SAP S/4HANA: RAISING THE BAR OF SOURCING EXCELLENCE FOR AUTOMAKERS
The automobile industry needs to navigate seismic changes due to technological, industrial and macroeconomic factors: equip mobility products with sensors and remote monitoring devices for enhanced safety and a convenient user experience, replace carbon-intensive internal combustion engine product lines with zero-emission models, compete with technology companies on the cusp of introducing autonomous vehicles, eliminate or minimize the use of unsustainable raw materials such as plastic, and increase the amount of recycled materials used in the production of finished vehicles and spare parts, among other factors.

Organizations are revamping their customer-facing IT systems and investing in software-defined vehicles (SDVs) to address business challenges. In addition, automakers are realizing that IT modernization also unlocks synergies and cost savings, especially in areas such as sourcing and procurement. However, sourcing strategies should be aligned with the production blueprint to capitalize on advances in material sciences. At the same time, original equipment manufacturers (OEMs) and tier-1 suppliers prioritizing electric vehicles as well as recycled and reusable materials need to adopt lean inventory practices, without exposing the shop floor to shortages, be it semiconductors in navigation systems or lithium for batteries of electric vehicles (EVs).

**Challenges in sustainable sourcing**

The bill of materials (BOM) of each automobile model typically runs into thousands of stock keeping units (SKUs) and suppliers. The huge volume of parts linked to a single project makes sourcing complex. Further, legacy IT systems, highly customized procurement software, federated sourcing models, and the lack of industry standards result in sub-par sourcing operations, while driving an escalation in costs. The technical debt also affects new product development and prevents the integration of sustainability criteria into the sourcing and procurement value chain.

Most global OEMs digitized their operations around the turn of the century, or earlier, but the distributed and disparate systems do not meet the data security, privacy and standardization requirements of cloud computing. These systems also did not factor in spend analytics, predictive insights, or regulatory compliance. Moreover, they lack the ability to support negotiations for annual contracts or commodity index-based pricing for bulk materials such as copper, nickel, cobalt, and lithium. In addition, siloed systems for supplier, price and parts management prevent sourcing teams from distilling business insights from available data. Most important, the rigid architecture of legacy procurement systems invariably does not support a seamless upgrade.
Automating the procurement cycle using SAP S/4HANA

One of the tried and tested ways for automobile manufacturers to streamline buying is by leveraging the automated workflows of SAP S/4HANA Sourcing and Procurement. It builds on the robust backend capabilities of the materials management module of SAP ERP Central Component (ECC) to optimize procurement and supply chain management via the cloud, machine learning and analytics. The unified platform harmonizes and standardizes procure-to-pay processes, which ensures end-to-end visibility and supports centralized purchase decisions. Moreover, consolidation and standardization boost the bandwidth as well as productivity of the automotive enterprise, while rationalizing costs.

SAP S/4HANA Sourcing and Procurement offers an automotive-specific product sourcing module to address local business challenges. It provides sourcing teams with the agility to manage operations at scale and velocity. The platform offers customizable, role-based dashboards with device-independent user interfaces as well as self-help portals for smooth procurement of goods and services. Digital support and embedded visualization tools enhance the user experience for sourcing professionals. At the same time, analytical insights from spend, supplier and market data, including real-time commodity market data as well as historical buying and sourcing trends, ensure informed decision making. Further, process automation simplifies reporting and statutory compliance, while improving the accuracy of demand forecasting. Accurate forecasting, in turn, enhances the efficiency of procurement planning and supply chain operations.

The API-driven architecture of the SAP sourcing and procurement platform supports both demand aggregation and native integration with the business network, which in turn facilitates discovery and collaboration with a global supplier base. A fledgling supplier ecosystem mitigates procurement risks and helps OEMs comply with quality, safety and reliability standards for spare parts, components, assemblies, and primary metals / materials. Significantly, a unified system for near real-time interaction with suppliers enables automotive enterprises to implement responsible sourcing.

Integration of SAP S/4HANA Sourcing and Procurement with SAP Integrated Business Planning (IBP) and SAP Ariba helps automakers future-proof the sourcing environment. SAP systems hosted on the cloud serve as a comprehensive suite to boost the reliability and efficiency of demand planning, direct and indirect procurement, contract management, inventory management, invoicing, and supplier management.

Infosys IP accelerates SAP S/4HANA migration

Infosys has implemented several greenfield SAP S/4HANA Sourcing and Procurement projects for automotive OEMs. We have also migrated legacy ERP systems to the SAP platform. Our engagements with manufacturers, suppliers, automotive finance companies, and dealers are managed by a team of 2,000+ SAP S/4HANA professionals with rich domain expertise.

Our SAP consultants leverage Infosys Cobalt, a set of services, solutions and platforms, to accelerate the cloud journey. Infosys Cobalt assets enable our project teams to quickly reconfigure processes for SAP S/4HANA and reinforce supply chain capabilities, without disrupting business operations. Simultaneously, we help enterprises capitalize on the scalability and agility of the cloud via seamless migration of operational systems to hyperscale environments. Notably, our testing tools address common issues in sourcing systems, such as interdependency with third party...
A German luxury automotive manufacturer partnered with Infosys to upgrade its legacy procurement ecosystem

Infosys modernized the procurement ecosystem at the automotive OEM to eliminate paper-based processes, ensure transparency into contracts, and unify sourcing across business units and regions. We adopted an incremental approach to phase out the legacy procurement system by replacing systems of the 1990s with SAP S/4HANA on Microsoft Azure. The advanced solution to manage 400,000+ global suppliers included SAP S/4HANA database, SAP Supplier Relationship Management on HANA, and the Icertis Contract Intelligence (ICI) platform. The Infosys solution helped the OEM rationalize costs and improve operational efficiency significantly.

Authors

Ruchir Budhwar
EVP and Industry Head - Manufacturing, Europe

Siddhartha Das
AVP- Group Manager - Client Services