

Three Sixty

Rotating to a 360° value creation





Contents

5 Editorial

6 Needle in a haystack

Finding the digital thread in the process industry

10 Don't run in circles, close the loop and grow!

Conquer increased complexity with holistic Closed Loop Spend Management

14 Sustainability and technology go hand in hand

How digital tools can enable trusted ecosystems and improve sustainability

18 Focus on the customer

Five steps to make your supply chain customer-centric

22 Ship-from-store fulfillment done right

How omni-channel retailers can increase inventory efficiency by carefully aligning their fulfillment infrastructure

26 Accenture SOLID: Rapid process optimization at scale

From pointless pilots to perpetual performance across all end-to-end processes

30 The cash flow connection

How supply chain and IT can drive a high-value transformation

36 Crossing borders

Making customs more proactive



Editorial

Welcome to the 10th edition of Operations.Insights – our magazine about the current and future trends and issues we face in operations management.

As I write this editorial in June, I'm looking forward to the return of the Olympics. The athletes, regardless of nationality or sport, are putting the pandemic behind them and focusing on the future – staying healthy, competing, overcoming challenges and winning gold. Soon, we can admire Athletes running, jumping, spinning around and performing "360-ies" again. As operations managers, let's embrace the ideals of Olympians and transfer them to our business activities. How? Of course by moving forward with the same positive mindset and a determination to succeed but also by performing 360° moves – not physically, but with a focus on value.

For this reason our tenth issue of the Operations.Insights focuses on and illustrates 360° value creation. The COVID-19 pandemic has rapidly evolved the global conversation on value. The universal imperative is clear: Organizations are moving past narrowly defined financial views of value and focusing on people, experiences and our planet. Today, we take a much broader view on how we measure value. Smart leaders will seize this opportunity to rotate to a 360° Value mindset and prepare for the short-term while also developing new capabilities that will seamlessly enable long-term changes to how they operate.

A value mindset will evenly affect supply chain and operations functions. The traditional values in supply chain – right product, right place, right time and right cost – are now being augmented by additional sources of value: customer centricity and experience, talent, sustainability, inclusion and diversity. To address these issues, you'll find articles that explore and present some reasonable examples for creating value within supply chain and operations by incorporating this holistic approach:

We begin with a perspective on how digital threats can enable the process industry to enhance their customer engagement, manage regulatory complexity and reach sustainability goals by utilizing a single source of truth for product data. This enables companies to accelerate time to market and secure compliance in a fast-changing environment.



After an excursion into the world of procurement and a perspective on how technology and sustainability can enable trusted ecosystems, we demonstrate how to transform supply chains from a solid foundation of operational excellence toward a customer-centric value chain.

Of course, we don't miss the automation perspective: Our article on rapid process optimization at scale is explaining how companies can move from isolated often effectless pilots to perpetual performance across all end-to-end processes building on experience and talent.

S/4HANA is on everybody's horizon and with "The cash flow connection" we shed a light on how business and IT can drive a high-value supply chain transformation and quickly enable a positive cash flow.

Last but not least, we address regulatory compliance and efficiency and show how companies engaged in international trade can make their supply chains more efficient by rethinking their customs operating model and making it more proactive.

I wish you an insightful read. As always, we look forward to getting your feedback and discussing the challenges you face within the domains of supply chain, operations and sustainability.

Best regards,



Michael A. Meyer

Needle in a haystack

Finding the digital thread in the process industry



The process industry has been hit particularly hard by a proliferation of regulations, demands by customers for more personalization and changes from digital technologies. These trends create requirements that make the complexity of product data rise exponentially. In our view, product data is an unsung hero: It's time to bring it to the center of attention.

Virtually all companies – but especially process industry companies – face stricter regulatory requirements in the years ahead, and not only in the developed markets.¹ These requirements cause companies to come up with auxiliary and bridging solutions within their system architectures to deal with compliance concerns. This inflates the sheer number of data points (e.g. bills materials) per product available in the system, increases manual efforts and reduces confidence that the information found is accurate and up to date. We believe a holistic digital thread throughout your company can help you to deal with product data complexity in an end-to-end (E2E) way.

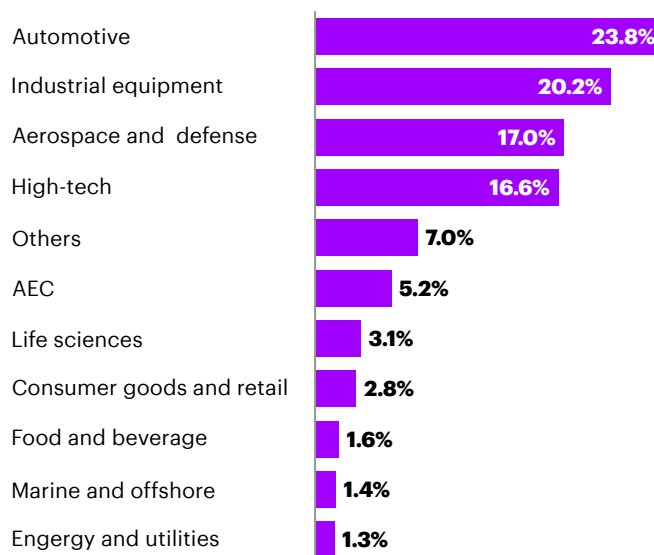
A digital thread refers to a solution that allows a connected information flow and integrated view of an asset's data throughout its lifecycle and across traditionally siloed functional perspectives.² A product lifecycle management (PLM) solution is one of the most commonly known ways to establish a digital thread within a company. The objectives of such solutions are simple: Ensure that your (product) information is complete, available and therefore usable for your business needs. As the numbers demonstrate, process industry companies have not yet ventured into the solutions offered by PLM vendors in the same manner their discrete industry counterparts have. Just four discrete industry branches (Automotive, Industrial Equipment, Aerospace & Defense and High-Tech) account for almost 80 percent of global PLM software revenue (see Figure 1).³ This indicates that the topic has received far less attention within process industries.

Main challenges

The reasons are manifold: Some process industry companies find current PLM solutions inadequate (for example, for dealing with major issues such as labeling, artwork, packaging and compliance). Others simply don't see the need. After all, formulated products require far fewer ingredients than a car does, for instance. Cars need 30,000 components.⁴ What these companies oftentimes don't realize is that PLM software is just as applicable to ingredients, formulas and recipes as it is to components and engineering bills-of-materials.

We see three main challenges that our process industry clients struggle with: Regulatory complexity, sustainability goals and customer engagement (see Figure 2). In the following discussion, we introduce these challenges and illustrate how a digital thread may help to address them.

Figure 1: Global PLM revenue by industry sector³



Regulatory complexity

With increasing regulation – and especially the differences in country-specific registration requirements – the complexity for system architectures is growing considerably. Many companies use bridging solutions and misuse their legacy systems as some sort of PLM system, for example by handling regulatory information in unsuited applications or worse – offline documents. Without shaping an end-to-end vision, they fall prey to the misconception that this is the ultimate answer to their problem. As a consequence, there is no assurance that what has been manufactured, shipped and marketed is in line with what has been registered. Information dumps as well as offline or undigitized documents further complicate the issue and eventually lead to inconsistent product data.

This requires a significant amount of manual effort for comparison and validation – impacting the accuracy of processes such as artwork and label creation.

Sustainability goals

Virtually every company must cope with the macro-trend of sustainability – with 58 percent of chemical industry CEOs agreeing to prioritize investments in 2021.⁵ This is effectively dictated by governmental policies such as the European Union's Green Deal and the drive for climate neutrality by 2050. The reduction of greenhouse gas emissions by 40 percent by 2030, a 32 percent share of renewable energy and the improvement of energy efficiency by 32.5 percent are just some of the intermediate steps to achieve the initial goal.⁶ Alongside these ambitions, the tracking of sustainability performance measures and the traceability of substances along the supply chain are key objectives. Without assurance that product information is complete, available, and therefore usable for your business needs these objectives are almost impossible to reach.

Customer engagement

A rising number of end customers are taking a more active role in the commercial strategy while the growth of online sales channels continues to boom. Furthermore, customers demand ever more personalized products, product variants and services. These trends are not necessarily new, but in combination with regulatory complexity, sustainability trends and technological change, they create significant challenges. Current legacy systems and underlying product hierarchies are not fit for purpose and are unable to manage complex bundling scenarios. In addition, they cannot handle product variants and diverse supply chain scenarios without adding to the problem of product data accuracy and availability. This severely impacts the ability to effectively meet the needs of customers today and more importantly their evolving needs of tomorrow.

How can a digital thread help?

A digital thread addresses these issues by building a single source of truth for product data. The first key step in deployment is to re-evaluate your current product hierarchy with your business needs in mind. It needs to be aligned across systems and geographies and should be founded upon a common product definition which is shared among all users. This enables process industry companies to define the product from an E2E perspective, along its lifecycle. The data can then feed downstream systems (e.g. artwork) while allowing automatization (e.g. label creation), decreasing human error and ultimately driving down cost (e.g. time spent on validating product information).

This hierarchy needs to be supported by a data model that is both flexible and scalable to accommodate for future needs. Redefining the data model will bring clarity about which information is needed and how to get it into the system. For example, regulatory information may only be used and linked to a product if it can be found in the system. If there is no possibility to enter the relevant information into the system, there is also no digital way to keep track of it – the same applies to monitoring offline or undigitized documents.

Going forward, a digital thread is needed to establish a consistent flow of information along the data backbone of the company. In other words, process industry companies need to rethink their siloed system landscape. Systems in the future must move from disconnected to connected and from siloed to networked to deliver on the promise of a single source of truth for product data. An efficiently maintained and agile PLM architecture acting as a facilitator for product information between systems is the key enabler.

Figure 2: Main process industry challenges and drivers

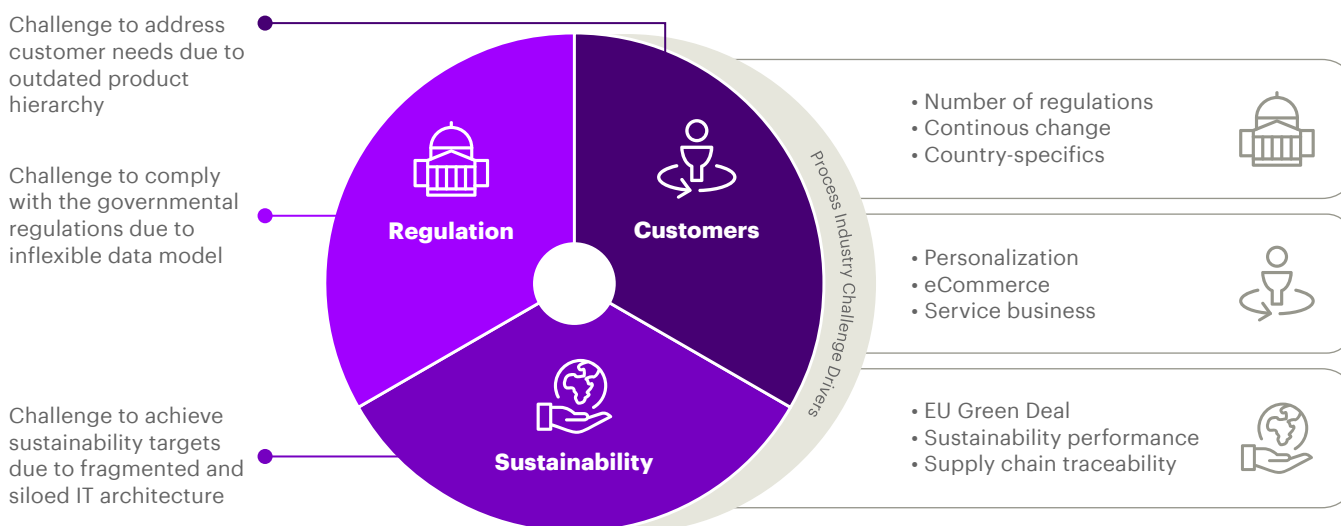


Figure 3: Typical value levers and impact of PLM transformations

	Value levers		Impact
 Growth	• Transparency on sustainability performance • Visibility of innovation pipeline • eCommerce enablement		• Increased customer loyalty • Increased product introduction efforts • Increased sales and revenues
 Speed	• Automated / workflow-controlled processes • Rules for re-use of content • Process and document digitization		• Faster time-to-market • Reduced process time • Decreased manual efforts
 Efficiency	• Accessibility of information • Harmonized E2E processes • Integration of 3rd party tools		• Reduced IT total cost of ownership • Reduced non-value-added activities
 Quality and compliance	• Supply chain traceability • Assurance on product hierarchy • Control of regulatory requirements		• Reduced compliance incidents • Reduced fines and penalties • Reduced non conformance cost (NCC)

In turn, a digital thread allows for E2E traceability of a product, from the chemical substance within a raw material to the packaged product ready for delivery. While shaping the vision for a digital thread, companies must also consider additional dimensions which are relevant in building the foundation for future success and need to be integrated with the new system. Namely, they must consider the definition of forward-looking sustainability performance indicators (e.g. carbon footprint, water intensity, etc.) as well as a strong data governance and change management process to support the system in the future.

Finally, process industry companies must ensure that claim and complaint information flows back into R&D to boost innovation and gain the maximum out of an E2E digital thread.

Moving forward

As you can see, establishing a holistic digital thread throughout a company's data backbone is an important way to address the main challenges process industry companies face today and in the future.

In fact, we see overall business benefits in the range of 10-30 percent from increased E2E efficiency and lead time reduction. These benefits may be structured into four dimensions (see Figure 3). A considerable amount of potential is still asleep, especially regarding automation, reduction of manual efforts and customer claims as well as enhancing regulatory compliance.

