## Benefits of integration

We discuss how integrated software solutions can help pharmaceutical companies to streamline processes, reduce costs and produce safer medicines with AX for Pharma's Andrea Ruosi

BY REBECCA GIBSON

roducing high quality medicines that are safe for human consumption is no easy feat. Pharmaceutical companies must deploy an enterprise resource planning (ERP) tool to manage their inventory; implement a laboratory information management system (LIMS) to automate laboratory workflows and store and manage data; and must also control production with a manufacturing execution system (MES).

According to Andrea Ruosi, CEO of AX for Pharma, these systems should be fully integrated to avoid potentially serious mistakes and excessive costs, while ensuring compliance with industry regulations. "Many pharmaceutical companies manually weigh ingredients and enter data into separate MES, LIMS and ERP systems, which can lead to human errors that have costly repercussions during the production stage, render the medicine non-compliant or even cause risk to patients."

To streamline processes, reduce human error and develop safer medicines that are produced in a more compliant way, many pharmaceuticals have replaced multiple customised solutions with fully integrated commercial-off-the-shelf-solutions (COTS).

"Rather than being built specifically for one company, COTS solutions are designed for general use, which means they are more reliable and require less testing," explains Ruosi. "Plus, using a single Microsoft technology-based solution, rather than multiple software solutions from different vendors, accelerates implementation and reduces total costs."

Built on the Microsoft Dynamics AX platform, AX for Pharma is a COTS tool that provides small to large companies with a complete integrated ERP, LIMS and MES (dispensing) system, and can help enterprises to manage specific processes like clinical supplies. "If a large pharmaceutical acquires another organisation or buys a new drug, it can be expensive and complicated to

extend or replace their existing systems to cover the new operations," explains Ruosi. "We can integrate our solution with the company's overall financial ERP to enable them to cover LIMS, or dispensing, or production and inventory management with handheld devices in a compliant and cost-effective way."

Multiple pharmaceuticals worldwide have implemented AX for Pharma. For example, one global organisation uses the solution to support supply chain, inventory, quality management, production and distribution operations across eight plants and multiple companies. Elsewhere, a pharmaceutical manufacturer deployed the tool to achieve regulatory compliance in plants in the US, Italy and France.

"Customers like AX for Pharma because it offers an intuitive interface, integrates with their existing Microsoft technology, and provides a clear overview of the entire operational process and supply chain," explains Ruosi. "Soon, we will release a preconfigured pharmaceutical tool based on AX for Pharma, which will run in the Microsoft Azure cloud and accelerate the implementation and validation processes." ©

