VIEWPOINT

Transforming pharma operations



MASSIMO CRUDELI: AX FOR PHARMA

Digitising supply chains with modular platforms like AX for Pharma can help pharmaceutical companies improve their operational performance

n every industry, most companies are carrying out digital transformations as part of their main business strategies. The first wave of the digital revolution focused on using data analytics to better understand customers, or in the case of life sciences companies, to better understand patients to improve engagement levels and develop new go-to-market approaches.

The next wave of the digital revolution is about transforming operations. Digitisation holds tremendous potential in helping pharmaceutical companies to adapt to the growing challenges of globalisation, greater supply chain complexity, price and cost pressures, personalised medicine, and more.

"Digitising the supply chain allows companies to gain real-time visibility and make decisions quickly"

> Process efficiency and agility is improving dramatically. Sensors and automation can deliver a step change in the efficiency, speed, quality and responsiveness of business processes in all industries. The pharmaceutical industry is no exception. To thrive in a digital world, pharmaceutical companies will need to deploy next-generation technologies to streamline their business processes.

> By applying digital technology, these companies can significantly increase visibility into their supply chain operations and make better and

faster decisions. Digitisation also allows organisations to fully integrate their supply chains and improve operational processes, making them more adaptive and responsive to change. As a result, planning accuracy, manufacturing efficiency and productivity, inventory levels, and service quality all improve.

Evolving industry trends pose significant operational and supply chain challenges for the pharmaceutical industry. For example, the global market requires companies to operate across various geographies with an ever-growing number of items, which makes supply chain management, regulatory compliance, and lifecycle management more complex. The number of supply chain partners – including suppliers, contract manufacturers, wholesalers, distributors, and third-party logistics partners – is also higher than ever before, so a lack of integrated planning across the network hinders real-time decision making.

Many companies currently operate with cumbersome, inefficient networks that struggle to respond to dynamic shifts in supply and demand, but increasingly competitive price (and therefore cost) pressures require more efficient operations and supply chain management. Meanwhile, more complex product portfolios and a rise in personalised medicine call for greater customer and supply chain segmentation, challenging companies to produce low volumes efficiently. In addition, a growing risk of counterfeit drugs demands greater transparency and tracking in the value chain, so that companies can monitor



the supply chain from end to end. Similarly, rising regulatory scrutiny around the world calls for better quality control and more visibility, so companies need better access to data about products in transit and at global hubs.

Digitisation has the potential to help pharmaceutical companies address these challenges. Specifically, digitising the supply chain will allow companies to gain real-time visibility and make decisions more quickly, and improve operational processes and maintenance. In addition, technology enables end-to-end supply chain integration and greater network scalability, while allowing companies to boost manufacturing efficiency and productivity.

Generally, the pharmaceutical and life sciences industry is quite advanced in its application of technology, but has been very cautious when it comes to operations. Thus far, pharmaceutical companies are still relying on supply chain and manufacturing paradigms that have been around for a long time, largely due to the regulatory environment.

Modular solutions like AX for Pharma – built on the Microsoft Dynamics platform and specifically designed for the pharmaceutical, life sciences and biotechnology industries – gives companies a full overview and complete control over their supply chain, manufacturing, warehouse and distribution.

AX for Pharma offers core enterprise resource planning, laboratory information management systems, manufacturing execution systems in modules like Basic Pharma, Advanced Quality Management, Weighing and Dispensing, and Advanced Warehouse Management. Together, these modules give a clear picture of everything that is going on in the organisation and allow companies to identify any issues, spot opportunities for process optimisation, and make faster and more informed decisions.

As a commercial-off-the-shelf solution, AX for Pharma has been extensively tested. This means it is quick, easy and cost effective to implement, extend and validate the solution if a company decides to start small and add more modules in future.

Digitising the supply chain can help pharmaceutical companies to significantly improve their operational performance, and ultimately, strengthen their financial outlook. When implemented effectively, digitisation of the supply chain gives companies a true competitive advantage.

Massimo Crudeli is the senior manager and solution architect at AX for Pharma