THREE WINNING THEMES

FOR UTILITIES IN DIGITAL SUPPLY CHAIN
Supply chain digitization has been revolutionizing many industries, making them more reliable, connected and responsive. It is time for utilities to reap similar benefits.

Utilities are facing disruption and performance pressure, whether from new and increased competition, evolving customer expectations and shifting regulatory requirements. Digital technologies can be the catalyst to drive top-line growth, improve value delivery to customers and increase market share.

The opportunities of an enhanced supply chain

Historically, utilities have looked to their supply chain for operational delivery and transactional third-party cost and service management. Today, supply chain is also being asked to support additional business objectives such as improving customer experience.

Digitalization of the supply chain could mean new value for utilities. Applying three winning themes of digital supply chain — robotics and artificial intelligence, advanced analytics and digital control tower, could help utilities enhance customer experience, improve workforce productivity, and according to our analysis reduce supply chain cost by up to 40 percent while meeting regulatory obligations.

Amplify productivity and enhance user experience through robotics and artificial intelligence

Robotics and artificial intelligence (AI) can be used to augment and enhance your workforce by performing high-volume, repetitive tasks across the supply chain. Automating tasks such as supplier on-boarding, order expediting and invoice compliance can reduce lead time, reduce errors as well as release the human workforce to take on more complex, value-added tasks. AI can also act as digital assistants to answer supplier and supply chain helpdesk queries. Armed with natural language processing capabilities, the digital assistant can participate in thousands of conversations at once, answering queries in a human way. With the adoption of AI-enabled assistants or chatbots as user interfaces, adoption of supply chain practices enabled by technology could be more intuitive, as well as easier and faster to roll out.

For example, one London Council leverages the power of Amelia, a digital assistant, to answer residents’ questions ranging from website navigation queries to request on status of their permitting and licensing applications. This effort delivered 60 percent cost savings and enabled its human workforce to focus on answering more complex queries. In another example, a global oil and gas company applied robotics to augment its invoice processing team to deliver 75 percent productivity improvement. At the same time, invoice handling time fell by 70 percent and released more than $40 million in savings from improved on-time payment.

DID YOU KNOW?

Accenture is the largest robotic process automation integrator in the world. We have shifted 14,000 full-time professionals to more value-added services and we have 950+ robotics experts worldwide working with 300+ clients today.

Increase ROI from your data through advanced analytics

Despite collecting vast amounts of data from operations, suppliers and customers, utilities often struggle to harness the power of their supply chain data to generate actionable insights and inform decision making. Poor systems integration, lack of data visualization and limited consideration for user access are often cited by utility executives as barriers.

Using advanced supply chain analytics tools, data can be taken in real time from internal and external sources to provide readily accessible and enhanced data visibility. Advanced analytics can facilitate better data-driven decision making in areas including supplier collaboration, buying decisions, work scheduling and inventory planning through to route and network optimization. For example, a global technology company applied analytics to get better visibility of its end-to-end supply chain cost. With its analytics engine, field workers are now able to make data-driven planning and scheduling decisions, reducing material consumption and lowering inventories.

Analytics can also be applied to generate insights or adapt technologies to influence human behaviours. This can be used to address improvement in areas ranging from buying practices to driver behavior. One global airline, for example, applied analytics to analyze their pilots’ habits in a bid to lower fuel
consumption. At the end of the pilot, the airline had saved $5.4 million in fuel costs and raised job satisfaction rates by 6.5 percent.

DID YOU KNOW?

Accenture Insight Platform is a cloud-based analytics solution designed to simplify analytics and deliver real-time, industry and supply chain specific actionable insights. Using a consumption-based commercial model, the platform’s flexibility can facilitate data-driven decision making.

Master the supply ecosystem through the digital control tower

Utilities’ ecosystem is made of third parties such as maintenance service providers, meter asset providers and logistics providers that work together for supply chain delivery. Leveraging innovation and enhancing value from these interdependent suppliers and strategic partners could facilitate new levels of collaboration through digital platforms.

A digital control tower connects the suppliers’ ecosystem by acting as an operational center to sense, orchestrate and respond to changes across the supply network. It can address flexibility in the supply chain, increase visibility in planning and execution, provide clarity on location of jobs, materials and field force. It also facilitates real-time adjustments that can enhance the power of the supply network. Moreover, it can help all parties in the ecosystem to alert each other of changes and respond in a coordinated way.

For one aerospace company, implementing a digital control tower, we helped them achieve inbound, on-time delivery of more than 80 percent and inventory reduction of over $200 million. In another example, it enabled an oil and gas company eliminate non-productive time due to logistics outages, while logistics cost fell by 25 percent.

Summary

Having focused much of the effort on digitizing the customer experience, most utilities have made little inroads on applying similar efforts to their supply chain. This is a significant missed opportunity for the industry. Digital is a core part of every business today and the utility digital supply chain has a key role to play in generating new value and improving customer experience and satisfaction.

Three practical steps to get started

1. Review the three winning themes against your current efforts. Where do you stand?
2. Prioritize your current supply chain challenges. How can applying the three winning themes have the greatest impact in addressing your challenges?
3. Define your digital supply chain vision and strategy. How will you define your plan to achieve it?

Figure 1. Digital control tower framework.
Reference

1. “Robot called Amelia to do the job of human council workers for the first time,” The Telegraph Online, 16 June 2016, Factiva, Inc.


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