The time is now for process industry companies to venture into the possibilities offered by PLM and begin their journey to discover the digital thread. Watch out for our second article in the next edition of Operations. Insights on how exactly process companies may awake the sleeping potential and give product data the attention it deserves.

References

- ¹ Accenture 2020, Project Experience
- ² iBase-t 2019, What is a digital thread?
- ³ Quadrant 2018, Market Outlook Product Lifecycle Management
- ⁴ Processing Magazine 2015, How PLM is relevant to process industries
- ⁵ PWC 2020, Chemical trends 2020
- ⁶ European Union 2020, Climate & energy framework 2030



Key contact

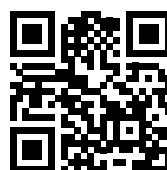
Matthias Hegele
Managing Director
Supply Chain & Operations Strategy
matthias.hegele@accenture.com

Authors

Stefan Lippautz, Laurent Delsaux, Tobias Schawohl

Interested in more?

Click [here](#) or follow the QR code for further insights.



Don't run in circles, close the loop and grow!

Conquer increased complexity with
holistic Closed Loop Spend Management



Closed Loop Spend Management (CLSM) is a proactive approach to managing third-party spend and driving end-to-end transformation, to help realize and sustain 360-degree value. All of this can be driven by procurement.

Conquer complexity with procurement in the driver seat

Seventy-eight percent of chief procurement officers (CPOs) believe their industry is facing disruption.¹ While disruption is often seen as a threat and is mitigated with siloed cost-reduction programs, many organizations have discovered that these traditional cost-cutting measures fail to deliver sustainable value over the long term.

Closed Loop Spend Management (CLSM) is a new and effective approach to managing third-party spend. It aims to “close the loop” between procurement and supply chain management on the one hand, and planning and budgeting activities on the other. CLSM provides the required spend visibility to establish an environment that enables companies to realize and sustain savings. In parallel, the focus is on transforming the organization to increase resilience as well as responsibility along the entire supply chain.

What is CLSM and how is it applied to create and sustain value?

CLSM is a systematic approach to unlock value across a company’s profit and loss statement, while driving holistic business transformation. Done right, CLSM can help companies improve profitability & new growth, and agility & resiliency, while enhancing sustainability & trust. To achieve these goals, CLSM tackles three key building blocks as shown in Figure 2: (1) Spend transformation, (2) New ways of working, and (3) Responsible business.

1. Spend transformation: Realize profitability enhancements and new growth

A newly appointed CEO of an industrial company was confronted with a high sense of urgency to transform the business to regain profitability. However, sufficient funds for the transformation were missing. Consequently, the CPO was instructed to free up cash by optimizing the cost base. CLSM helped him to go beyond this assignment.

Figure 1: CLSM realizes and sustains value over the long term

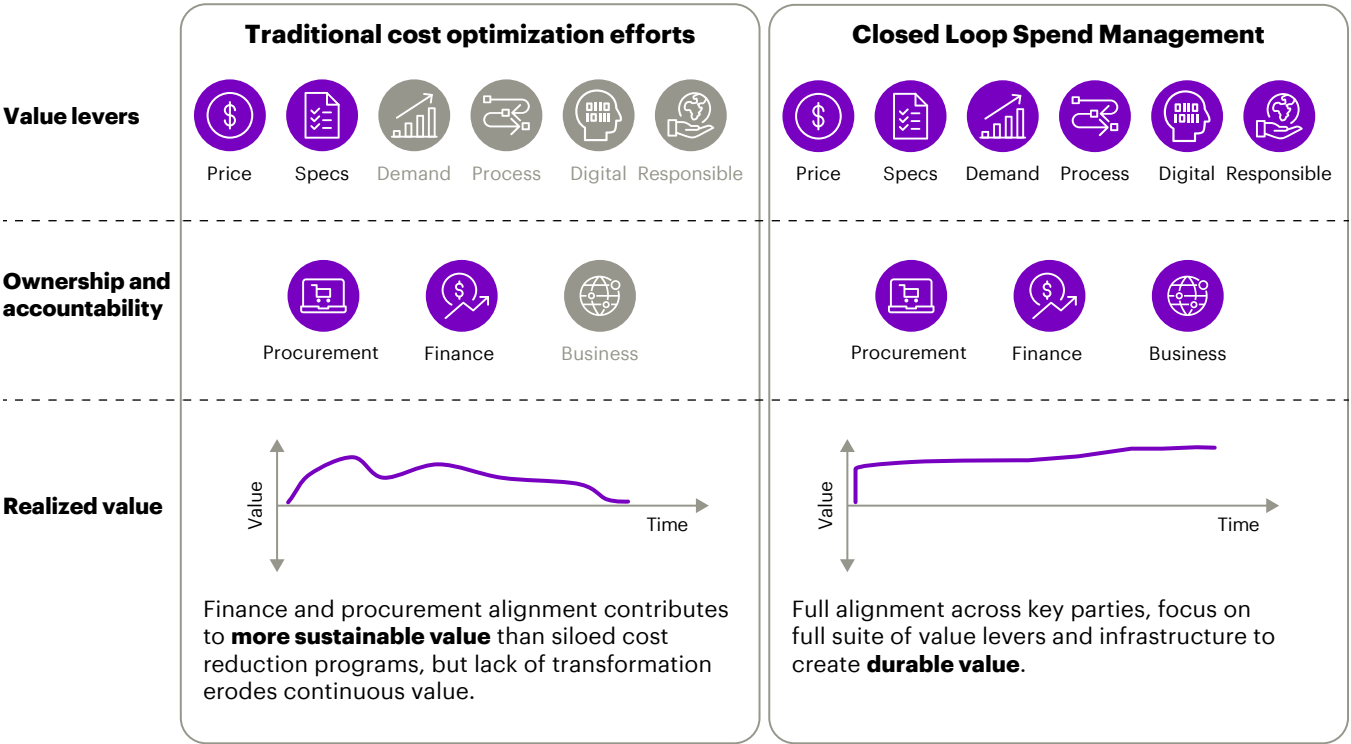


Figure 2: The three key building blocks of CLSM



The closed loop transformation began with rapid value realization. This phase accelerates cost take out throughout 12 weeks and secures funds to finance the transformation. It was achieved by establishing forensic visibility to the third-party spend, deriving opportunities by category, locking saving targets into budgets, and initiating a monitoring process.

In parallel, new avenues of value were tapped. For this, the enterprise-wide resource allocation was systematically aligned to market shifts. A procurement visioning workshop set the course for the strategic realignment and transformation. Category strategy fundamentals of “where to play” and “how to win” were addressed building on our zero-based best-practices. A key element was to identify what the business operations should cost, instead of defending outdated practices. As a result, costs reduction opportunities were identified in direct materials, supply chain, and CAPEX categories.

2. New ways of working: Enable talent for agility and resiliency

To extract the maximum value, CLSM requires enterprise-wide collaboration. At the beginning of a closed loop transformation, the CFO of a leading automotive manufacturer faced significant challenges with the procurement function. It lacked data visibility, involved a high degree of manual activities, and was predominantly reactive to business partner needs. By establishing new ways of working through an enhanced governance model, procurement evolved to a value co-creator, working directly with business partners. Achieving visibility, enhancing digital maturity, and breaking organizational silos proved to be key success factors for the overall transformation.

In addition, an integral component of the CLSM approach is to create an agile operating model, which strengthens cross-functional collaboration. The digital augmentation of talent helped procurement deliver on the CFO’s desire to build organizational resilience. Automation-enabled procurement, for example, freed up people from performing repetitive tasks so they could prioritize business critical activities when urgently needed, such as proactive management of possible supply shortages, and mitigation of supplier risks with a medium and long-term perspective.

3. Responsible business: Sustain trust in the company’s license to operate

Responsible sourcing and business practices are an imperative and evolved into a business necessity. Expectations from capital markets, customers, employees and governments continually increase. It is estimated, for example, that 50 percent of global assets under management already incorporate environmental, social and governance (ESG) factors in fund allocation and will rise to 95 percent by 2030.² In addition, 64 percent of people worldwide already choose, switch, avoid or boycott a brand based on its stand on crucial issues.³ Further, progressing governmental discussions about introducing laws and policies put additional pressure on companies to act. In Germany, for instance, the “Lieferkettengesetz” is planned to be implemented as of 2023.⁴

While this cumulative pressure is an urgent call to action for procurement, our recent engagements demonstrate that making sustainability a priority – sometimes even self-imposing it as license to operate – can yield significant value. CLSM taps this avenue of value by driving positive environmental and social impact.

A global chemicals company, for example, has focused on reducing CO₂ emissions and leveraging circular sourcing opportunities. One exemplary initiative was to replace single-use plastic packaging with circular packing materials. By eliminating plastic waste, reducing CO₂ emissions and increasing process efficiencies, the client cut costs group-wide.



Close the loop and act

Recent Accenture research suggests that delaying a closed loop transformation by just a single week could result in an average opportunity cost of 5 million USD for global companies.¹ To stop running in circles and instead conquer increased complexity, we help clients kick-start a CLSM transformation with a pragmatic 2-3-4 framework:

- **2 hour procurement visioning workshop** to set up an “outside-in” value story through spend visibility and benchmarking
- **3 x 4 hour immersion workshops** to conduct visioning sessions at innovation hubs defining category specific value proposition and co-creating the CLSM journey
- **4 week due diligence** to validate value and scope, prioritizing value capture initiatives and executing quick wins

Let’s discuss how CLSM can create value in your organization, with procurement in the driver seat – get in touch.

Key contact

Markus Schebitz
Managing Director
Supply Chain & Operations Strategy
markus.schebitz@accenture.com

Authors

Christoph Cewe, Sven Hierl, Markus Schebitz

Interested in more?

Click [here](#) or follow the QR code for further insights.



References

¹ Accenture 2021, The end of procurement as we know it

² Deutsche Bank 2018, Big Data Shakes Up ESG Investing

³ Edelman 2020, Edelman Trust Barometer 2020 – Global Report

⁴ Bundesministerium für Arbeit und Soziales 2021, Liefergesetz kommt noch in dieser Legislaturperiode

Sustainability and technology go hand in hand

How digital tools can enable trusted ecosystems and improve sustainability



Today's procurement leaders face an ongoing challenge to seek new sources of value that go beyond cost-cutting opportunities. One source of new value creation lies at the intersection of digital technologies and sustainability. Establishing a trusted ecosystem increases transparency by providing data for better decision making in supply chains, enabling companies to work toward their overall sustainability ambitions and responsibilities in understanding and reporting their full ecosystem impact.

In 2019, the world's biggest investor, Larry Fink, told CEOs in his annual letter that it is crucial to take a company's environmental, social and governance (ESG) impact into consideration.¹ With the increasing demand for social impact to be understood, senior company executives are rapidly bringing their sustainability performance to the top of the agenda.

At the same time, the global pandemic has further spurred business leaders to think differently about digital strategies, ecosystems and risk management, including those in procurement. Almost 90 percent of executives said their consumers want more traceability and accountability to gain product transparency – a trend that is likely to continue.² Today, visibility across the entire supply chain, and demonstrating responsible buying behavior, are key differentiators. Achieving transparency among ecosystem partners is, therefore, critical to ensure that companies are not only able to manage their own sustainable practices, but also those of their suppliers and their suppliers' suppliers.

But how do you get there?

By combining sustainability and technology, businesses can be reimaged and rebuild from the pandemic, says Accenture CEO Julie Sweet who also firmly believes it to be an "opportunity to embed sustainability by design to drive their customer agenda."³ Establishing digital and sustainable capabilities in parallel generates new sources of value. An Accenture study published in 2019 shows that companies that combine digital technologies and sustainability are 2.5 times more likely to be among tomorrow's strongest-performing businesses.⁴ Why? Because long-term value for clients, suppliers and communities is generated when sustainability is made a part of everyday business.

As a leader in technology, Accenture itself has set ambitious sustainability targets, aiming to reach net zero emissions by 2025, and a trusted ecosystem will play a significant role in meeting these goals. As part of these efforts, Accenture's procurement and technology teams have embarked on a journey to develop a blockchain-based solution named "True Supplier Marketplace."

The tool connects buyers and suppliers in one platform. Furthermore, it supports supply chain decision making by assessing suppliers, creating transparency and motivating them to improve sustainability performance through co-innovation.

The concept of the True Supplier Marketplace shows how future value in procurement is most likely to be delivered through the interaction of technology and sustainability efforts to allow transparency and measurement across entire ecosystems.

