The State of the Supply Chain for SAP Customers
Executive Summary

The supply chain drives the revenue stream for an organization and plays an increasingly important role in delivering a positive customer experience. Yet most organizations don’t feel confident in how this function is performing. A separate study that ASUG conducted last year found that only 1 company in 4 believes that it has a very efficient or somewhat efficient supply chain.

The Responsibility Gap Between IT and Supply Chain

Supply chain professionals believe that technology purchasing should be a shared effort across teams, but IT and Line-of-Business (LoB) users should have equal responsibilities for implementing these solutions. SAP customers divide the supply chain technology purchasing responsibility somewhat equally among C-level executives, the LoB team, and the IT team. It’s worth noting the perception that LoB teams should take the biggest role in implementation for this function—a reversal compared with what we’ve seen within the enterprise asset management (EAM) function and other departments.

This could correlate with the fact that 60% of LoB supply chain workers have intermediate or lower skills in supply chain technology. This must improve if supply chain workers will take on increased responsibility in the future. It’s also possible to compensate for a lack of skills by automating more processes, which respondents identified as a trend.

Figure 1: Responsibility for Purchasing and Implementing Supply Chain Technology

<table>
<thead>
<tr>
<th>Primary responsibility for supply chain technology purchases</th>
<th>Primary responsibility for supply chain technology implementations</th>
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</thead>
<tbody>
<tr>
<td>21% IT team</td>
<td>31% C-levels</td>
</tr>
<tr>
<td>29% LoB team</td>
<td>38% IT team</td>
</tr>
<tr>
<td>52% LoB team</td>
<td>9% C-levels</td>
</tr>
</tbody>
</table>

Source: ASUG research, May 2019

Trends

- Improving end-to-end supply chain visibility
- Streamlining processes through automation
- Innovating with emerging technologies

Pressures

- Data management and quality
- Change management for technology adoption
- Lack of skills and appropriate training
Key Technology Topics

Improving End-to-End Supply Chain Visibility

Supply chain transparency is one of the critical factors that SAP customers are striving for. This is something that organizations can work to solve through their approach to managing people. To help the supply chain function execute efficiently and drive future innovation, it’s critical to break down silos through streamlined communication and collaboration. One respondent emphasized the value of removing these team barriers completely. “We realigned our KPIs. The asset managers and supply chain employees are now in one group because we share similar purposes,” they explained.

When it comes to technology, mobility surfaced as a key consideration that could help organizations address their supply chain visibility issues. Almost half of supply chain customers say they have access to real-time inventory across all locations, yet only 25% allow employees to view the inventory via a mobile device. Mobile devices are used more frequently in the field for tasks such as scanning inventory, capturing proof of delivery, or updating purchase orders in real time. Integrating mobile devices throughout more of the supply chain could help add visibility and velocity if these devices prepare employees to be more responsive.

“We should have autonomous rules and guidelines that operate in our systems and a flag that goes up when we are outside of those lines.”

– SAP supply chain customer

Streamlining Processes Through Automation

Improving supply chain processes has been the top goal for many SAP customers in 2019. In particular, inventory/warehouse management and logistics are specific areas that could benefit from automation. Reasons for automating include maintaining data integrity, managing risk, and improving efficiency.

More than half of supply chain customers (55%) are currently using or plan to use automation/robotics within their supply chain processes. “We are starting to implement RPA where there is no value to add for a person doing some of these tasks versus a computer,” one respondent said. This could explain why participants flagged data management and quality as a concern. Reducing or removing human intervention from key processes will only work when organizations are running those processes with clean data. Once automated processes are running, these processes can dramatically reduce human error in the future.
Innovating with Emerging Technologies

Almost half (41%) of respondents believe emerging technologies like artificial intelligence (AI), the Internet of Things (IoT), or edge computing will have a significant impact on their business in the next 12 months. This level of interest points to a clear desire to start building solutions now for the future.

