

Empowering direct procurement in Aerospace and Defense



The Aerospace and Defense (A&D) industry value chain involves a complex and diversified ecosystem of players including Original Equipment Manufacturers (OEMs), Maintenance, Repair and Overhaul (MRO) providers, tier one suppliers, minority-owned suppliers, N-tiers and clients including airlines and defense forces. To effectively engage with suppliers and clients across different geographies, A&D companies must have a robust supply chain and procurement strategy to mitigate risks, reduce costs and improve

efficiency to meet their financial goals. They also need N-tier supplier visibility to quickly respond to any disruptions or changes in demand.

As OEMs ramp up production to meet the demand post-pandemic, challenges related to increasing raw material costs and parts shortages are emerging. The procurement process remains the key to managing the direct spend of A&D companies enabling them to reduce the cost of goods sold and deliver a quality product.

With the ongoing geo-political events across the globe, there will be increased spending by the US government on defense and A&D companies will need to automate, transform and digitize their procurement process to manage this new level of spending.

According to a research report by SAP, 50% of executives say that procurement is helping them mitigate supply chain challenges by improving supply chain transparency.¹

Direct procurement in the A&D industry

Direct spend is a major component in the bottom line for A&D companies who have been looking for a unified solution that covers all aspects including direct, indirect and services spending.

An indicative spend volumes study by SAP determined that for A&D companies, direct spend accounts for close to 26% whereas indirect spend accounts for 21%.²

The major difference in approach to direct vs indirect procurement is with respect to supplier collaboration as priority in direct procurement is managing supplier relationships as opposed to indirect procurement where the focus area is spend management. The availability of raw materials and component lead times directly affect production plans for OEMs, hence with changing supply chain dynamics in the A&D industry post-pandemic, companies have an opportunity to transform their direct procurement processes and realize their full potential.

Stakeholders from different functions are involved in the procurement process flow covering several areas from spend analysis, sourcing, contract management,

supplier performance, buying and supplier collaboration to invoicing and payment. Typically, for A&D companies, the procurement process

starts with sourcing and product design, continuing through production, sustainment and end-of-life.



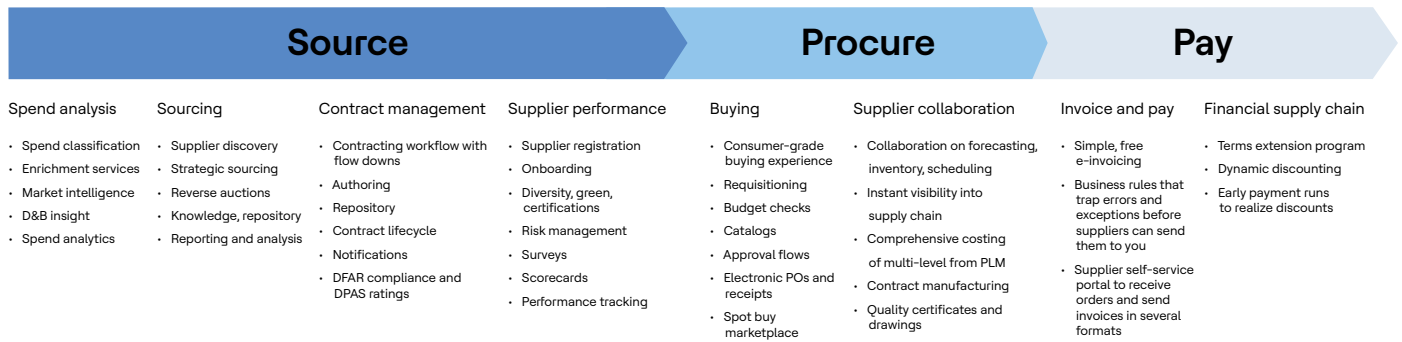


Figure 1: Procurement process flow

The procurement process has evolved with digital transformation, real-time notifications and visibility over the supply chain. A single unified, integrated collaboration and communication platform across the direct procurement landscape plays an important role in reducing inefficiencies and addressing some of our clients' commonly encountered business challenges. Some of these challenges are mentioned below.

