

Digital Transformation Use Cases in Supply Chain Management

Ever since the COVID-19 pandemic hit the globe, it has wreaked havoc and posed significant challenges for supply chains worldwide. National lockdowns continued to slow or even temporarily halt the seamless flow of raw materials and finished goods, consequently disrupting manufacturing processes. Additionally, many organizations witnessed staff shortages and losses due to COVID-19, affecting business continuity and adding to the already mounting problems in the supply of essential goods and services.



As an aftermath of the chaos, an E&Y survey found that "several US enterprises plan to shake up their supply chain strategies to become more resilient, collaborative, and networked with customers, suppliers, and other stakeholders. To do that, they will increase investment in supply chain technologies like AI and robotic process automation while retraining workers."

Indeed, digital enablement through AI, automation, advanced analytics, and other technologies can turn linear supply chains into more integrated networks connecting thousands of players. 64% of the surveyed supply chain executives said that digital transformation would accelerate due to the pandemic, and 61% of the respondents will retrain and reskill their workforce to adapt to the changing ways of working.

Below are some digital transformation use cases that can herald a new era in the supply chain industry.

Emerging Digital Transformation Journeys in the Supply Chain Industry

Below, we'll have a look at how modern technologies can drive agility and opportunities for growth in the supply chain industry, improving real-time monitoring of your end-to-end supply chain.

Increase supply chain efficiency by leaps and bounds with enhanced visibility into operations

A supply chain management tool leverages advanced analytics and AI to unify data across apps in your supply chain – accelerating time-to-market and driving agility without compromising on speed and innovation.

Research by EY shows increased visibility is the top priority over the next few years for a successful supply chain.

Build more visibility and predictability into supply chain operations with Microsoft Dynamics 365



As a Microsoft Gold Partner, Acuvate helps clients implement solutions like the Microsoft 365 Dynamic Supply Chain and the Microsoft Azure Synapse Analytics in the cloud to build a connected supply chain with end-to-end, real-time visibility across all its parts - distributors, retailers, and local stores.

For example, IoT devices and sensors used in conjunction with AI-powered bots can provide valuable realtime data on the location and condition of goods in the supply chain. This is especially useful for products where temperature monitoring is critical (i.e., vaccines, frozen foods, and medicines)

Creates a digital-supply-chain twin by performing what-if simulations and using AI-powered advanced analytics, enhancing multi-tier supplier visibility in the process.

Improves end-to-end visibility into stock availability and the demand across channels and products, thus replacing inventory overspends with agile replenishments.

Create a cognitive supply chain powered by machine learning and advanced analytics that builds on the connected data to surface actionable insights and improve the "perfect order rate."

Integrate seamlessly with external manufacturing execution systems to enhance the visibility of the production floor, improve quality, and eliminate data silos.

How Walgreens transformed supply chain operations and accelerated decision-making with a data warehouse in the cloud



Walgreens is a 118-year-old drugstore chain with more than 9,200 stores serving markets in the United States, Puerto Rico, and the US Virgin Islands. The organization moved to Microsoft Azure Synapse Analytics in the cloud to modernize businesses, study historical data, manage inventory, and provide customers with the products they want at the right time.

At one-third of the cost of a new data warehouse application on the premises, the company created a streamlined, secure, and scalable platform and helped drive better decision-making.



Within three months, Walgreens migrated its entire onpremises data to the cloud with **Azure ExpressRoute** and **Azure Blob Storage**. Users can now consume valuable data and insights through a web app developed in-house and data visualization tools like **Power BI**.

Accelerate time to market and improve product quality by unifying everything on a single platform



A supply chain management system accelerates innovation and allows organizations to respond swiftly to changing specifications, quality issues, and obsolete processes and mitigate any delays.

Microsoft's Dynamic 365 Supply Chain Management solution in the cloud helps organizations achieve the aforementioned.



Centrally manage product information by inviting partners and suppliers to receive and share data on a unified platform securely.



Simplify configure-to-order processes



Resolve issues and manage product quality

As the largest and most widespread healthcare company, Johnson and Johnson collaborated with Microsoft to make its supply chain operations increasingly efficient with AI, Azure, IoT, and the Microsoft Cloud. Senior Vice President and Group CIO of Global Supply Chain at Johnson and Johnson, Steve Wrenn, gave a befitting example of the same.