Innovation is an area where organizations would benefit from combining their learnings between their supply chain and enterprise asset management (EAM) teams. AI and IoT are a big part of the Industry 4.0 push, which is about improved automation, machine-to-machine and human-to-machine communication, continued technological improvements, and digitization in manufacturing. Both EAM and the supply chain function are key players in Industry 4.0. "IoT and blockchain are trends I am keeping watch on and trying to make changes to implement in the near future," one respondent told us.

Additional emerging technology applications and use cases are starting to emerge within the supply chain. Other options such as augmented reality or using SNEW (social media, news, event, weather) data are areas where companies can innovate to stay ahead of the curve on logistics and distribution, along with other activities. The top use case for this technology might be to address a major pressure for this function—managing master data and maintaining its quality.

“We’re working on AI, RPA, real-time data acquisition (RDA), and machine learning. We’re looking at things to help us fix master data issues.”

– SAP supply chain customer

55% of supply chain customers are currently using or plan to use automation/robotics
Major Pressures

Data Management and Quality

Data cleansing is a top concern, as inconsistent or nonexistent cleansing policies lead to poor data quality. The more siloed supply chain teams and systems are—due to a lack of collaboration between IT and LoB—the greater the risk for inaccurate data and multiple sources of truth. “You can’t find out in two months’ time that your master data has been wrong for the last four months,” one respondent told us. Poor-quality data introduces a high level of risk and holds back innovation. “You’ve got to build that foundation with your master data, then determine what process that artificial intelligence can go on top of,” another respondent described.

“Data policies and procedures are mismanaged and subverted to the point where information is lost or inaccurate and is responsible for the loss of hundreds of thousands of dollars.”

– SAP supply chain customer

Change Management for Technology Adoption

Like all other functions, the supply chain struggles with change management. Getting users to adopt new products can be a significant hurdle for new initiatives, even those that improve existing processes. Part of the burden is on IT professionals to better understand the supply chain processes they are supporting. Of our respondents, 59% rate IT’s supply chain understanding as intermediate or lower. “We had all the technology in place and couldn’t get the business to use it. We had to change a lot of things so the business would actually accept it,” a respondent explained.

Lack of Skills and Appropriate Training

Training can help teams understand business processes from end to end, beyond their specific role. It also can help ease change management. Yet organizations are not offering effective training, as 60% rate supply chain technology expertise among LoB workers to be intermediate or lower. What adds to this challenge is that 40% of companies outsource or use external solutions to help with specific supply chain workflows or projects. “Users don’t have equal training to use software to its full capacity,” suggested one respondent.
The Secrets Behind Satisfaction

Critical Factors for Satisfaction
We asked about the factors that are important to SAP customers who work in supply chain functions and evaluated how strongly they correlate to satisfaction with SAP information that’s available. Respondents identified only one critical factor: supply chain transparency.

Companies that emphasize supply chain transparency are significantly more likely to self-identify as supply chain industry leaders, underscoring the need to get this right. The more visible and open you can make these systems, the easier it is for different teams across the organization to optimize their related processes. Respondents identified supply chain visibility as an industry trend, so it’s clearly on the radar for supply chain professionals.

Hidden Motivators Driving Satisfaction
Respondents didn’t initially indicate these factors as critical, but they associated them with high satisfaction. They identified these as hidden motivators: improving multichannel capabilities, predictive analytics/maintenance, and field operations/use of mobile technology in the field.

The supply chain is playing an increasingly important role in the customer experience, and many workers within this function are having to adapt their skill sets to serve customers directly. That’s where arming employees with mobile technologies they’re well-trained to use can make a big difference in delivering visibility throughout the supply chain.

Bare-Minimum Expectations
SAP customers in the supply chain space also have minimum expectations for their investments. These are change management to get users comfortable with new technology, master data management/governance/data integrity, and automation of manual processes.

It is worth noting that participants also identified two of these expectations as pressures and one as a trend. These issues are unlikely to move the needle on satisfaction, yet they are the foundation for all other high-satisfaction activities mentioned here. For example, supply chain transparency and predictive analytics depend on well-managed data.