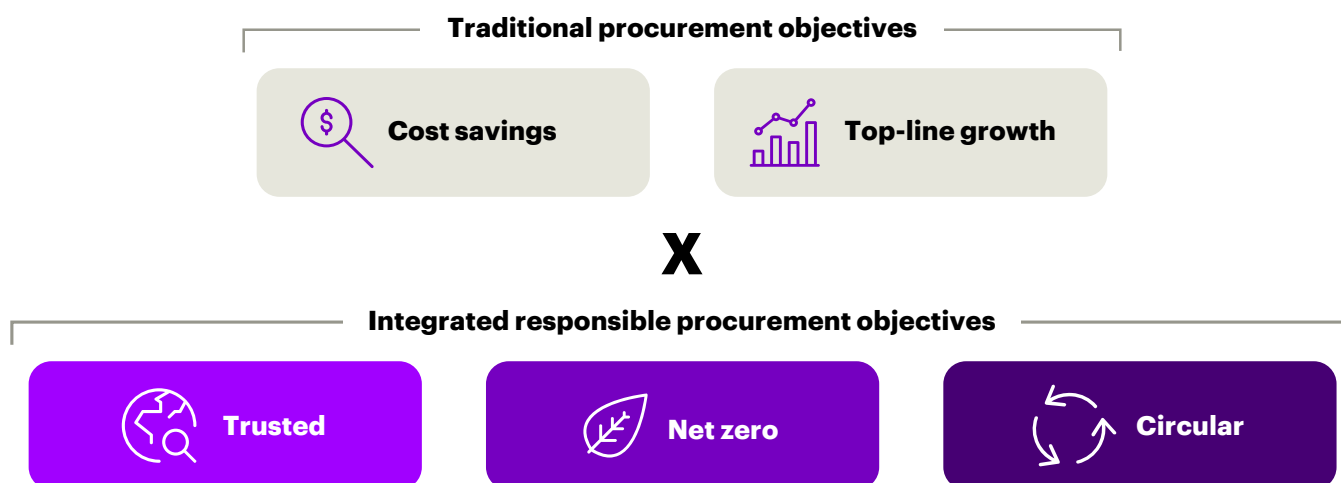
Balance traditional and new procurement priorities

Before kicking off such a journey, a good starting point is to create global ground rules in relation to technology and sustainability. While digital rules focus on transparency and support decision-making based on data, sustainability rules focus on three key objectives (see Figure 1). Going beyond the more traditional objectives of cost savings and revenue growth, procurement must set new standards in sourcing and find new ways of working to bake responsibility into buying. The objectives are:

1. To build **trust** to reduce social risk and create positive impact from supplier management and procurement operations.
2. To attain **net-zero** goals for scope 2 and 3 emissions among the categories with the highest impact.
3. To reach **circular** targets aimed at resource efficiency and close the loop on material that is sourced by procurement.

Organizations can use these objectives to successfully

Figure 1: Traditional and new procurement objectives



shape their procurement sustainability agendas and build a responsible sourcing road map. The key differentiator in the future will be the ability to identify and report on the entire societal impact of suppliers – including the entire ecosystem and partners. This is where the True Supplier Marketplace plays a significant role.

Enable a trusted ecosystem of suppliers and network partners

The True Supplier Marketplace connects buyers and suppliers to create a common view of sustainability performance, improve sustainable practices and co-innovate on shared initiatives (see Figure 2).

The True Supplier Marketplace has three main features: an automated sustainability assessment tool, the secure blockchain network on which the platform is built, and an efficient supplier onboarding and data management process.

Automated sustainability assessment tool

One key objective of the platform is to help Accenture and other buyer organizations capture, evaluate and improve suppliers' sustainability performance on a global scale. This objective is realized through this automated sustainability assessment tool that scores and tracks each suppliers' sustainability performance while simultaneously incentivizing sustainable supplier practices. Based on this data, greater visibility on risks, supply chain impact and sustainability criteria are generated, which allows the integration of sustainability into sourcing activities and improves decision making.

Blockchain network

Blockchain technology has proven to be an accelerator and enabler to overcome the challenges of sharing data between parties. This shared blockchain network

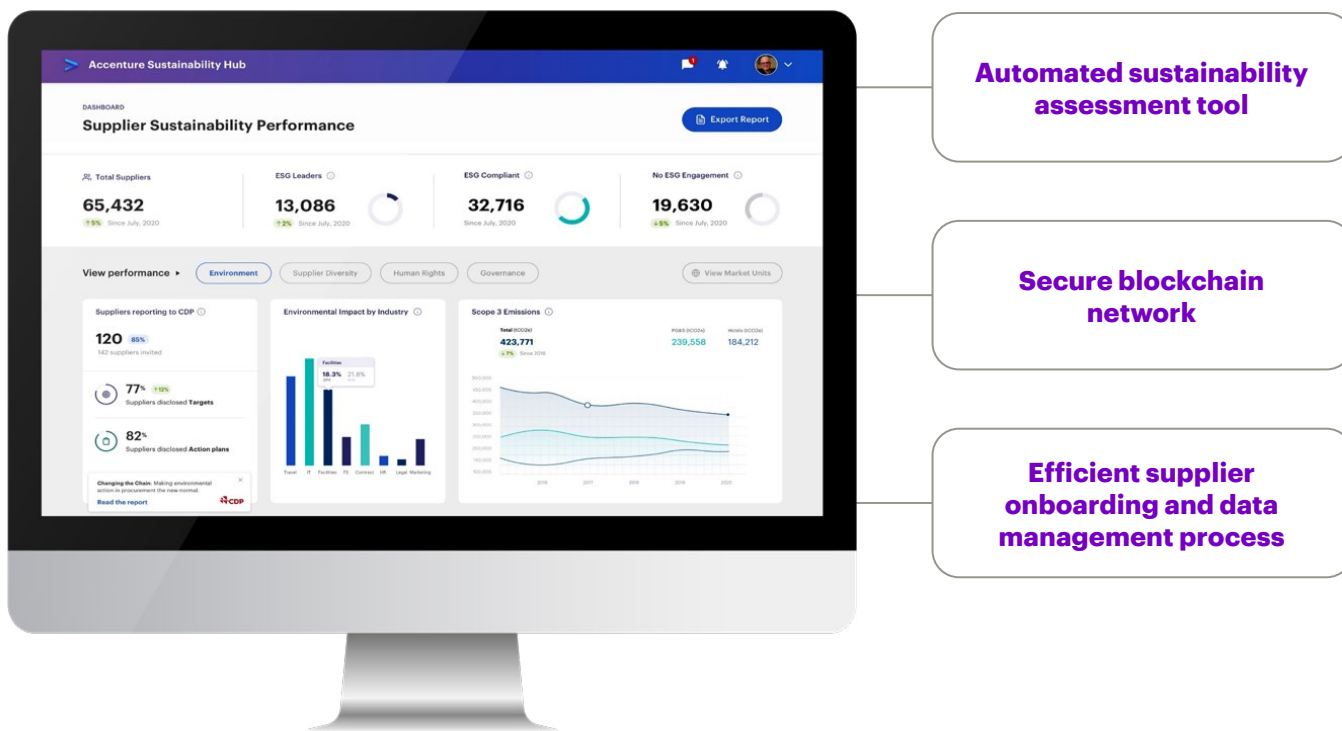
connects suppliers and external partners, enabling multiparty collaboration with a seamless and secure data exchange. Data permissions and privacy features are built so all parties are only able to access information that is relevant to them and share this information only once on the blockchain. Using blockchain to facilitate the data exchange on a shared platform has proven to be more secure than siloed systems or data exchange by phone or mail.

Supplier onboarding and data management process

Like many organizations, Accenture faces challenges to receive and maintain supplier data in a user-friendly format. By using the new True Supplier Marketplace for onboarding, the platform provides a dynamic assessment questionnaire, depending on the size, types of goods or services being procured. It is a two-sided data-sharing and blockchain-enabled platform where suppliers create their own account, populate their ESG data and then consent to share these certified credentials across multiple buyers. The tool will help Accenture and other buyer organizations to better assess, score and drive transparency around suppliers' ESG performance, including in relation to modern slavery, child labor and human trafficking.

Through a streamlined onboarding process, suppliers are onboarded 73 percent faster with a 39 percent reduction in manual entries, enabled through automation.⁵ Suppliers own, manage and update their own profile data, with all information stored in one profile that is easily maintained and updated in real time. As a result, the True Supplier Marketplace increases the visibility of suppliers' risk and sustainability performance and incentivizes them to act responsibly. The information enables data-driven decision making and incorporates sustainability targets into standard processes within procurement. Furthermore, the improved transparency among ecosystem partners allows enhanced support

Figure 2: True Supplier Marketplace Dashboard



for small- and medium-size enterprises, supporting them to improve their sustainability performance through an idea sharing and innovation network.

The journey forward – procurement leads the way

Sustainability, as well as the latest digital technologies, will continue to remain on the top of executives' agendas. Being able to react to the latest consumer and market trends is key to differentiate companies from their competitors, bringing chief procurement officers to the forefront when it comes to building sustainable and transparent ecosystems among their supply chain partners. An important mantra for executive leadership is "the best way to predict the future is to invent it." One way of doing so is to drive change by combining technology and sustainability in a parallel approach to generate long-term value making sustainability a part of everyday business in procurement and beyond.

References:

- ¹ Blackrock 2019, 2019-larry-fink-ceo-letter,
- ² Accenture 2021, The European double up – A twin strategy that will strengthen competitiveness.
- ³ Accenture 2021, Accenture and Salesforce expand Partnership.
- ⁴ Accenture 2021, Accenture Technology Vision 2021.
- ⁵ Accenture 2021, Accenture True Supplier Marketplace delivers.



Key contacts

Anna Schiller
Manager
Supply Chain & Operations Strategy
anna.schiller@accenture.com

Lara McLeod
Senior Manager
Supply Chain & Operations Strategy
lara.mcleod@accenture.com

Authors

Anna Schiller, Lara McLeod, Benon Ngobi

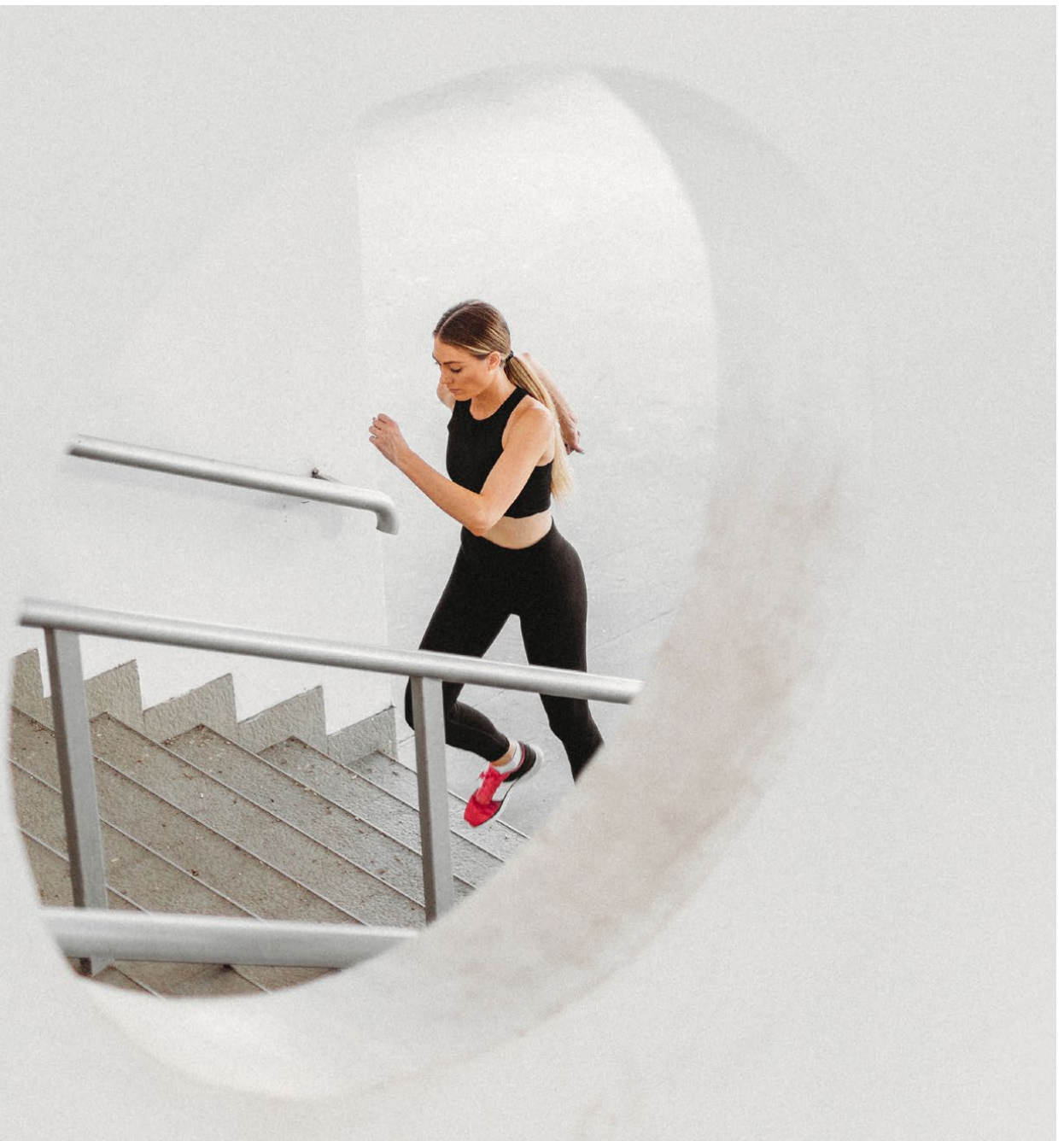
Interested in more?

Click [here](#) or follow the QR code for further insights.



Focus on the customer

Five steps to make your supply chain customer-centric



Today's supply chains are well-oiled machines that are optimized for efficiency and consistently deliver above targets. While this high level of operational excellence has received well-deserved recognition, innovative organizations are tackling the next frontier.

Instead of asking, "How do we deliver goods even more efficiently?" they are asking, "How do we meet the needs of our customers in the best possible way?"

Leading supply chain organizations have expanded their view to take a 360-degree perspective of the customer experience. Instead of only focusing on operational excellence, they contribute to growth by putting their customers at the center of everything.

Take a holistic perspective

To manage high levels of complexity and improve efficiency across the supply chain, companies typically employ a "divide-and-conquer" strategy in which they establish challenging performance targets and incentives for individual segments. Each segment, such as sales, order desk, manufacturing and logistics, then develops immense expertise in its area, striving for optimal results. Procurement optimizes unit price per kilo of raw material. Manufacturing drives up yield per machine hour. Logistics keeps cost per kilometer down, and customer service improves the number of calls per hour. However, with this approach, companies can quickly lose sight of the true task: to deliver a product or service that meets – or exceeds – customer expectations, so that the customer returns and reorders.

