SAP S/4HANA adds Dollops of 'Real-time' Mojo to Manufacturing

For reliable, real-time decision-making, leverage data that digital enterprises generate to whittle down support costs and improve management of materials

The good news is that with improvements in connectivity, the growing momentum around the Internet of Things (IoT), and Big Data technologies, it is possible to extract actionable intelligence.

In many ways, manufacturing has become simpler than it ever was. What required scores of expensive machines, thousands of people, enormous production plants and storage, has been reduced to a handful of machines, men, manufacturing units and storage. Thanks to the smooth flow of information across sophisticated IT systems (ERP, CRM, SCM, social media, etc.), efficient on-demand manufacturing has become the norm, making it possible for manufacturers to manage thousands of SKUs for diverse markets.

Conversely, the orchestration of the tiny moving parts in the background that enable this simplification has become extremely complex. Today, planners and decision-makers in manufacturing have to deal with a constant stream of market data, competitive analysis, supplier information and operational data. They don't have the luxury of time. An error in mapping demand to plant operations and supply chain capabilities can result in inventory overhang, poor plant performance and loss of market share. New tools, designed to handle the real-time needs of manufacturing in a digital economy, are needed.

Take the case of a mobile handset manufacturer – and this example echoes itself across every type of manufacturing activity – that sources CPUs, batteries, antenna, switches, power frequency oscillators, memory, displays, chargers, etc., from multiple suppliers based on price and proximity to the manufacturing plant. To meet sudden changes in demand, handle rush orders or respond to fluctuating component supplies, planners can't take days to collect data and reach decisions. The good news is that with improvements in connectivity, the growing momentum around the Internet of Things (IoT), and Big Data technologies, it is possible to extract actionable intelligence. It is the post-processing activity that is tedious, confusing and error-prone.

What should the manufacturer do when a supplier in, say, China fails to fulfill component orders because of an unexpected natural disaster or a labor problem? What is the corrective action that Material Requirements Planning needs to take? What are the best actions planners can take based on price points and market demand? Which SKUs should be temporarily discontinued? Which plants should re-execute production schedules based on the location of the new supplier?

A planner's paradise

Smart manufacturers are increasingly turning to SAP S/4HANA for answers to these tricky questions. For its part, SAP S/4HANA is rapidly re-shaping manufacturing operations so that they remain efficient in the face of unpredictable and volatile conditions.

SAP S/4HANA is designed to run in a digital economy and assist with production planning. While conventional ERP systems are bound by technological limitations and are not able to act in real-time, SAP S/4HANA offers limitless possibilities of analyzing and acting on real-time data to derive business value with simple, unified and personalized user experience.

Planning functionality users of SAP S/4HANA don't run overnight batch job to reach their decisions. Instead, they execute data analysis in real-time. The information is made available in a user-friendly color-coded visual form. Critical parameters, stock situations, delays and KPIs are marked out so that they are not missed. Users can apply filters (planner group, area of responsibility), select fields, sort and conveniently switch between Fiori applications (from monitoring process order to re-executing production planning, to ordering raw materials). Fundamentally, users can evaluate stock situations and execute decisions with in-built decision support and greater simplicity and accuracy at a hugely accelerated pace.

Fiori road

The new user experience of SAP S/4HANA is created by SAP Fiori, a simple role-based user experience which minimizes training effort while increasing productivity by enabling anytime access across devices. SAP S/4HANA consists of re-designed applications in SAP Fiori to harvest powerful in-memory SAP HANA. It is able to conveniently process a huge amount of data by doing away with aggregates and indices and leveraging real-time techniques such as reading data records using internal parallelization.

These dramatic changes in supply chain management and manufacturing are being driven by the fact that we live in an increasingly connected and collaborative world.

Today, suppliers, manufacturers, distributors, retailers and customers are linked by several diverse networks, generating capabilities that did not exist until a decade ago.

With innovation seeping into every aspect of manufacturing, even experienced plant managers and production heads need to familiarize themselves with the new generation of tools and technologies. Capabilities around SAP S/4HANA, that turn data into decisions at real-time, will prove to be invaluable in the future.

For more information, please write to **sap.practice@wipro.com.**

About the Author

Pushpum Rastogi is a Lead Solution Architect with over 12 years of experience in SAP technologies. As a member of Wipro SAP Digital Innovation Group, Pushpum is primarily responsible for design, development and deployment of S/4 HANA, Suite on HANA and industry solutions.

About Wipro

Wipro Ltd. (NYSE:WIT) is a leading information technology, consulting and business process services company that delivers solutions to enable its clients do business better. Wipro delivers winning business outcomes through its deep industry experience and a 360 degree view of "Business through Technology." By combining digital strategy, customer centric design, advanced analytics and product engineering approach, Wipro helps its clients create successful and adaptive businesses. A company recognized globally for its comprehensive portfolio of services, strong commitment to sustainability and good corporate citizenship, Wipro has a dedicated workforce of over 160,000, serving clients in 175+ cities across 6 continents. For more information, please visit **wipro.com** or write to us at **info@wipro.com**

DO BUSINESS BETTER