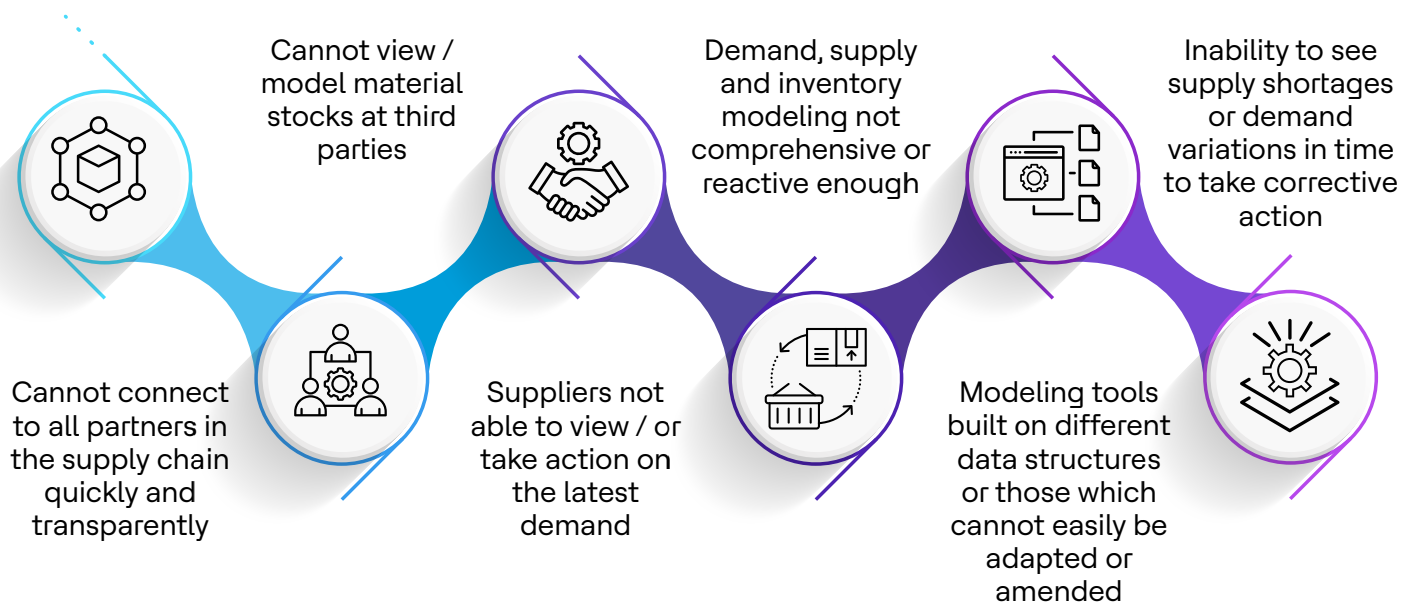


Figure 2: Challenges in direct procurement

Aerospace and Defense companies have been leveraging the benefits of SAP Ariba for indirect procurement for a long time, however, they were not utilizing the Ariba suite for direct procurement due to security concerns linked to the highly regulated environment.

Supply chain management solutions like Ariba enable collaboration through integration between the planning system and supplier network. This empowers the supplier ecosystem with complete visibility of the forecast and by opting for a direct procurement pay option, the overall procurement process can speed up.

By consolidating supplier data in a centralized platform and analyzing supplier behavior, the procurement team can compare prices, quality, payment terms and many other criteria to select an efficient supplier seamlessly for direct procurement.

Benefits of a direct procurement platform

With a dedicated direct procurement solution for managing the direct spend, A&D companies can effectively manage their complex supply chain and lengthy order lifecycles

leading to several benefits. Ariba modules form a key component of the digital procurement platform along with the SAP Business Network, which is its

largest B2B network to provide a unified, integrated collaboration and communication channel between companies, their suppliers and partners.