Research from Accenture shows that companies that build customer-centric supply chains outperform their peers. Companies that invested in transforming their supply chains into customer-centric organizations outperformed others by 2.5 percent of earnings before interest, taxes, depreciation and amortization (EBITDA) and grew by 13 percent, according to top-level executives at 900 companies across nine industries worldwide.

Five steps to make your supply chain truly customer-centric

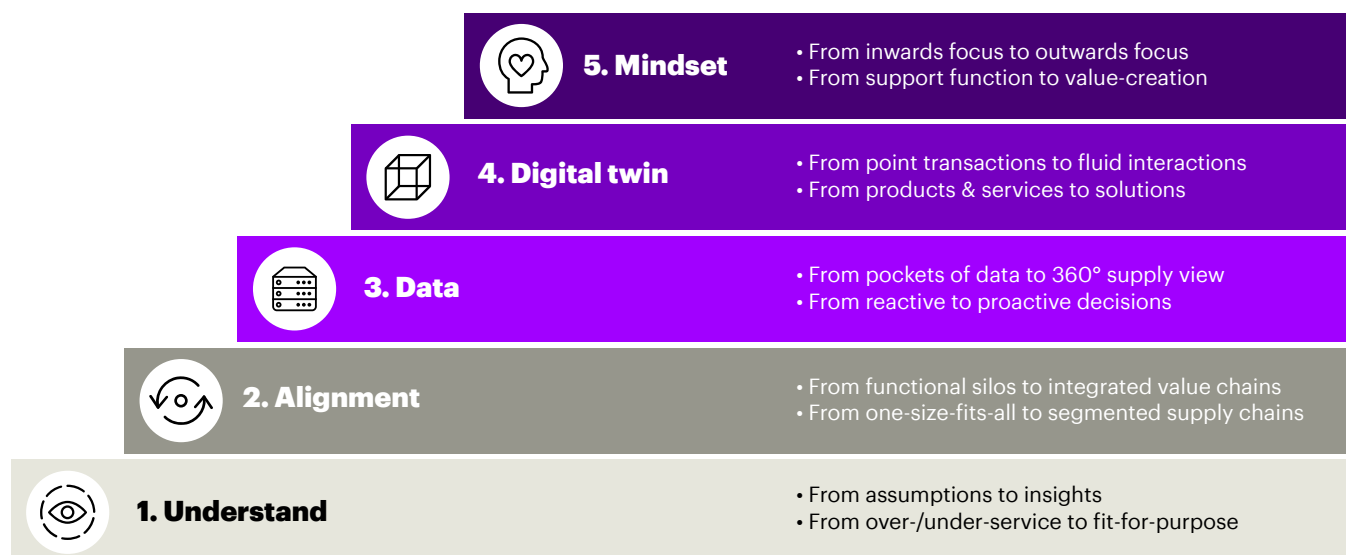
How do you make your supply chains more customer-centric? There are five primary steps (see Figure 1):

Step 1: Identify your customer and understand their needs.

Building a customer-centric supply chain begins with identifying your customers and understanding their needs. This can be easier said than done in complex, multitiered channel structures. Sometimes, sales has one perception of the customer, while a different department, such as marketing, has another.

Extensive customer research is a good place to start. This may include customer interviews and feedback surveys that help to bring the voice of the customer into

Figure 1: Key steps to a customer-centric supply chain



the organization. With the right skills and supporting technologies, companies can gain a deeper understanding on which to build structured services that meet customer needs.

This is not a one-time exercise. It must be done frequently to regularly adjust customer segments and services accordingly. It is critical to understand the customer to make the right decisions. If you don't understand the customer, you don't know what they value, and you may invest in the wrong capabilities.

We know this from studying perception gaps between sellers and buyers. For instance, Accenture's 2020 Global Buyer Values study for Chemicals investigated what customers value in customer service functions – and compared it to the internally assumed value. It showed that sellers overestimated the value of having 24/7 complaint handling by up to 30%, whereas they underestimated the value of establishing a single point of contact by more than 20% (see Figure 2).

Step 2: Align the customer-centric value chain end-to-end.

Today's supply chains typically string together independent functions, which hinders a transparent end-to-end view internally. Moreover, traditional supply chains don't address the changing needs and expectations of customers. Leading companies are re-aligning their value chain – from sales, procurement, planning and logistics – with a focus on each customer. They are aligning all functions to provide visibility into end-to-end operations, to ensure smooth and personalized customer experiences.

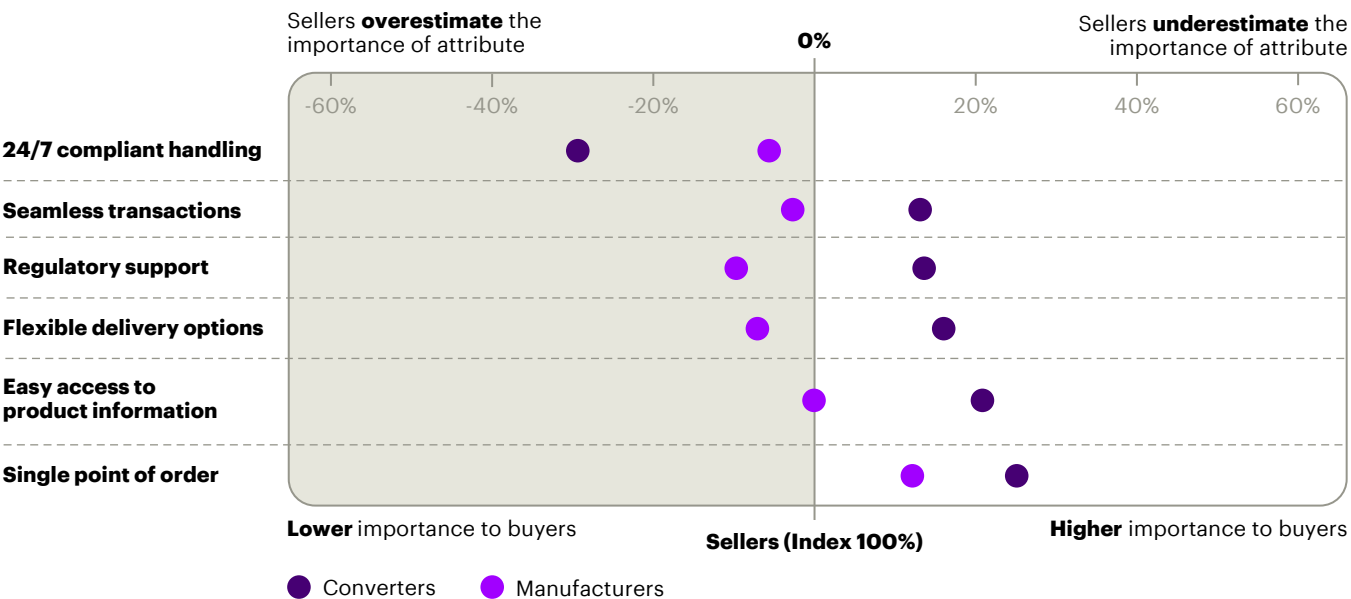
Supply chain visibility depends on connectivity across all segments of a company's business, from product lifecycle management (PLM) and integrated business planning (IBP) to expediting delivery by integrating warehouses and carriers. Agility and flexibility are key to moving from a one-size-fits-all supply chain response to a model that meets individual customer demands and, when possible, improves cost efficiency. Leading companies also collaborate with customers and establish shared targets for delivering products and services.

Step 3: Integrate supply chain data to gain insights.

Supply chains are complex global operations with an abundance of data collected within a company and while products are en route to customers. A manufacturing process, for example, provides data on product quality, a customs clearance process gives data on duration, and a phone call yields data on the mood of the customer. All this information resides somewhere within an organization, often in different applications and formats.

To gain insights from supply chain data, leading organizations address three key challenges: access, context and accountability. Instead of building silos of data in multiple on- and off-line systems that might be contradictory and include duplicate items, they invest in solid master data management capabilities and capture data in a centrally accessible data lake where it waits to be analyzed. They combine qualitative and quantitative data by linking hard facts with touchpoints across the end-to-end customer journey. That allows companies to assign clear accountabilities and use the information to improve decision-making, processes and services.

Figure 2: Perception gaps between sellers and buyers for customer service attributes¹



N=2205 covering Americas, APAC and Europe. Note: Converters transform chemical products for manufacturing segments and end-use markets; Manufacturers produce finished products for industrial sectors and consumer

Advanced process mining solutions provide companies with a clear strategic advantage, reducing the turnaround time of data collection and insight generation from weeks to a mouse click. Insights gleaned from high-quality data enable companies to continually improve the customer experience in near real time.

Step 4: Take advantage of digital product twins.

Leading companies are enabling their customers to benefit from digital twins, in which products exist in both a physical form and a virtual version. Digital twins, for example, can provide proof of authenticity, protecting customers' products from being counterfeited. This benefits customers in many industries, including agrochemicals, industrial, luxury and pharma. Customers can also use digital twins to get direct feedback from consumers regarding their experience with the product, its ease of use and quality of the packaging. Consumers just need to scan a barcode on the product, which takes them to an app or the company's website.

When using digital twins, companies must avoid a common pitfall, which is focusing on internal benefits instead of keeping the customer in mind. Most consumers will not share product insights without getting something in return. That's why leading companies are building advanced functionalities into digital twins. One application, for example, invites consumers to scan a QR-code with their mobile phone to access educational videos and instruction manuals. Creative gamification might inspire consumers to spend more time with customer products, increasing loyalty. Leading companies recognize that sustainability is important to consumers and are exploring the use of digital twins to provide visibility into a product's end-to-end CO₂ footprint.

Step 5: Adapt to a customer-centric mindset.

To make a supply chain truly customer-centric, companies must tackle their corporate culture. This may be one of the most difficult steps. Many companies that have strong siloed activities and rigid structures struggle to adjust their operating models toward a customer-centric perspective. Yet, this is essential to keep up with customers changing needs, including different consumers, government regulations, market evolution and competitors.

It's important to break down silos so business units can collaborate and share a common understanding of the benefits of a customer-centric culture. Companies will also have to manage change with their supply chain partners. Companies that succeed embrace change by helping their employees and partners understand how it will drive sustainable growth.

Your customer as starting point

Leading companies recognize their supply chains are key to achieving a competitive advantage. They build on a solid foundation of operational excellence to expand their perspective from an inward-looking and optimization-driven culture toward a customer-centric value chain. They work toward gaining a true 360-degree perspective on their business.

To achieve this goal, leading companies stay focused on their customers. They open invisible doors by having quality conversations about supply-related topics instead of pricing and sales. This reveals insights that can help to shape the transformation. Customers will appreciate the small changes you make along the road as you transition to a customer-centric supply chain.

References

¹ Source: Accenture 2020 global buyer values study for chemicals industry,



Key contact

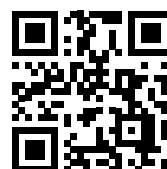
Matthias Hegele
Managing Director
Supply Chain & Operations Strategy
matthias.hegele@accenture.com

Authors

Matthias Hegele, Clemens Czech

Interested in more?

Click **here** or follow the QR code for further insights.



Ship-from-store fulfillment done right

How omni-channel retailers can increase inventory efficiency by carefully aligning their fulfillment infrastructure



A smart implementation of ship-from-store fulfillment can significantly lift total profit by boosting online sales. In light of the ongoing COVID-19 pandemic, a ship-from-store (SFS) strategy plays a vital role in mitigating excess inventory in physical stores.

Introduction

Implementing an ship-from-store (SFS) strategy promises higher overall product availability and efficient use of inventory across all sale channels. It also closes the last-mile gap through the use of store inventory for online orders. But despite its potential benefits, using an SFS strategy means higher processing and shipping costs and may create empty shelves for in-store customers. A simulation study conducted in collaboration with the University of Cologne in June 2020 analyzing various retail scenarios showed that – if done right – an SFS strategy can lift total profit as much as 8 percent, depending on the industry and online demand.

Currently, the majority of omni-channel retailers use inventory solely from the distribution centers (DC) to fulfill online sales, while employing store inventory to fulfill offline orders (i.e. in-store purchases). A potentially better option would be a dynamic fulfillment approach in the form of a heuristic that harnesses the benefits of SFS while addressing the challenges.^{1,2}

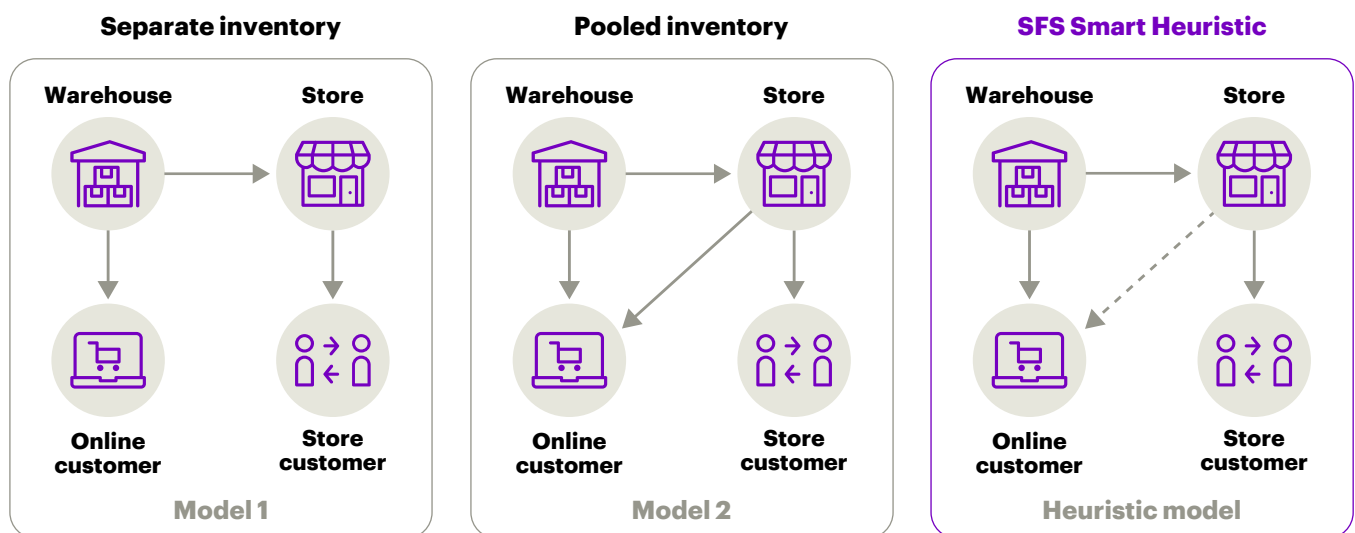
Smart heuristic

Figure 1 shows the two inventory models that most retailers currently use (Model 1 and Model 2), as well as the proposed heuristic approach:

- **Model 1:** A classic fulfillment structure where the retailer has a dedicated inventory for each channel.
- **Model 2:** A pooled inventory policy whereby the retailer fulfills online demand in the most cost-effective way possible. The inventories of the online and offline channels are equally used to fulfill online demand, following a first-come-first-serve (FCFS) principle.
- **Heuristic model:** A dynamic approach to fulfillment that sources inventory from a physical store only after a certain threshold is reached.

