Rockwell Automation uses Vuforia Chalk to keep customer's production schedule moving during a critical time

By blending the physical and digital worlds, augmented reality (AR) helps companies adapt to remote work and keep their customers' production schedules on target—even when plans change on short notice. Learn how Rockwell Automation Services leveraged AR technology to provide a vital lifeline to an essential industry with just 10 days of lead time, all while keeping customer service and employee safety a top priority.

A customer-centric framework that stands out from the rest

When it comes to using innovative technologies to keep their customers satisfied, some companies rise to the top of the list. Rockwell Automation may be known as a leader in industrial automation and digital transformation, but they also maintain a robust service division, with nearly one-quarter of the company dedicated to support and services.

Rockwell Automation employs 23,000 "problem solvers" and serves customers in more than 100 countries. Within their Services team, 3,400 engineers and project managers have an average of 13 years of experience, with services capabilities including product support, asset management, workforce training, network and security services, and modernization planning.





A global pandemic highlighted Rockwell Automation's commitment to keeping essential industries in production

Rockwell Automation is committed to providing value to customers by ensuring they have access to round-the-clock support, regardless of location. In March 2020, Rockwell Automation found itself, like so many others, adjusting to the months to come as remote work became a world-wide phenomenon. In the case of one of Rockwell Automation's premier customers, a pressing installation and start-up of a brandnew replacement machine—a critical planned downtime event booked the previous year—was scheduled just a few weeks away on April 1.

As strict travel bans unfolded, it became increasingly clear that Rockwell Automation would not be able to send a full team of field engineers and product experts to install the customer's medium-voltage soft starter. This complex paper pulping machine required highly specialized experience and safety training, and without the machine in the line-up, the entire production run would be in jeopardy of shutting down, causing lost revenue and detrimental delays in the distribution of essential products.

Rockwell Automation turned to Vuforia Chalk to prevent catastrophic production delays

Fortunately, the Rockwell Automation Services organization was well-versed in the benefits of using AR technology. They knew that Vuforia Chalk would be the most time-efficient and effective way to complete the scheduled service via remote assistance. Chalk allows remote experts to draw on-screen instructions for on-site workers to view and follow in real time, with digital annotations anchoring to the recipient's local environment to help them see what's happening—making it the ideal solution for this situation.

Just 10 days before the scheduled service event, Rockwell Automation's local field service engineer Alexei N. Wilson-Eorgan downloaded Vuforia Chalk and began testing the remote assistance technology in anticipation of the impending changeover. Upon arriving on site, and equipped with Chalk on his mobile phone, Wilson-Eorgan

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3,400

connected with the other necessary Rockwell
Automation service experts in upstate New
York and Ontario. Although he was a seasoned
Rockwell Automation expert, this was his first time
working on the new pulper, and Chalk made the
remote communication process easy.

By combining real-time audio and video with AR technology, Chalk allowed the remote experts to view the end-customer's equipment and annotate directly onto the screen. With Chalk's "over-the-shoulder" ease of use, Wilson-Eorgan could follow along as the expert's digital annotations guided him through the process, helping him complete the steps more efficiently. With additional diagnostics and analysis software running on the machine, he also used Chalk to share real-time data readings with the extended team, helping them work through the changeover together in under two days.

Despite having a very short amount of time to train and prepare for his field engagement, Wilson-Eorgan was able to leverage Chalk's simplicity to keep everyone connected and able to collaborate more effectively. This was a significant accomplishment—the equipment was so new that very few people had been trained on it, and even with decades of experience in the industry, Wilson-Eorgan still found himself with a





completely new field service experience. "Chalk was the single most important link in the chain of diagnostic tools and expertise," says Wilson-Eorgan.

Putting customer needs above all else

Thanks to their ability to leverage Chalk on short notice, Rockwell Automation stayed true to their long-held commitment to a customer, who, in turn, maintained production levels with no revenue loss. All told, the equipment replacement was safely completed in under two days, meeting the allotted schedule for planned downtime. Rockwell Automation also ensured the customer didn't face any additional unscheduled downtime during a period when it could have easily proven catastrophic, not only for the customer, but for the communities who relied on their product.

As a customer-centric business, Rockwell Automation will continue to work closely with customers to ensure their continuity of business, both during the COVID-19 pandemic and beyond. One way they're doing this is with Live View Support™, a virtual remote support application for mobile devices. Their Live View Support™ offering is powered by Vuforia Chalk and is included as an entitlement with the purchase of TechConnect, Rockwell Automation's comprehensive customer support package.

For customers, the ability to quickly and easily connect with remote service experts is a gamechanger for resolving equipment issues faster which is exceptionally important during times when remote work has become much more commonplace, as evidenced by the COVID-19 pandemic. "The visibility offered by Vuforia Chalk enables our customers and domain experts to remain in contact in the face of this crisis, and it has allowed us to ensure our business is more resilient moving forward," says Rachael Conrad, Vice President and General Manager, Customer Support at Rockwell Automation. "Our partnership with PTC has provided our business with the tools needed to rapidly adapt our service offerings and delivery methodology to a new way of working." Conrad continues, "In under two months, we were able to train and deploy a total global workforce

of over 3,000 remote and field-based engineers with Vuforia Chalk, enabling unprecedented collaboration with our teams and our customers." Conrad sees their work with PTC as an important part of their global servicing capabilities. "We continue to evolve our portfolio by leveraging PTC's AR technology because of the success and the lessons learned from this past year—it enables us to better serve our customers, and it helps us execute our business more efficiently around the world," says Conrad.

Powering their support tool with Chalk has also allowed Rockwell Automation to make a permanent shift in their global delivery model for all remote support engineers, and they've held more than 500 sessions to support customers over the last six months. They've also expanded the global reach of their remote support group, enabling more than 600 remote support technicians in 16 global centers to now use Chalk.

Rockwell Automation has launched additional entitlements leveraging Vuforia Studio to provide enhanced self-service experiences. They are also currently looking at ways in which AR will allow them to advance their training business and other core service offerings.

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The results are in: AR technology provides a critical lifeline when remote services and collaboration abilities are most needed

In a time of uncertainty, Chalk enabled Rockwell Automation to not only connect their own service engineers more efficiently, but to go above and beyond for customers. As tools like Chalk have become an increasingly useful way to collaborate, customer feedback has been positive, with many taking notice of the value obtained by resolving complex issues with accuracy and confidence.

The ability to leverage AR technology to solve complex customer problems is what keeps Rockwell Automation at the top of the pack. As a proven leader in manufacturing and customer service, they epitomize the business imperatives to not only perform at the highest standards, but to serve others well, especially in times of great need—and with their proven commitment to innovative technologies, Rockwell Automation will be doing just that for a long time to come.

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