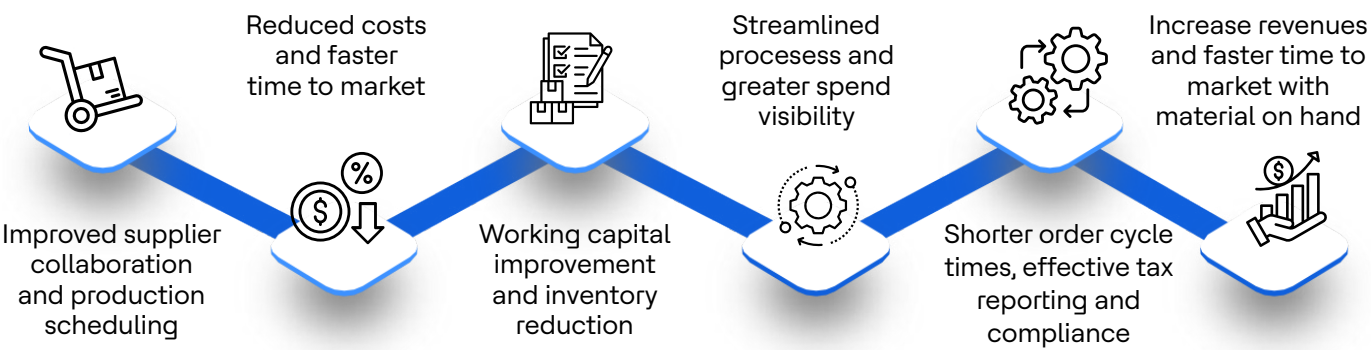


Figure 3: Benefits of direct procurement platform



With FedRAMP (Federal Risk and Authorization Management Program) authorization for SAP Ariba solutions, SAP's industry-leading Ariba supply chain solutions can now be deployed by Aerospace and Defense clients to scale the benefits that digital procurement delivers across agencies. FedRAMP authorizations can help companies meet the legislation requirements such as ITAR, CMMC, DFARS, etc. Moreover, integration solutions from SAP Ariba cloud integration gateway enable quick connection of back-end systems with trading partners. This benefit could not be utilized fully in the A&D sector due to the constraint of hosting secure data in a regulated environment on a public/hybrid cloud. However, this changes with the FedRAMP authorization and Ariba Direct's ability to seamlessly integrate with a GovCloud platform.



In addition to traditional Ariba modules like strategic sourcing (which has now been enhanced to include material master integration support direct/product sourcing),

contracts management, supplier lifecycle performance plus risk and commerce automation (providing purchase order to invoice automation on the

network), Ariba has added a new suite of tools specifically for direct called supply chain collaboration or SCC.



The following SAP Ariba graphic highlights the capabilities of SCC.