Using real-time inventory data across all channels and forecasted demand for the remaining selling season, the heuristic calculates the inventory range for each product at each store. The inventory range is determined by dividing the current inventory level by the forecasted demand for the remaining period. Using this range, the heuristic applies a threshold mechanism that enables the use of store inventory for online orders by analyzing the cost of fulfilling the online order versus losing that online sale in anticipation of a future in-store purchase.

Figure 1: Omni-channel delivery concepts



To summarize, store inventory is used for online orders as long as the inventory range for the product being purchased is above the determined threshold value. Once the inventory range at a particular store drops below the pre-determined threshold, the heuristic inhibits the use of that store's inventory for online fulfillment.

The heuristic approach controls inventory sourcing through a threshold mechanism which is implemented in two stages (see Figure 2) and considers three different pre-determined threshold values (TV_{DC} , TV_1 and TV_2). The different threshold values allow the heuristic to distinguish between two situational outcomes.

In stage 1, the inventory range at the DC is evaluated in order to determine the threshold value for the stores (TV_{Store}). If the inventory range is below or equal to the threshold, then the inventory at the DC is deemed insufficient and is expected to run out of stock in the near future. Thus, exposing store inventory to online orders becomes more valuable in this scenario. The opposite is true, if the inventory range is above the threshold value TV_{DC} .

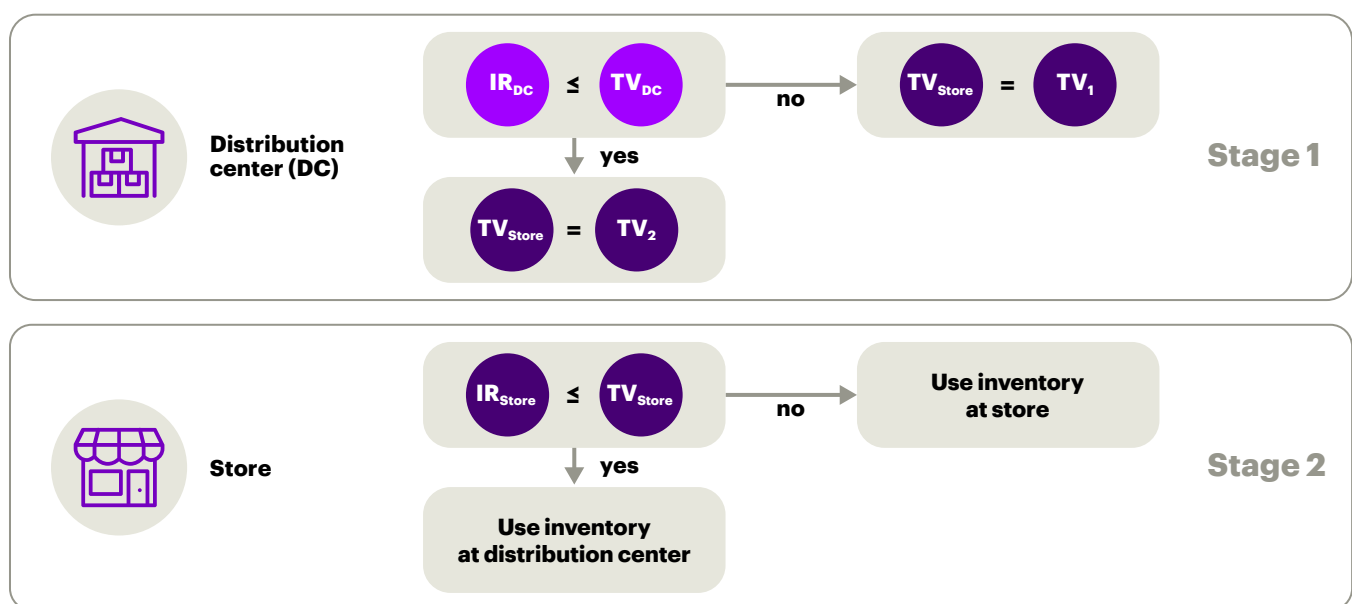
In stage 2, the heuristic model compares the inventory range at each store against the threshold value (TV_{Store}) determined in stage 1. This way, retailers can fine-tune the way the heuristic model evaluates its sourcing decision by customizing threshold values. For example, a retailer with less sensitivity towards a stock-out might deem a threshold value of 0.8 as sufficient while another might consider this value as a sign of insufficient inventory.

Simulation with empirical data

The study in collaboration with the University of Cologne implemented the smart heuristic in a simulation model. The simulation was based on survey data of retailers from various industries and analyzed the performance in more than 100 demand scenarios. The study evaluated the simulation results of model 1 versus model 2 and model 1 versus the heuristic model (see Figure 1) to provide a standardized performance comparison. Figure 3 displays the simulation results of a retailer with a broad product range (i.e. ranging from high-value items such as jewelry to low-value items such as clothes) and a retailer from the pet food industry. The benchmark was conducted with scenarios of normal and high shares of online demand to observe the impact of increased online demand. The outcomes, as shown in Figure 3, deliver evidence in favor of the heuristic approach.

The results show that a dynamic implementation of an SFS strategy is more profitable compared with the static approaches currently being used by most retailers. Overall, the heuristic becomes more efficient with an increased share of online demand – making it a great solution for businesses that anticipate higher online sales in the future and for those that already have a high share of online sales. The study showed that the survey participants could already harness the benefits of the heuristic model when online demand is around 15 percent. Further, the best results could be observed with middle-to-high profit margin product categories compared to less improvement potential with low margin products (e.g. grocery industry).

Figure 2: Heuristic threshold mechanism

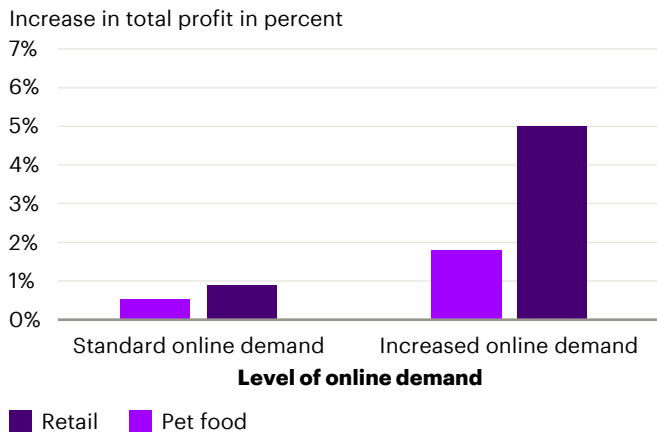


IR_{DC} = Inventory range at DC
 IR_{Store} = Inventory range at Store

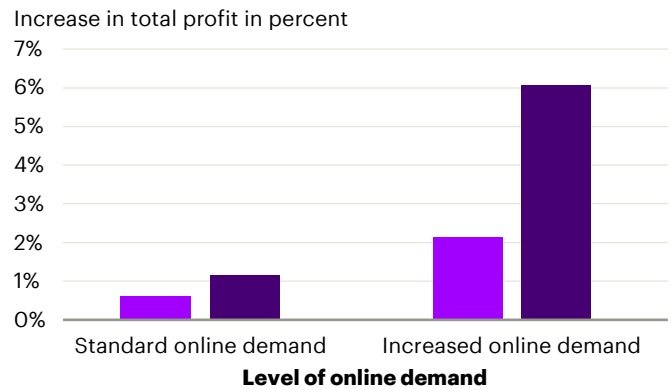
TV_{DC} = Threshold value for DC TV_{Store} = Threshold value for store
 TV_1 = Threshold value for store if the DC inventory is deemed insufficient in stage 1
 TV_2 = Threshold value for store if the DC inventory is deemed sufficient in stage 1

Figure 3: Benchmark results of simulation study

Benchmark results of model 1 vs. model 2



Benchmark results of model 1 vs. heuristic model



The COVID-19 pandemic shows how crucial it has become for retailers to adapt to sudden changes in customer behavior in order to stay profitable. Dynamic approaches to fulfillment are a key ingredient in this strategy. A critical requirement to implementing a dynamic SFS strategy is to ensure full inventory data transparency across all online and offline sales channels. Enabling real-time data tracking allows the evaluation process in the heuristic model to work precisely to make the correct sourcing decision.

Further, the study's analysis showed that the heuristic model is most beneficial for product categories with a higher profit margin. Therefore, it is crucial to conduct a thorough analysis of the retailer's product types and industry to determine the value of implementing a dynamic SFS strategy, given the existing fulfillment infrastructure. The list of requirements below provides a rough test as to whether a dynamic SFS strategy could be beneficial for your firm:

- Is your firm's anticipated share in online demand at least 15 percent?
- Do you mainly sell products with a profit margin of at least 20 percent?
- Can you ensure full inventory data transparency across all offline and online locations?

If these requirements are fulfilled, retailers might want to launch a pilot project in a region encompassing one distribution center and up to 10 physical stores. During this pilot period, it is essential to test the algorithm of the heuristic model and to fine-tune the starting threshold values to accommodate the firm's specific needs.

Depending on the pilot project's outcome, the rollout strategy can take on different dimensions based on the company's existing fulfillment network. Your company may decide to implement the heuristic only for a specific region that is supplied by a particular DC. Increased network complexity encompassing multiple DCs and retailers within one model may make the heuristic computationally intractable.³

References

- ¹ Bayram, A., Cesaret, B. 2020. "Order Fulfillment Policies for Ship-From-Store Implementation in Omni-Channel Retailing." *European Journal of Operational Research*.
- ² Bellman, R. 1984. *Dynamic programming*. Princeton University Press, Princeton, NJ.
- ³ Bayram, A., Cesaret, B. 2017. "Ship-from-Store Operations in Omni-Channel Retailing." *Proceedings of the 2017 Industrial and Systems Engineering Conference*. Pittsburgh, Pennsylvania, USA, 1181-1186.



Key contact

Dr. Michael Dittrich
Managing Director
Supply Chain & Operations Strategy
michael.dittrich@accenture.com

Authors

Minh Chau Nguyen, Klaus Hügler

Interested in more?

Click [here](#) or follow the QR code for further insights.



Accenture SOLID: Rapid process optimization at scale

From pointless pilots to perpetual performance across all end-to-end processes



What if we told you there was a way to optimize processes at scale and do it fast – but it's one that many companies are overlooking? Well, we'd like to do just this. Introducing SOLID, a fast approach for improving processes that heavily engages the business and lets them take ownership of the change idea. Instead of waiting a year to see results, your business can move from improvement idea to implementation within weeks using the SOLID framework.

Often directed by corporate digitization initiatives, process automation was mainly applied to transactional, mundane activities in shared service centers or corporate back-office functions. Technologies such as robotic process automation (RPA) or other no/low code programming and process mining were often the focus area of such programs.

Although each technology carries advantages, optimization programs have lacked one concerted framework which places scalability, impact and recognizable return on investment at the center of things.

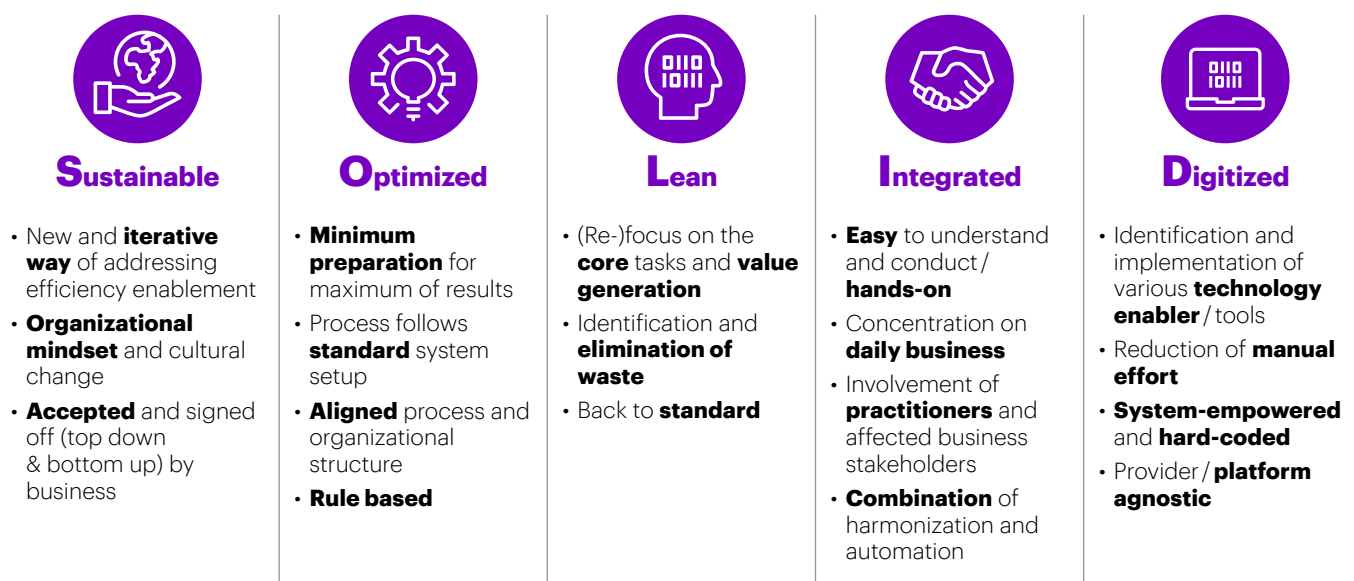
Moreover, most industries are currently either facing cost pressure or the need to free up significant money for investments in future innovations and business

models. This macro-economic development paired with industry's quest to further automate its business processes generates excellent momentum to focus on business value rather than putting a single technology on the spot.