<table>
<thead>
<tr>
<th>Critical Factor</th>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
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<td>Supply chain transparency</td>
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Products of Interest

The majority of SAP supply chain customers who participated in our study are most interested in optimizing current products (54%). Only 30% are focused on exploring new products—a smaller percentage than we’ve seen in other functions such as business intelligence (BI) or enterprise asset management (EAM).

Possibilities for Supply Chain Innovation

Despite that, there is strong interest in SAP S/4HANA. SAP ECC is still the leading core ERP and current use of SAP S/4HANA is only at 14%, which also is lower than we’ve seen in other functions or industries. There is an opportunity for supply chain professionals to learn how switching to SAP S/4HANA could act as a springboard for the innovations they desire.

Of these supply chain professionals, 48% believe that data analytics and dashboards will have a significant impact on their business within the next 12 months. It’s possible that those who desire greater supply chain visibility are hoping to achieve this through the use of analytics. We see relatively strong use of SAP BusinessObjects in this group, indicating that these professionals are already using analytics and reporting tools.

SAP customers who have adopted SAP S/4HANA report faster access to analytics as one of the top benefits they’re receiving from making the switch from their previous ERP systems.

Although supply chain professionals are its core customers, current use of SAP Ariba is surprisingly low (22%). Our results don’t explain why this is the case, though it could be related to the hurdle of encouraging their organizations to adopt new technology.

Figure 2: Key Products Used by SAP Supply Chain Management Customers

<table>
<thead>
<tr>
<th>Product</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>SAP ECC</td>
<td>45%</td>
</tr>
<tr>
<td>SAP Business Warehouse (BW)</td>
<td>36%</td>
</tr>
<tr>
<td>SAP BusinessObjects</td>
<td>36%</td>
</tr>
<tr>
<td>SAP Production Planning (PP)</td>
<td>33%</td>
</tr>
<tr>
<td>SAP Ariba</td>
<td>22%</td>
</tr>
</tbody>
</table>

Source: ASUG research, May 2019
Getting the Most from Supply Chain Solutions from SAP

Based on our research, SAP customers who are responsible for managing the supply chain want to improve end-to-end supply chain visibility, streamline their processes through automation, and innovate with help from emerging technologies. These customers believe that one entity should not own supply chain technology purchasing, and both IT and LoB users should share the responsibility for implementing this technology. But they have some challenges to get through, including a shortage of skills, before this can happen effectively.

At the 2020 SAP-Centric EAM & Supply Chain conference, you'll be able to attend customer-led sessions with use cases that are applicable to these industries and more. As 71% of the SAP supply chain customers who participated in our research use a procure-to-pay (P2P) operating model, SAP-Centric EAM & Supply Chain will offer sessions featuring practical applications for the P2P method. Examples of some of the topics we covered at our 2019 event include improving productivity with mobile warehouse management, transforming sourcing through automation, and integrating inventory and work management. Previous customer company speakers included Caesars Entertainment, Ford Motor Company, Xcel Energy, Pfizer, and Monster Beverage Corporation.

We'll address these industry trends through real-life customer case studies, interactive discussion sessions, demos, and SAP expert presentations. At the SAP-Centric EAM & Supply Chain conference, you'll have the chance to attend relevant sessions and connect with other professionals looking to automate and innovate their processes to keep their organizations running efficiently.

Figure 3: Top Three Industries Informing This Trend Report

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Utilities</td>
<td>17%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>17%</td>
</tr>
<tr>
<td>Automotive</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: ASUG research, May 2019

About ASUG Research
ASUG research captures a unique view of what SAP customers are doing, thinking, and planning for the future. We apply traditional quantitative and qualitative methodologies and research best practices to deliver insights on relevant technology topics. The information in this report came from both a qualitative study and a quantitative survey of SAP customers in the supply chain management function conducted in March 2019 and May 2019.