of speed control, such as throttling, might be modernized with variable speed drives (VSDs) that can typically boost energy efficiency by 30 to 50 percent.

To ensure the industrial operations of our customers continue running profitably and reliably during these uncertain times and beyond, ABB will continue to make significant investments in the further development of our digital offering. Solutions to secure better performance and energy savings for customers will be key.

Together with our partners we will also expand to support customers through connected operations, as the remote monitoring of critical installations will prevent potential costly failures.