In this article, we will show you how to marry a new smart and lean working culture with technology-agnostic automation project setups to enable sustainable process performance improvements by overcoming unclear governance structures as well as the wrong perception of market-related unique selling propositions, uncleaned master data and unstructured service level agreements.

Figure 1: Accenture SOLID key enablers

Our approach helps to identify and implement sustainable results and creates a new corporate mindset



Why process optimization and automation matter now more than ever

Most companies failed

Between 2016 and 2018, industrial companies spent a little over 100 billion US dollars on scaling digital innovations to drive new experiences and efficiencies.¹ Almost 80 percent of industrial companies struggled to reach expected earnings and only 20 percent of industrial companies achieved a return on their digital investments that exceeded their expectations. Although 61 percent of companies within the DACH region invest more than 50 million US dollars² per year in digitization projects, currently only 13 percent of robotic process automation (RPA) projects are scaled.³

Processes are en vogue again

The need to implement cloud-based, advanced and integrated enterprise resource planning (ERP) platforms such as S/4HANA and the return of shared services have led to a significant amount of process design activities. This is an invitation to do it right at scale the first time and hence also leverage the full harmonization and automation potential.

This leads one to the following realization: It is not just about scaling a multitude of proof of concepts (PoCs) – SOLID is also about releasing value by scaling the process automation.

SOLID: Because successful change needs speed and substance

To improve the sustainable scaling of automation initiatives, we have developed the SOLID mindset which consists of five key enablers to support companies throughout the entire project lifecycle in fulfilling their digitization agenda (see Figure 1).

This framework is not only about identifying demand for process improvement but driving those improvement ideas into the final implementation. In this context, we believe it is time for the next level of business process performance improvement to radically change the internal ways of working and how automation is done within an organization.

Sustainable: Automation mindset as part of the corporate culture

To foster sustainable results, optimizing processes and applying automation has to become an integral part of the daily life of every employee. Therefore, it must be easy and fast. That's how SOLID is designed. After the first four weeks, all the involved stakeholders become multipliers in this approach, living the idea and ensuring a continuous pipeline of improvement ideas.

Optimized: Ready to use approach following clear standards

By defining clear guiding principles for scope-sizing and creating pragmatic templates, the effort for preparation and execution is reduced to a minimum and can be implemented in every client environment according to dedicated project objectives.

Lean: Clear scope and focus

The approach always aims to optimize a complete end-to-end process chain (e.g. order-to-cash) within four weeks. All activities are challenged along the same guiding question: "Can I reach a milestone in a simpler way, with less manual interventions and process breaks to ease my daily business?"

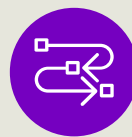
Figure 2: Accenture SOLID key benefits



Reduce SG&A cost by 15%-20% in only 4 weeks*



Free up significant workforce capacities to enable your growth strategy



Optimize processes driven by the insights of your own operations



Enable E2E process digitalization at scale

* 4 weeks with major business participation – in the area of focus

Integrated: From the business for the business

In achieving our goal, we have selected a 360° approach. Most digitization agendas are communicated 'top down'. SOLID it is a truly bottom-up exercise complemented by top-down support. By building the foundation of efficiency gain on the practitioners' expertise, we create a quantified improvement commitment towards SOLID. Therefore, we conduct digital exception workshops for interface functions as well as process walkthroughs with practitioners to make existing pain points transparent and enable stakeholder buy-in. This allows us to get an understanding of the practitioners' pain points as well as a quantification of the respective automation potential.

The solutions at hand will be implemented without a delay between their development and implementation and instantly decrease the business unit's workload, which leads to a higher acceptance of digitization initiatives and therefore positive cultural change.

Digitized: Solutions resolve and don't limit

A core success factor is to allow multiple technical enablers to solve the identified challenge. Desperately applying a bot while a business rule or an ERP solution fits much better will not solve the issue. That's why solutions need to be tailored to the individual pain points. This can be a process re-design as well as a technology-agnostic process automation.

Why SOLID?

We recommend SOLID because nobody can afford to neglect 15-20 percent SG&A reduction identified in weeks (see Figure 2).

Secondly, because smooth processes ensure happy professionals and high-quality results.

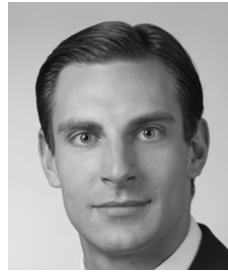
Thirdly, growth needs capacity. The SOLID framework unlocks additional capacity through practitioner-driven process automation. Finally, digitized end-to-end processes are a rare good and bring your team into the digital pole position.

References

¹ Accenture 2019, Intelligent automation at scale: What's the hold up?

² Accenture 2020, Wie Unternehmen ihre digitalen Initiativen endlich skalieren können

³ Accenture 2020, The agilification of automation



Key contact

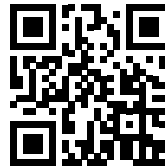
Ralph Kästel
Managing Director
CFO & Enterprise Value
ralph.kaestel@accenture.com

Authors

Ralph Kästel, Simon Rüffert, Martin Boecker

Interested in more?

Click [here](#) or follow the QR code for further insights.



The cash flow connection

How supply chain and IT can drive a high-value transformation



Supply chain has the power to pivot cost-intensive large-scale IT transformations such as S/4HANA implementations into a positive cash flow journey and therewith helps to overcome the burden of double or triple digit million dollar cost traps. In this article, we show how we can support clients, here exemplary for the agrochemicals industry, to develop supply chain capabilities that turn the overall business case positive.

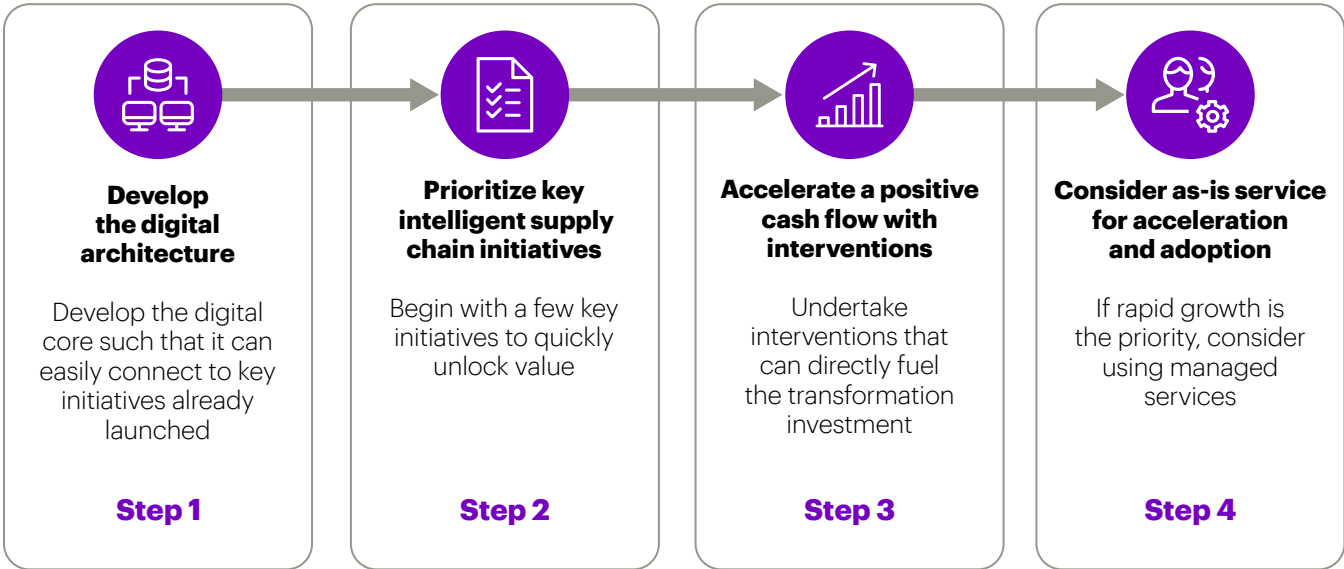
S/4HANA is replacing enterprise resource planning (ERP) systems of the past, enabling companies to benefit from a digital core that is simpler, cloud-based, more flexible and works in real time. A recent survey found that within the next three years, 40 percent of respondents expect to transition to S/4HANA.¹ Such a transformation, typically initiated and mainly driven by IT departments, requires a high invest, often costing more than 50 million dollar. Many companies do not consider the business perspective of the transformation sufficiently. We believe the key to success is to take a holistic approach.

To support clients on their transformation journey, we have developed our supply chain transformation approach to combine business and IT perspectives at the beginning of the transformation.

This approach can improve the transformation business case, speed up the generation of a positive cash flow and enable the organization to leverage the new digital core functionalities (e.g. get real-time data insights) from day one. Our supply chain transformation approach, which can unlock value fast, consists of four steps, as shown in Figure 1.

To illustrate how our supply chain transformation approach can fuel a S/4HANA transformation let's look at the benefits an agrochemicals company can achieve. The cash flow figures presented are based on client project data, which was scaled and adapted to fit a 10 billion dollar revenue agrochemicals company. The timeline diagrams show how the supply chain transformation approach works over time.

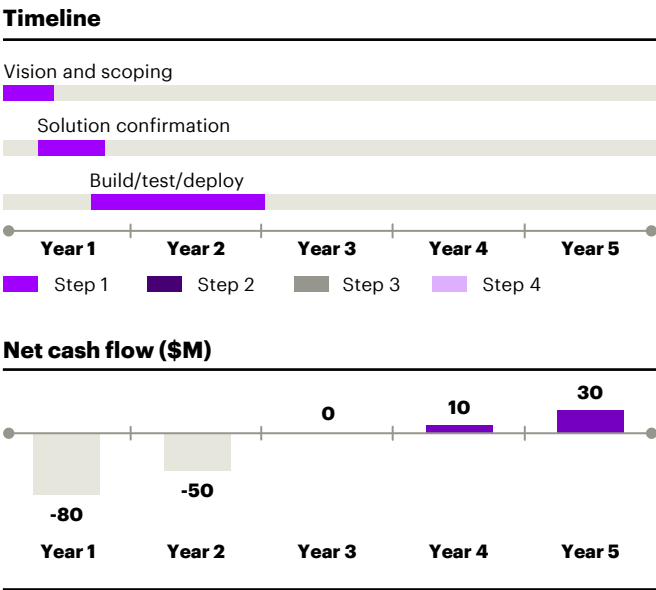
Figure 1: Steps of the supply chain transformation approach



Step 1: Develop the digital architecture

To deploy the digital core, the S/4HANA ERP, the development should be conducted in a way that allows to easily and quickly connect both, IT and business driven initiatives, that are also related to the supply chain transformation journey and that have already been started. The net cash flow diagram (see Figure 2) shows, for this first transformation step, a negative cash flow for year one (80 million dollar) and year two (50 million dollar). In year four and five we see a slight positive cash flow driven by the benefits of the implemented new digital core.

Figure 2: Step 1 timeline and cash flow



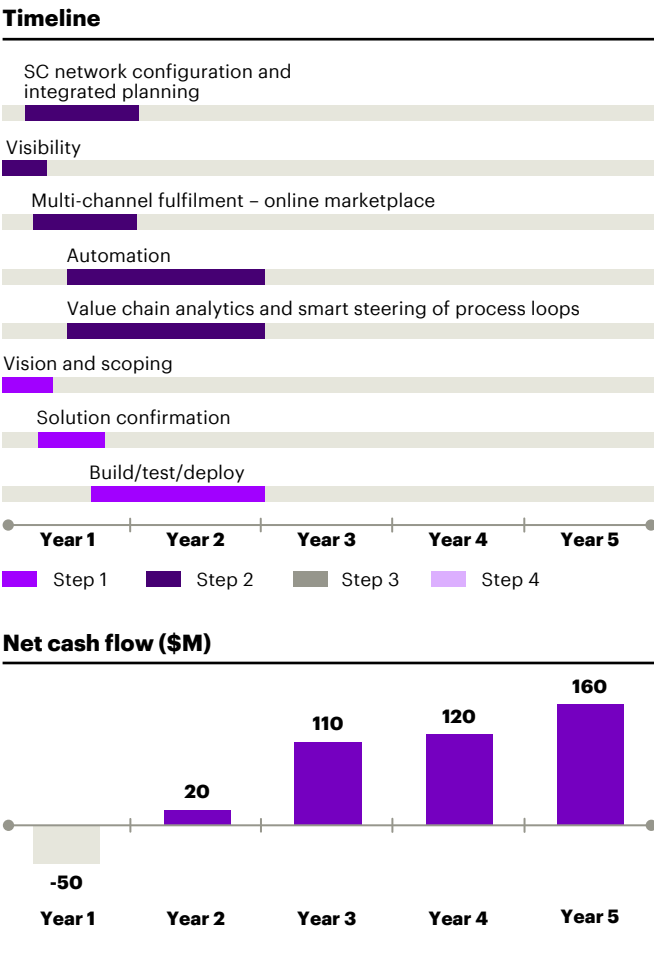
Step 2: Prioritize key intelligent supply chain initiatives

In parallel to the first step, step 2 should begin. The objective is to launch selected supply chain initiatives that contribute to savings or revenue generation in the short term, such as integrated planning, end-to-end visibility and multi-channel fulfilment, including an online marketplace, automation, value chain analytics and smart steering of process loops. As Figure 3 shows, implementing step 2 initiatives results in a positive cash flow from year two, which funds the ongoing transformation. The identification of automation potentials along the supply chain contributes to savings and the implementation of an online marketplace to efficiently serve selected client segments and offer related value-added services adds revenue.