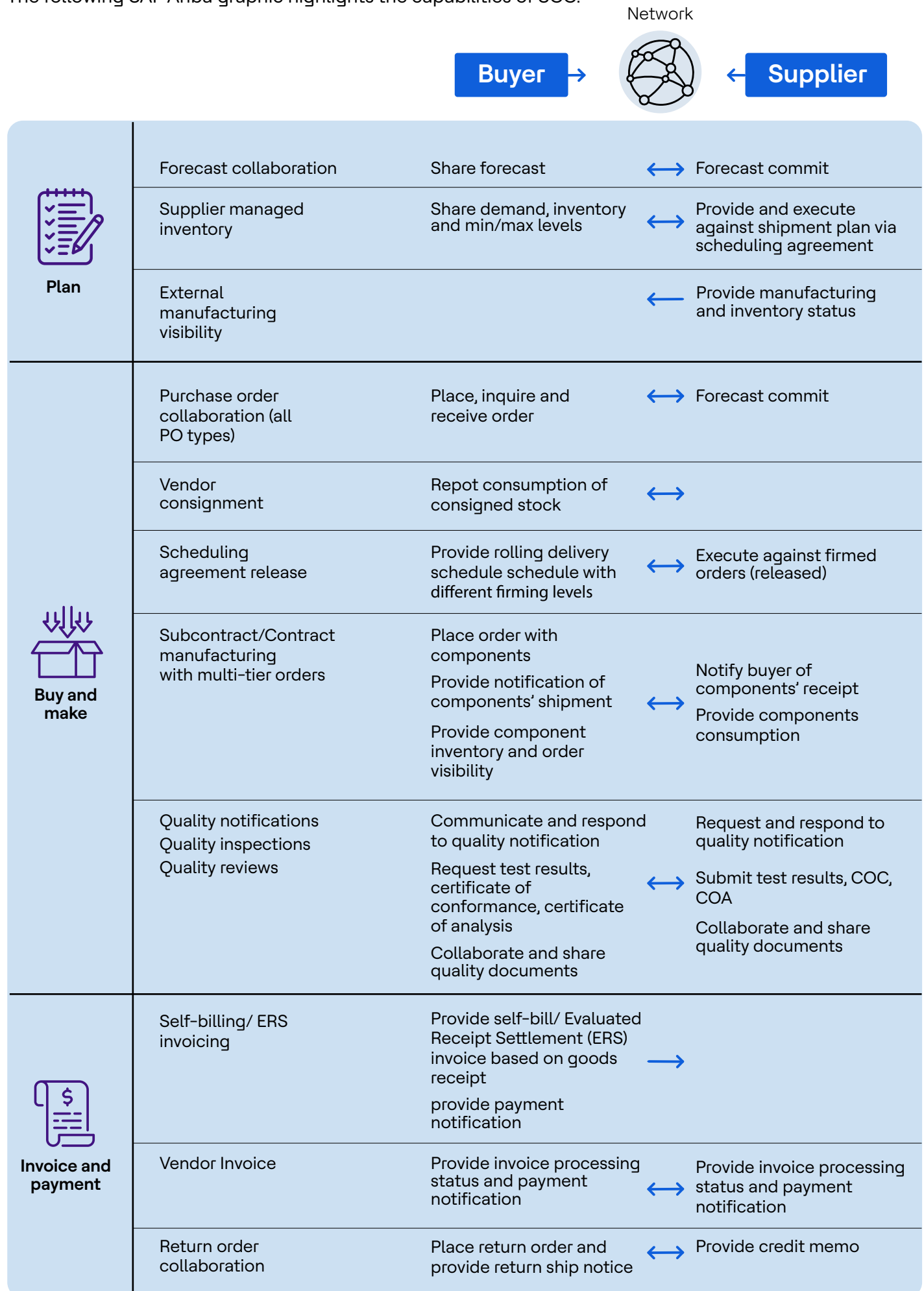


Figure 4: SAP Ariba SCC processes: Overview³

HCLTech partner ecosystem

With over 300,000 subcontractors and contractors in the defense industrial base community, CMMC compliance (Cybersecurity Maturity Model Certification) risk is a significant blind spot for most prime contractors across their supply chain. Assessing CMMC risk is complex, time-consuming and requires scarce and highly specialized security resources, costing as much as \$1.15 million per 2,000 suppliers assessed.

Getting a holistic view of a supplier requires multiple platforms and various data sources and is often an incomplete picture. Gaps in supplier compliance can lead to false claims act penalties, breaches and hacks. Existing methods of questionnaires are difficult to assess, based on self-attestation and are a lengthy end-to-end process. The joint HCLTech and Vendor Verifier solution for Ariba can help address some of the above challenges by providing KPIs

that detail compliance and drill-down level data to increase vendor supply chain security. The data produced via the SAP analytics cloud aggregates the status of suppliers to accelerate CMMC compliance across your supply chain. Current supplier risk questionnaires can be assessed using the tool to verify supplier maturity and provide detailed analysis.

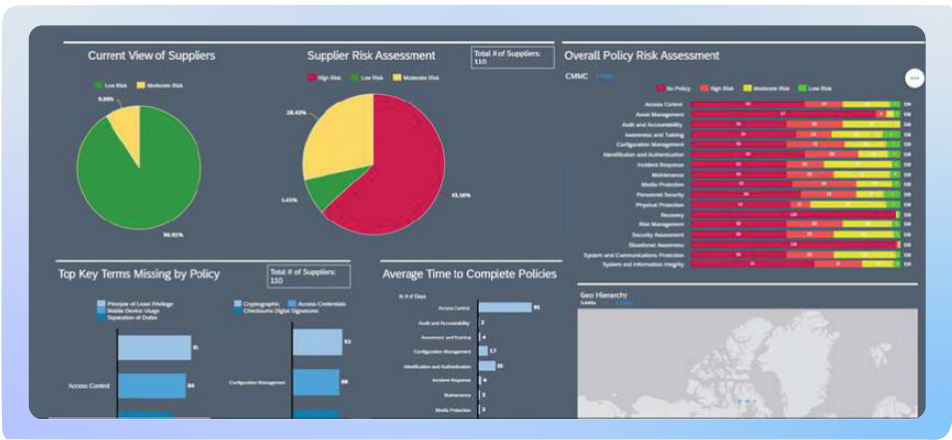


Figure 5: Snapshot from Vendor Verifier



