Combatting Covid-19

Andrea Ruosi explains how AX for Pharma 365 will help biotech and pharmaceutical companies to expedite the development and production of a vaccine against the virus

BY REBECCA GIBSON

Dubbed by many as the 'invisible killer', Covid-19 has posed unprecedented challenges, particularly for the pharmaceutical and biotech companies involved in trying to find a vaccination and cure.

"Everyone is fighting against the same enemy, but no one knows the exact nature of the fight or which weapons will be most effective. We know we must prepare our troops so they can spring into action the moment we have the right ammunition," says Andrea Ruosi, CEO of AX for Pharma.

While still in the initial R&D and clinical trials stage, pharmaceutical and biotech companies are already having to coordinate with multiple suppliers, contract manufacturers and third-party logistics providers to set up agile supply chains to ensure they will have the capacity to quickly produce and distribute large quantities of the vaccines to various geographical locations as soon as they are approved.

"Timelines have never been so short, and we've never had a situation where companies are trying to manage all stages of vaccine research, trials and production in parallel," says Ruosi. "We've also seen other companies that are being challenged to rapidly ramp up their production and distribution to enable them to repurpose existing medicines to treat the side effects of Covid-19, while also still delivering them to their usual patients. Companies need to carry out this work as quickly as possible, but they must still maintain high quality standards to create safe products and comply with industry regulations."

To overcome these challenges, it's essential that pharmaceutical and biotech companies have the right IT systems in place. Traditionally, they have implemented standard enterprise resource planning (ERP) systems for core financial, human resources and operational tools, and then bolted on industry-specific solutions to manage processes such as clinical trials, laboratory information

management and manufacturing. However, deploying a plethora of systems to manage each part of the process is time-consuming, expensive and carries both operational and compliance risks.

"Typically, all these solutions are deployed by different vendors, so they operate in separate silos, creating a disjointed system and making it difficult to gain a real-time overview of – and complete control over – the entire development, manufacturing, warehouse and distribution, and supply chain process," explains Ruosi.

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AX for Pharma has spent the past 12 years focusing solely on the biotech, life sciences and pharmaceutical industries.

"We want to provide organisations with the technology they need to be able to transform the lives of patients worldwide by creating, manufacturing and distributing effective vaccines and medicines

in a safe and efficient manner," says Ruosi. "To achieve this goal, our team undergoes training that has been specifically designed for pharmaceutical and biotech manufacturers. This means we fully understand the operational and regulatory challenges the industry faces, as well as the integral role our solution plays in ensuring patient safety."

Built as a commercial-off-the-shelf solution on the Microsoft Dynamics 365 platform, AX for Pharma 365 is the world's only ERP system with integrated modules that are preconfigured specifically for the biotech, pharmaceutical and life sciences industries. It enables organisations to handle everything from everything from the supply chains for clinical trials to weighing and dispensing, manufacturing execution, advanced quality management, warehouse management, logistics, financial planning and much more.

"Our solution empowers pharmaceutical and biotech companies to run clinical trials for Covid-19 vaccines and drugs, while also ensuring they have the agility, flexibility and scalability to manage the manufacturing and distribution processes once their products are approved," says Ruosi. "Crucially, AX for Pharma 365 has been extensively tested and validated for standard use in the pharmaceutical and biotech industries, so it guarantees compliance with all necessary regulations, such as Good Automated Manufacturing Practice, Good Manufacturing Practice, and US Food and Drug Administration 21 CFR Part 11."

Pharmaceutical and biotech companies from around the world have already adopted AX for Pharma 365 to manage their R&D projects and clinical trials for Covid-19, as well as many other illnesses and diseases.

For example, one multinational pharmaceutical company has selected the solution to run hundreds of clinical trials for Covid-19 around the world. Similarly, a biotech and medical device company is using it to support all their clinical and commercial processes. Meanwhile, a central European group comprising of more than 20 companies chose AX for Pharma 365 to manage its R&D projects for finding a drug to counteract the neurological impact of Covid-19. Another European pharmaceutical manufacturer relies on the solution to manufacture all its commercial drugs (more than 200 products), including some that can help to treat patients with Covid-19.

"These companies are at the forefront of the fight against Covid-19, and many other illnesses and diseases, and by implementing our end-to-end solution, they have automated all their processes and made them more accurate and efficient, transformed their supply chains and saved thousands of dollars per year," says Ruosi. "Now they have the flexibility and agility they need to quickly respond to changing healthcare needs, which may enable them to pursue R&D projects and clinical trials that were not financially feasible in the past. This may lead to the development of innovative new drugs, devices and therapies that will help patients live healthier and safer lives. We're proud to be part of that journey."

"Public cloud and AI technologies are providing pharma and medtech corporations with the robustness, flexibility and scalability they need for the research and development of new molecules and gathering of real-life clinical evidence for production and distribution," says Bruno Denys, the business lead for pharma and chemical industries at Microsoft. "AX for Pharma's years of in-depth expertise of pharmaceutical process automation combined with Microsoft's powerful technology, plus a strong service partnership, ensures the success of pharma and medtech clients' digital transformation projects. In healthcare, trust is key. This is at the heart of AX for Pharma and Microsoft's approach." ◼