In addition, the analysis of supplier and logistics data as part of the visibility initiative can support the development of more intelligent supply chain solutions. Insights generated through integrated planning can be leveraged to create more customer-centric supply chains, by tailoring logistics solutions through an improved understanding of the customer's demand.

Beside the "stand-alone" value of the described supply chain initiatives, the initiatives also support the company to benefit from the new digital core directly after the implementation. For example, a data governance model, developed for exploiting the data within the above mentioned visibility initiative, can be leveraged further to manage large amounts of data accessible and usable through the newly implemented digital core.

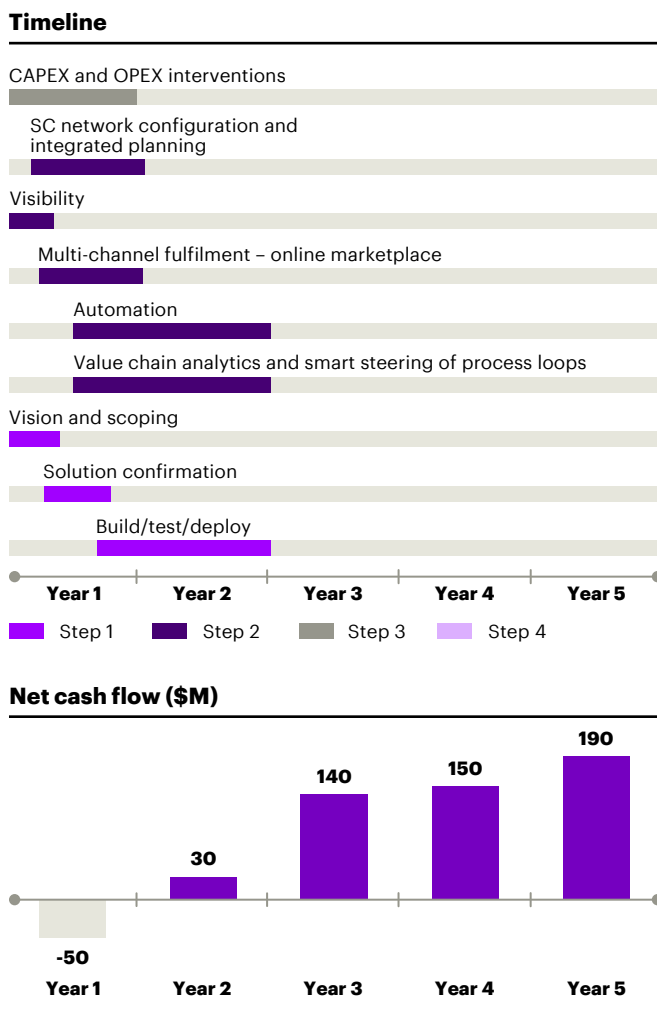
Figure 3: Step 2 timeline and cash flow



Step 3: Accelerate a positive cash flow with interventions

Initiating step 3, also at the beginning of the transformation, means making capital expenditure (CAPEX) and operational expenditure (OPEX) interventions that further support the transformation investment. Suitable measures are, for example, zero-based-mindset initiatives, such as a zero-based-spend quick scan and/or process optimization initiatives to boost operational efficiency. Those additional measures further improve the positive cash flow development (see Figure 4), triggered by step 2 key supply chain initiatives.

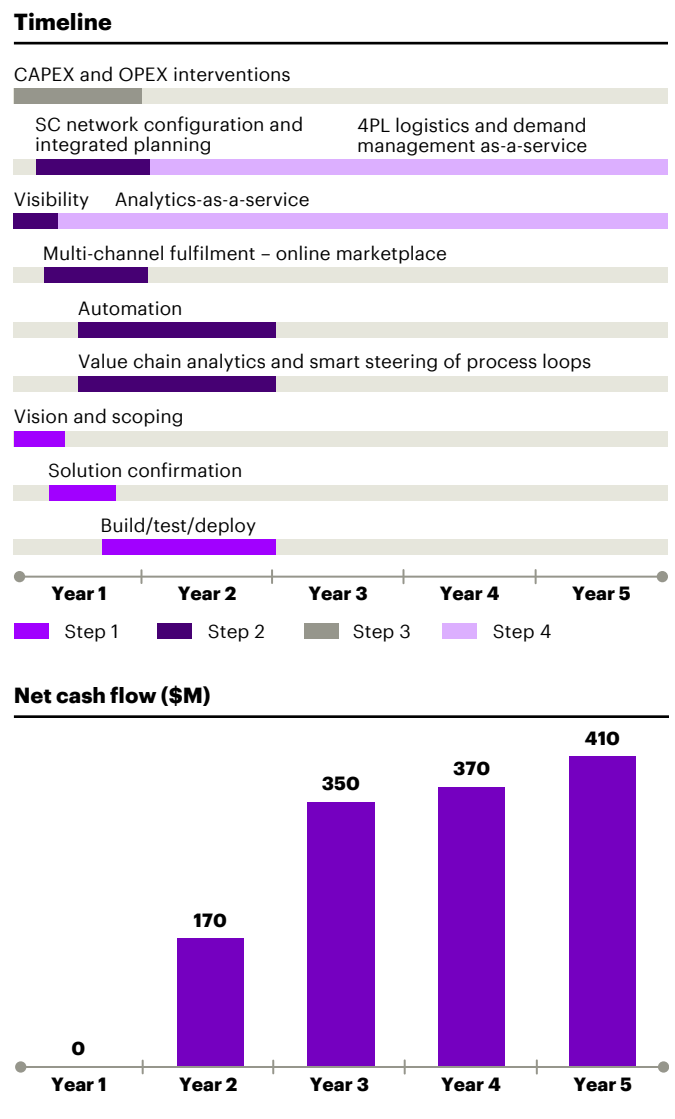
Figure 4: Step 3 timeline and cash flow



Step 4: Consider as-a-service for acceleration and adoption

If rapid growth is the priority, our approach leverages managed services which can be introduced in the first year already. By implementing e.g. 4PL logistics, demand management and analytics via an as-a-service model, the mentioned capabilities can be leveraged from an external provider in a cost-efficient manner and at scale. This can help the organization focus on its core value creation areas and avoid lengthy efforts in developing captive new capabilities, such as analytics. As Figure 5 shows, a “capability” as-a-service model can boost the cash flow beginning in the second transformation year.

Figure 5: Step 4 timeline and cash flow



Exploit entire transformation value

Our supply chain transformation approach shows how to quickly benefit from a supply chain driven S/4HANA transformation. Instead of hitting the transformation cost trap – large investments with unclear financial value – our holistic approach, incorporating business and IT, reduces the time it takes to achieve value.

For an agrochemicals company, the transformation also provided an opportunity to design a future-ready supply chain. The company faced increasing regulatory pressure on selected pesticides and had to cope with increasing sustainability standards. During step 2, key supply chain initiatives helped to resolve current and future business challenges, such as the need for more sustainable supply chain solutions. As part of the visibility initiative, for example, the digital core enabled the exchange and analysis of data required to track the compliance to safety standards across the supply chain.

The transformation approach we have presented outlines how to bring your IT and supply chain (business) capabilities to the next level while simultaneously harvesting the financial benefits early along the transformation journey.

References

- ¹ DSAG 2020, Investment Report: The Switch To S/4HANA Is Complete



Key contact

Dr. Timo Würz
Managing Director
Supply Chain & Operations Strategy
timo.wuerz@accenture.com

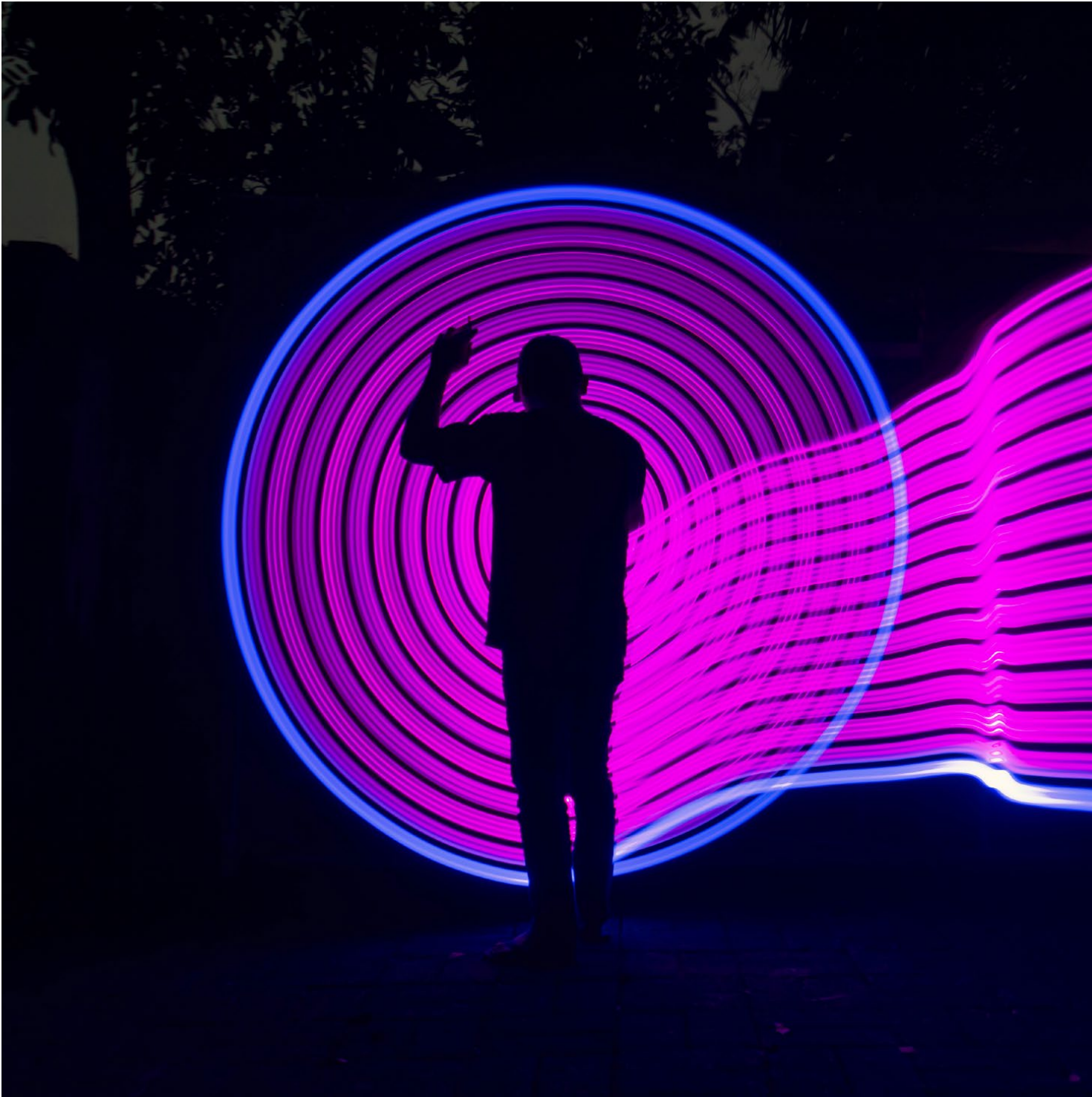
Authors

Dr. Timo Würz, Andreas Hof, Hendrik Schneider,
Elisabet Ericsson, Melanie Binggeli

Interested in more?

Click [here](#) or follow the QR code for further insights.





“There will be no successful supply chain transformation without a close collaboration between business and IT.”

Crossing borders

Making customs more proactive



Companies engaged in international trade can make their supply chains more efficient by rethinking their customs operating model and making it more proactive.

Introduction

According to the World Trade Organization (WTO), world merchandise trade reached 19.05 trillion dollars in 2019, which is about 88 percent of the gross domestic product (GDP) in the United States in 2019.¹ Every time cargo is imported to or exported from a country or a customs union (e.g. the European Customs Union), it must undergo a customs clearance process. In this process, shippers submit customs declarations to the relevant authorities to prove that the cargo can be lawfully moved across and to find out the amount of customs duties to be paid on the goods.

If companies do not do the paperwork correctly, it can lead to disruptions in the supply chain and put pressure on the customs and foreign trade departments of internationally active companies. This is even more evident in times of political uncertainty and change. For example, news outlets widely reported how companies faced difficulties as part of the Brexit transition: Shipping companies such as UPS, DPD, DB Schenker and DHL had to suspend shipments due to incomplete customs declarations.² Companies such as Tesla and Kraft Heinz were concerned about their ability to move goods due to a shortage of customs brokers.³ In addition, studies have shown how protectionism and state discrimination against international business has increased trade distortions since 2008, resulting in a disadvantage for exported goods.⁴

Despite these challenges, by focusing on three areas, companies can improve the customs operating model to achieve supply chain efficiencies.