"If we have ten vendors that supply us with raw materials, and data coming down from the cloud tells us that two of them are having some kind of supply chain interruption or issue – maybe they're going to be late delivering more materials, for example – artificial intelligence knows who the other vendors are and can instantly make the selection and place an order without a human needing to take the time to generate a report and make that decision."

Obtain prescriptive insights into customer demand and get the right products to customers at the right time



A supply chain management system uses AI to predict demand and get products to people right when they are needed, thus eliminating stockouts or overstocking with real-time priority-based planning.

At Acuvate, we can help you streamline sales and operations with the Microsoft Dynamics 365 Supply Chain Management module.



Improve demand planning by responding intelligently to dynamic shifts in demand and supply with prescriptive analytics



Ensure seamless resource scheduling



Optimize production and distribution planning



Improve cost management and make accurate estimates of landed costs



Automate warehouse operations

How GN Group future-proofs its supply chains operations with Microsoft Dynamics 365

The GN Group offers brands like Jabra and Resound to make life sound better with top-of-the-class headsets, hearing aids, and video collaboration solutions. The company implemented Microsoft Dynamics 365 to optimize inventory management and get Al-powered predictive insights for the end-to-end supply chain management.

By adopting Dynamics 365, the GN Group can evaluate supply chains needs and pricing. For example, when the company receives a large order, it can determine if it has the components to build that number of headsets and generate pricing and timing estimates.

Maximize asset longevity and uptime with proactive maintenance

With Microsoft Dynamics 365, supply chain personnel can proactively manage critical business assets, improve overall equipment maintenance, maximize asset life by performing predictive, condition-based, corrective, and preventive maintenance.



Reduce costly equipment downtime



Improve overall equipment effectiveness through regular maintenance



Optimize maintenance scheduling with AI

How does Microsoft PowerApps move supply chain operations to the mobile environment?



Owing to the fast-moving nature of supply chain management tasks, organizations must move processes like manufacturing execution systems, advanced warehousing, and other operations to the mobile platform.

The primary tool to help fuel success in extending operations to mobile devices is Microsoft's low-code app-building platform PowerApps. PowerApps help employees in the supply chain industry quickly develop a multitude of apps for various cases, with little or no coding knowledge needed.

At Acuvate, we use PowerApps to help enterprises optimize and move a host of supply chain operations to mobile, including the following



Inventory transfer journals



Picking list registration



Route card and packing slip



Production order execution



On-the-fly pick



Container receipts



Item inquiry

Continuing with the example above, the GN Group leveraged Microsoft PowerApps to build a custom, vendor-managed inventory (VMI) app to scan items while picking them up and streamline inventory management.

Introducing Chatbots For Supply Chain Management



At Acuvate, we can build AI-enabled bots with our enterprise bot-building platform, BotCore, or Microsoft's low-code platform Microsoft PowerApps, to drive better and more intelligent supply chain operations. Here's looking at some use cases of chatbots in the supply chain industry.

Automatically register shipments to a customer and provide delivery status updates Eliminate the need for customers to track codes, web forms, and other components corresponding to an order

Send notifications about the location and status of inventory (Eg., stock requiring temperature control

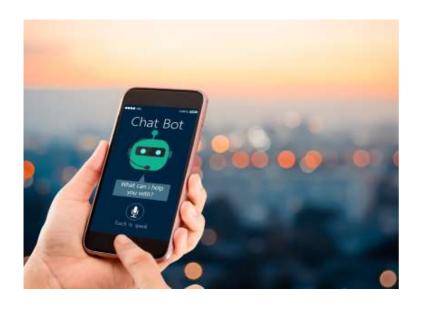
Issue proactive asset maintenance alerts

Simplify purchase order creation and time entry

Help delivery executives reach their intended destination hassle-free

For example, suppose a delivery executive in Europe supplying the end-product to the customer is unsure of the exact address and location. Through a mobile app, he can ask the bot questions regarding the address in his native language (for example, French).





The live translation capability of the bot translates the query for the agent at the other end (who may be a native-English speaker), following which the bot translates the agent's answer in French in real-time to help the executive reach his destination.

About Acuvate

Acuvate Software is a global player in next-generation digital services and consulting with 15+ years of experience optimizing the supply chain and improving business efficiencies and revenue for numerous enterprises globally. As a Microsoft Gold Partner, we leverage all things Microsoft to build enterprise apps that support intelligent analysis, collaboration, and orchestration of information, to redefine sales, service, mobility, and experience.