Our partnership with HCLTech marks a significant milestone for our Vendor Verifier solution. The combination provides a more efficient and user-friendly approach allowing Ariba clients to obtain analytics empowering them to make better decisions based on their vendors' cybersecurity status.”

Carr Davis,
Founder, ISMS Applications



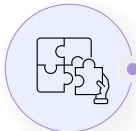
Document assessment
Suppliers assess policies using patented AI technology



Monitor and aggregate
View supplies cybersecurity risk and receive real-time data analytics



Ariba risk
Integrated holistic view and manage supplier risk across multiple categories with real time integration from external sources



HCLTech solution
Automatically scan, select and invite suppliers to achieve vendor verifier assessment based on user defined criteria



End to end process
From invitation, to assessment score capture in Ariba, to cascading to this data to operational modules such as sourcing, contracting and procurement and automating actions

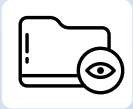
Figure 6: Highlights of Joint HCLTech and Vendor Verifier solution for Ariba

A&D companies also face significant challenges related to contract reporting. Ariba contracts is part of an integrated suite allowing you to move seamlessly from sourcing to contracting procurement and

contract compliance. However Ariba's contract reporting is limited to contract header fields and standard clauses added through the Ariba authoring process, making deep data analysis across large numbers of

contracts virtually impossible, especially about legacy contracts that have been imported into Ariba.