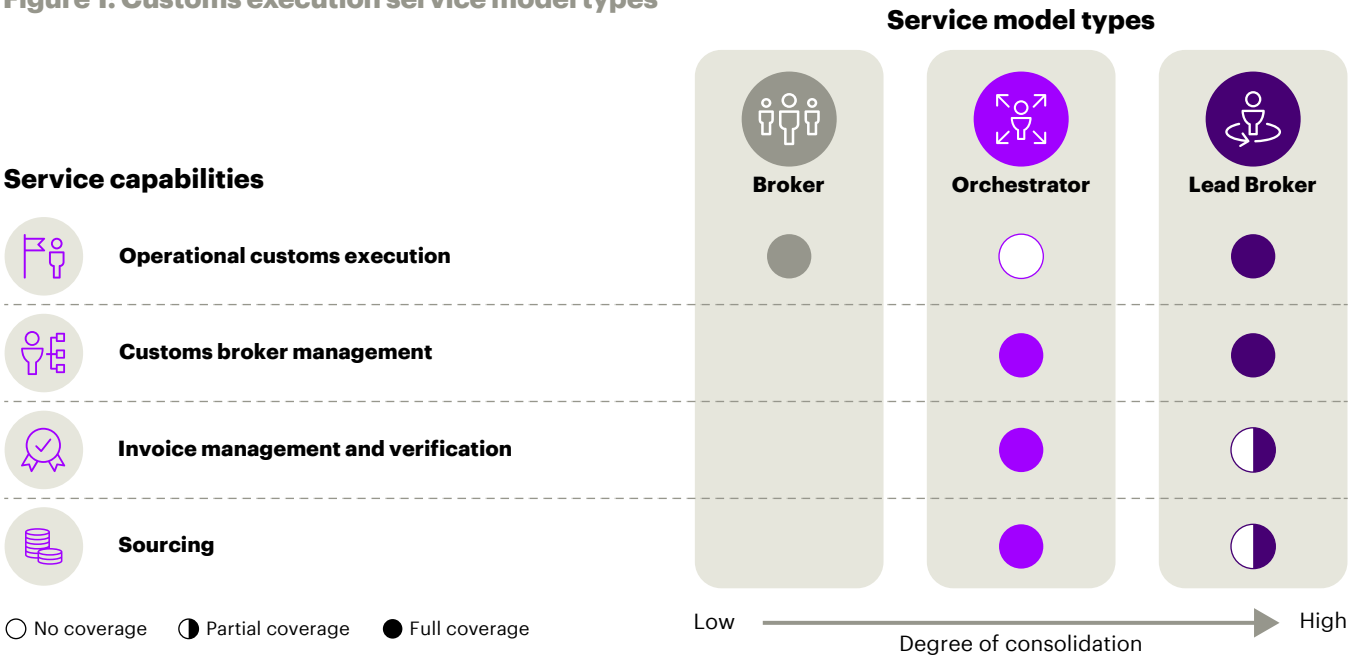
Step 1: Define a strategy for your customs service model

To navigate the complexities of the customs clearance process, companies need to find the right partner. Filling out a customs declaration, validating all the supporting documentation and data, and submitting it to the customs authorities is a process that is time consuming and requires specific knowledge for each country. Globally, more than 550 million export and import declarations were submitted in 2019, and the number is expected to increase significantly according to Maersk, a global shipping company.^{5,6}

Customs brokers offer their services to companies by acting as intermediaries between traders and customs authorities in the clearance process. There are three main services model types covering different service capabilities as shown in Figure 1.

The **Broker** focuses exclusively on customs execution and supports customs clearance processes and all related activities (e.g. document management and duty payment). Depending on the geographic reach of a multinational company it may interact with up to 400

Figure 1: Customs execution service model types



individual brokers globally. This type of service can be expensive and impact visibility and process efficiency. The complexities and inefficiencies of the Broker model can be overcome with more sophisticated models, such as the Orchestrator or the Lead Broker models.

The **Orchestrator** as a service model focuses on the management of customs brokers, as well as invoice management and sourcing.

This contrasts with the **Lead Broker** model, in which a broker works regionally and also serves as an Orchestrator for third parties who are contracted in countries where the Lead Broker is not present.

Both service model types help companies gain efficiencies in steering customs activities because they significantly reduce the number of external partners a multinational company interacts with, and they increase the end-to-end visibility of foreign trade. In the Orchestrator service model, companies still use multiple customs brokers to perform operational customs clearance activities. This contrasts with the Lead Broker model, in which the Lead Broker is also accountable for operational customs execution at the border. This means the Lead Broker has more ability to consolidate its capabilities, which can lead to increased process standardization and harmonization. Depending on the characteristics of each region, a company can decide to use an Orchestrator in one region (e.g. Europe) and a Lead Broker in another (e.g. North America).

Step 2: Establish systems integration

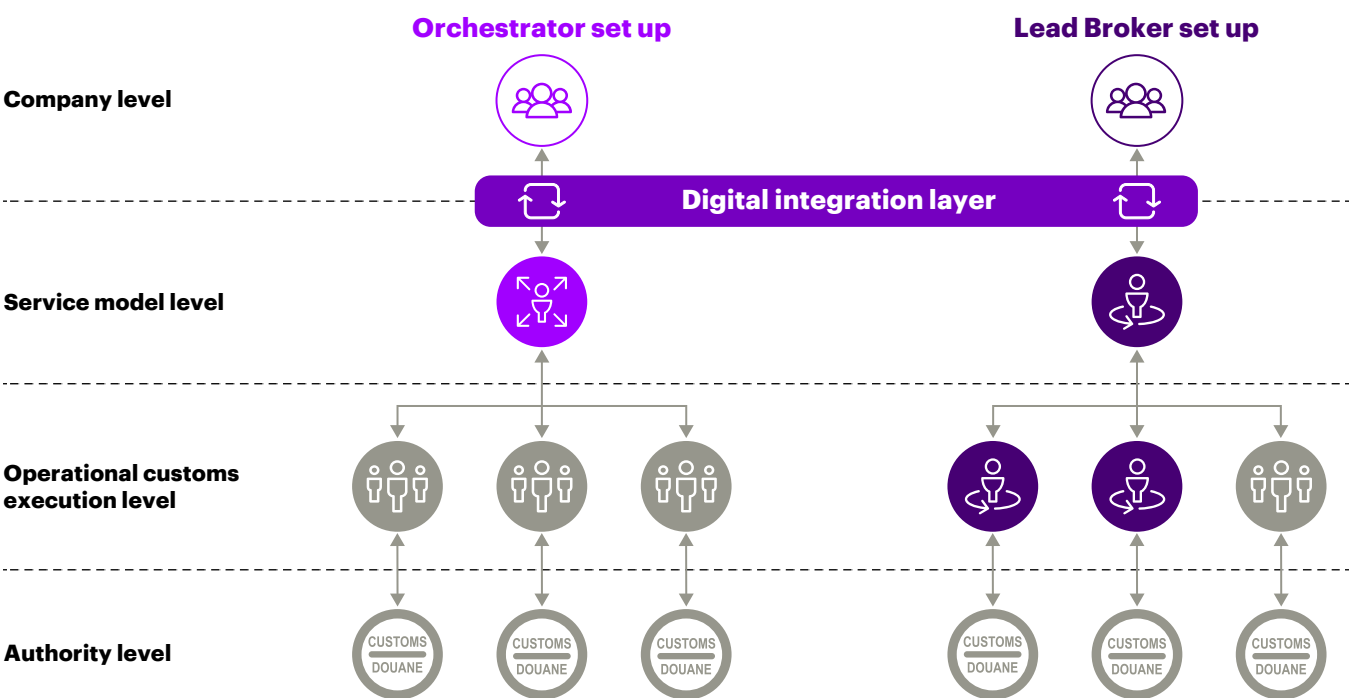
Once the customs service model type is decided, companies need to integrate the systems of the selected Orchestrator and/or Lead Broker with their own internal systems. A key benefit is that with the Orchestrator and/or Lead Broker setup, a multinational company reduces the number of connections with external parties, resulting in lower investment and maintenance costs for systems. In the traditional model of directly interacting with the broker, such a global connectivity setup might not even be feasible, given the large number of external partners.

The best practice is to use the same integration layer as for logistics, given the process interdependencies across functions. This will allow an easy and frictionless transmission of customs execution data (e.g. milestones, costs) and documents between all relevant parties. Every time goods are to cross the border, the exporting/importing company will provide all relevant data to the Orchestrator or Lead Broker electronically, who then transmits the information to customs brokers or the customs authority. With this two-way communication, data can also flow back to the system of the importing/exporting company, ultimately providing end-to-end customs visibility. The high-level integration setup is shown in Figure 2.

Step 3: Gain actionable insights from data

Once system integration is established, the company has enhanced end-to-end visibility of the customs process and to a broader extent the logistics process. A tailored analytics strategy can help companies make

Figure 2: Customs execution service model set ups



use of this data to measure KPIs (e.g. data such as planned customs clearance date vs. actual customs clearance date) and create actionable insights. This will enable the company's customs and foreign trade department to become a proactive internal partner within the supply chain ecosystem. For example, the data will help companies identify bottlenecks in the supply chain that were not visible before. The insights can then be used to provide recommendations and support decision making, leading to more efficient import and export processes and fewer disruptions in international trade flows.

The benefits of a lean and integrated customs operating model

A proactive involvement of the customs function is a central component of a 360-degree supply chain optimization approach. However, supply chain managers often underestimate its importance. Companies can optimize the customs operating model to become more efficient. While customs clearance and broker management are just one part of the foreign trade process, it is a highly complex one that can easily become a bottleneck for trade flows, impacting both revenues and operational costs. Companies that have restructured their broker landscape by implementing an Orchestrator and/or Lead Broker service model and integrated systems will benefit from lower operational costs and increased performance. Figure 3 shows the benefits achieved by a chemical company active in +100 countries and revenues of 12 billion dollars that transformed its customs operating model by following the three steps presented in this article.

References

¹ World Trade Organization 2020, World Trade Statistical Review 2020
² CEP Research 2021, UPS suspends Amazon UK-EU deliveries amid post-Brexit delays
³ Bloomberg 2020, Tesla and Heinz Hit Brexit Snag When Customs Capacity Runs Out
⁴ Simon J. Evenett 2019, Journal of International Business Policy, Protectionism, state discrimination, and international business since the onset of the Global Financial Crisis
⁵ World Customs Organization 2020, WCO Annual report 2019-2020
⁶ Maersk 2021, Brexit made easy



Key contact

Christoph Tobler
Senior Manager
Supply Chain & Operations Strategy
christoph.tobler@accenture.com

Authors

Christoph Tobler, Diego Freiermuth

Interested in more?

Click **here** or follow the QR code for further insights.

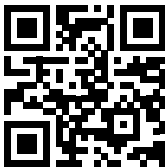
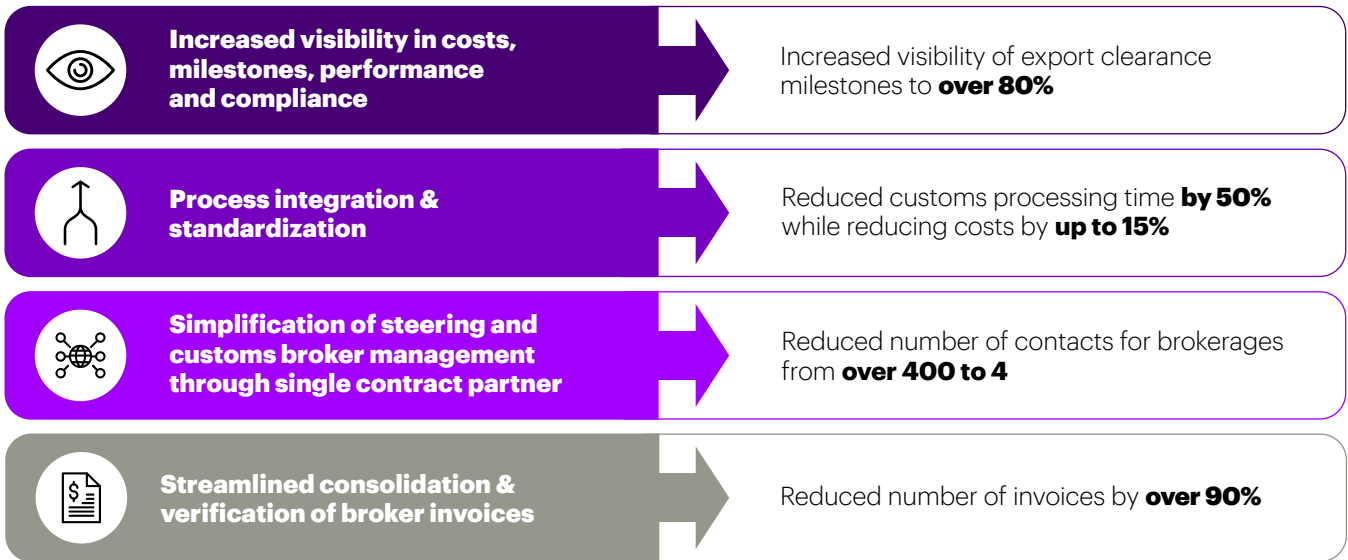


Figure 3: Delivered benefits



About Accenture

Accenture is a global professional services company with leading capabilities in digital, cloud and security. Combining unmatched experience and specialized skills across more than 40 industries, we offer Strategy and Consulting, Interactive, Technology and Operations services—all powered by the world's largest network of Advanced Technology and Intelligent Operations centers. Our 569,000 people deliver on the promise of technology and human ingenuity every day, serving clients in more than 120 countries. We embrace the power of change to create value and shared success for our clients, people, shareholders, partners and communities. Visit us at www.accenture.com.