Some of the typical challenges include:



Lack of visibility into data that may be "locked" inside of Ariba contract PDFs and other non-reportable contract attachments



Manual data entry is time-consuming, costly and error-prone – increasing deployment times, compliance and financial risk



Complex processes and siloed systems can lead to low process adoption, making change management risky and expensive



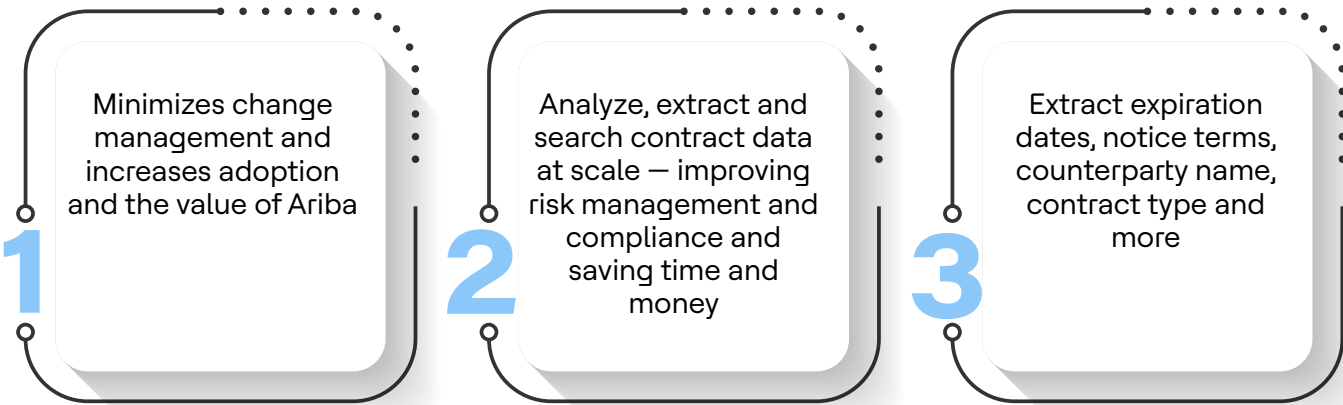
Hard to find, missing or inaccurate procurement data leads to missed renewals and notices, wasted spend, sub-optimal pricing and unnecessary services



Regulatory change, data privacy challenges and amended obligations require agility to assess, review and remediate contract terms

Figure 7: Typical contract reporting challenges

Ariba contracts capabilities can be extended with joint HCLTech and Evisort's contract search and analytics solution which allows to:



<p>Ariba contract management</p> <p>Ariba provides best in class contract management tools for process, authoring and collaboration</p>	<p>Evisort's AI-powered contract analytics</p> <p>Instantly turns your contracts into searchable data without manual data entry</p>
<p>Automated integration</p> <p>Utilizing RPA and API based processes, contract metadata and attachments are continually fed and synchronized to Evisort</p>	<p>HCLTech and Evisort end-to-end process</p> <p>Through bidirectional API processes, Evisort can return enriched data to automatically populate mapped Ariba fields</p>

Figure 8: Highlights of joint HCLTech and Evisort solution for Ariba contracts

How can HCLTech help: Ariba direct procurement services

HCLTech's SAP Ariba team is one of the newest and fastest growing within our larger SAP practice. We are dedicated to the delivery of leading supply chain and procurement solutions to our clients worldwide. Our skilled and certified professionals have the broadest and deepest Ariba experience, led by a team with an average of 15 years of experience in deploying global Ariba solutions across multiple industries. Some of these leaders are former SAP Ariba employees who have

participated in the solution suite's evolution. Working with an HCLTech SAP team connects you to an entire community of experienced subject matter experts within our company and across the SAP ecosystem. As a world-class Ariba implementation partner, HCLTech has unique connections with the SAP product development and support teams in the U.S. and Europe, as well as the installed base of Ariba users. We have a strong track record in delivering a wide variety of projects and

supporting some of the world's leading brands in their source-to-pay transformation journeys.

Our direct procurement services can help enterprises extend intelligent enterprise transformation to suppliers and other supply-side trading partners, such as contract manufacturers, co-packers and logistics providers.

The solutions enable companies to:



Manage and collaborate on critical production, merchandise and MRO spend, starting with integration to product design and R&D processes, through collaborative supply chain execution and delivery, with multiple suppliers



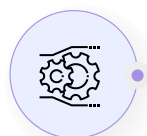
Source direct materials through SAP Business Network-based project and RFx tools with integration to your SAP S/4HANA's material master



Integrate seamlessly with PLM, SAP S/4HANA and SAP integrated business planning solutions



Utilize SAP Business Technology Platform (BTP) for sourcing and planning



Direct material sourcing

Template driven process and online events



Contracts management

Automated compliance utilizing Ariba contracts integration to your ERP



Supplier enablement

Strategic onboarding of key suppliers



Supply chain collaboration

Forecast, quality, VMI, contract manufacturing

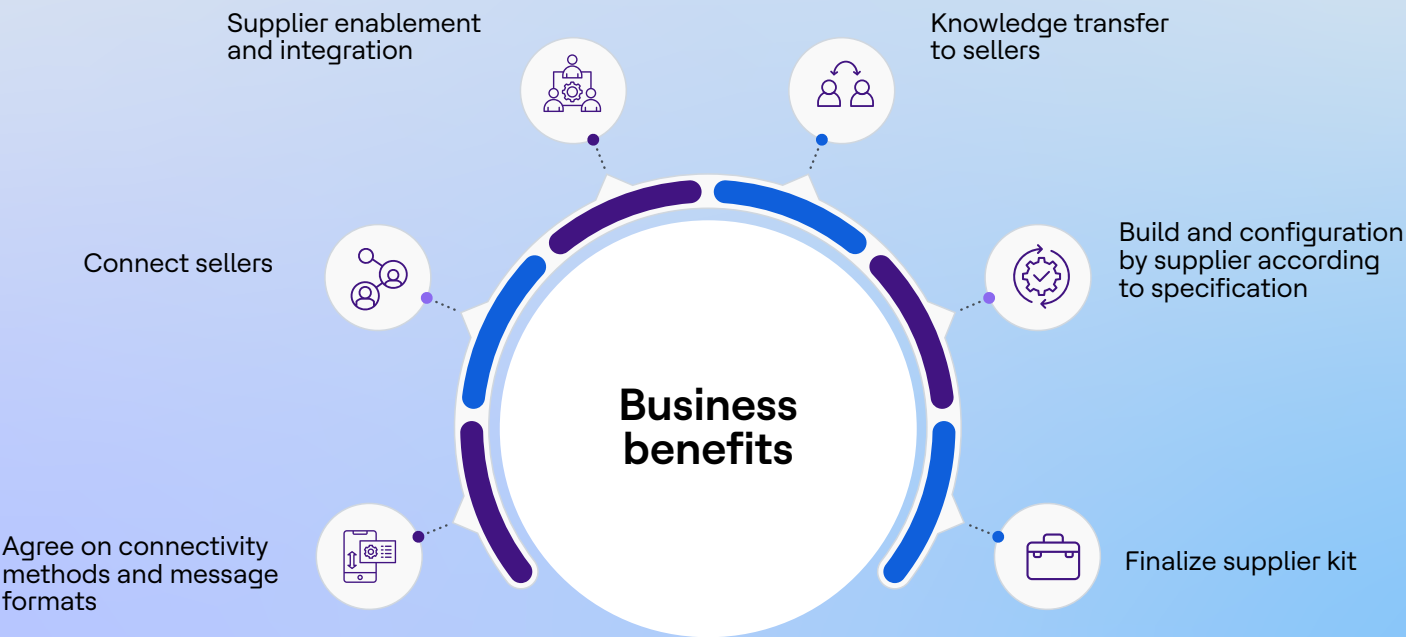


Spend visibility and analysis

Enriched spend data for improved opportunity analysis

Figure 9: HCLTech Ariba direct procurement services

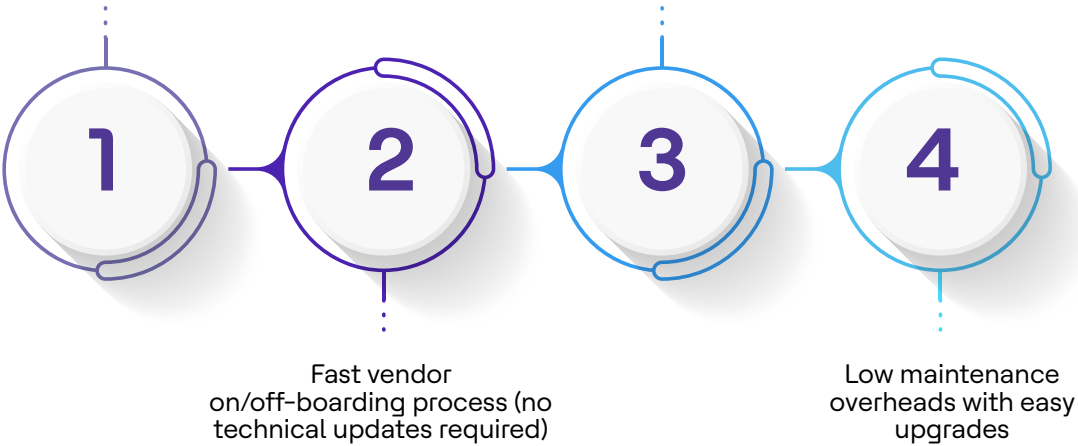
SAP Ariba solutions directly allows seamless integration with ERP, PLM and SAP Integrated Business Planning systems to unlock several benefits. Some of the advantages of including Ariba direct solutions into your digital procurement platform include:



Technology benefits

Eliminate effort and overhead associated with on-premise middleware and point-to-point integration solutions with multiple vendors

Eliminate challenges and complex processes arising from elaborate workarounds and excessive customizations



SAP's Ariba solutions for direct spend assessment matrix predicts that in an Aerospace and Defense company with a fully functional Ariba direct solution in place, for every \$100Mn of revenue, there would-be savings⁴ of:

\$550K+

through an improvement in time to market

\$45K+

due to reduced inventory and increased cash flow

\$110K+

due to Improving strategic sourcing on direct spend

Typical savings that can be achieved through adopting a collaborative direct material solution are shown below.

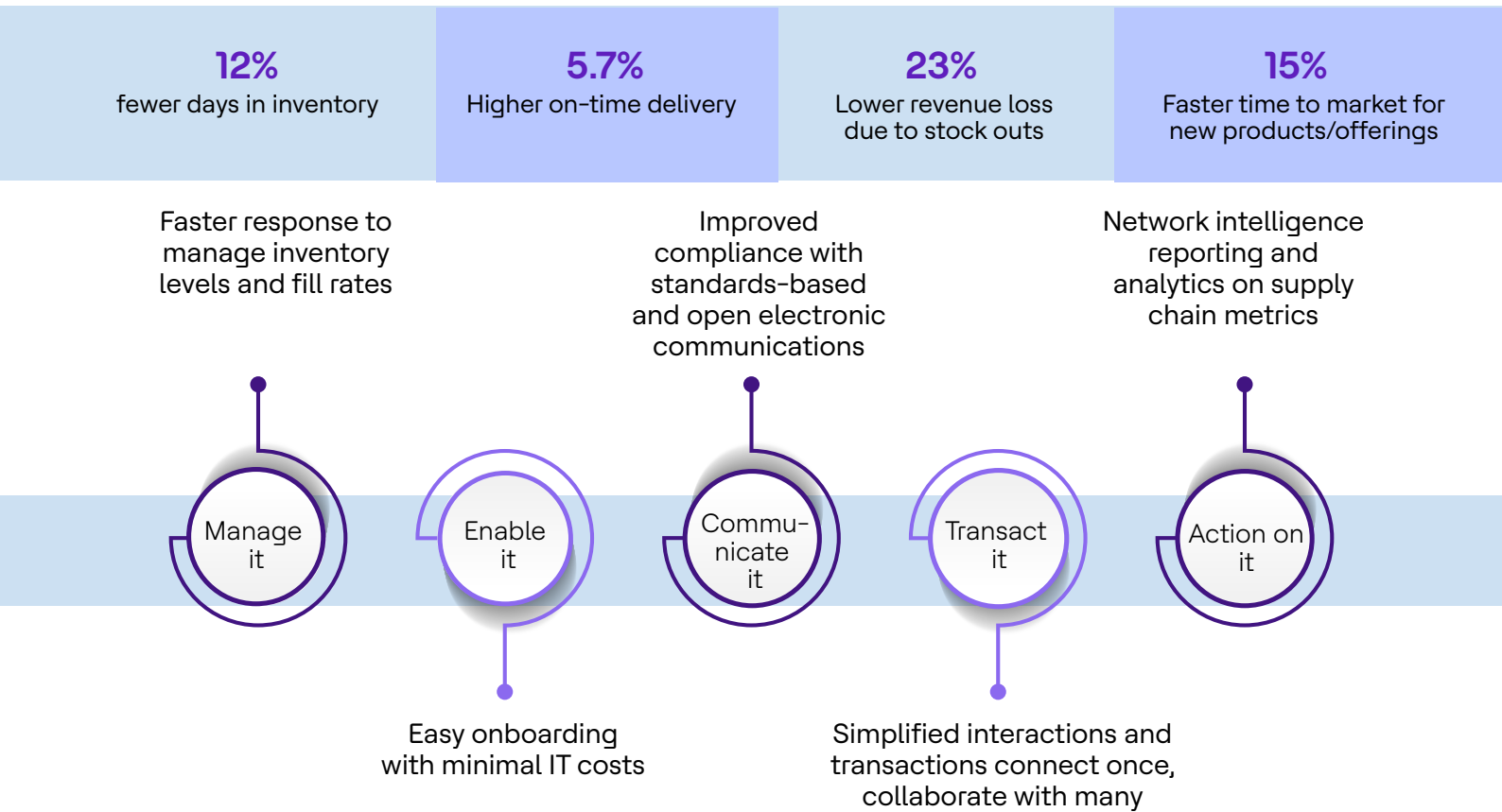


Figure 10: Potential savings through adopting a collaborative direct material solution

HCLTech has been at the forefront of Ariba since it became part of the SAP solution set and we have tremendous experience in both small-scale and large-scale deployments globally. The list below shows some representative cases and more details are available upon request.

Organization	Engagement	What did HCLTech do?
Pharma manufacturing company (\$40B+ in revenue)	Ariba SCC	Delivery of Ariba collaborative supply chain for SMI with key suppliers
Wind turbine manufacturer (\$15B+ in revenue)	Ariba Procurement Content (APC), Procure to Order (P2O), direct transactions on SAP Business Network, service order SAP business network integration	Solution architecture, functional consulting, integration consultants and support, IT roadmap
Oil and Gas company (\$2B+ in revenue)	Ariba Procure to Pay (P2P) sourcing and contracting direct transactions on SAP Business Network	Complex integration work into SAP ECC, including design, build, test and go-live
Consumer goods supplier (\$14B+ in revenue)	Ariba APC, P2O, direct transactions on SAP Business Network, Ariba sourcing, Supplier Lifecycle and Performance (SLP) and contract management	Solution architecture, functional consulting, integration consultants and support.

Conclusion

The Aerospace and Defense Industry is seeing a paradigm shift in manufacturing through digital innovation utilizing Industry 4.0 technologies. With the shifting of the balance of power between supply and demand, direct buyers must prepare to take advantage of these shifts. Transforming direct procurement operations will enable A&D companies to unlock the full value of their supply chain by not only cost reduction and achieving operational efficiency, but also by improved supplier collaboration. HCLTech Ariba's direct procurement services along with Evisort contract analytics capabilities and Vendor Verifier solution will empower A&D companies to extend their competitive advantage and rapidly realize their return on implementation investments.



References

1. SAP study finds procurement is vital to manage supply chain disruptions, SAP Ariba press release, Aug 2021
2. How Ariba solution can help with your direct procurement needs, SAP community blogs, Dec 2018
3. Introduction to Ariba Supply Chain Collaboration (SCC), SAP community blogs, Oct 2021
4. SAP Ariba Direct spend calculator

Authors



Anshul Sharma is an Aerospace and Defense Industry Principal at HCLTech responsible for sales enablement and thought leadership initiatives. He has over 13 years of experience in A&D sector primarily in business research, presales and client account planning supporting large scale digital transformation opportunities and go to market initiatives for A&D companies.



Chris Nguyen is a trusted advisor that brings over 19+ years of experience working with industry-leading procurement technologies across HCLTech's multiple client industries. Chris is based in Dallas, Texas and currently leads our Ariba Practice in North America.

About HCLTech's SAP Practice

To get the best return on your digital investments, you need a partner that doesn't just do SAP right, but does it better. Our SAP practice works seamlessly with HCLTech's digital consulting, engineering services, IoT WoRKS™ and cloud infrastructure practices to design, implement and support tomorrow's integrated, intelligent solutions today. An SAP Global Strategic Services Partner, our 12,500+ consultant base leverages insights, advanced accelerators and industry-acclaimed frameworks to deliver award-winning services from local offices across Europe, Africa, Asia and the Americas.

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