Advanced Industries Practice

Implementing a digital transformation at industrial companies

Six building blocks can help industrial companies create a strong digital strategy and generate top value from digitization.

by Chris Angevine, Jacklyne Keomany, Jannick Thomsen, and Rodney Zemmel

Industrial companies have long trailed behind retailers and other B2C players when it comes to digitizing their marketing and sales operations, but they are now on the cusp of change. With the COVID-19 pandemic forcing workers to stay home and limiting in-person interactions, digital solutions are now essential to customer outreach and support. In fact, a recent McKinsey survey showed that two-thirds of B2B customers prefer remote human assistance or digital self-service when making a purchase.[1] What's more, 80 percent of B2B leaders said that omnichannel sales were equally or more effective than traditional methods.[2]

As we discussed in our earlier article, "Creating strong digital B2B channels at industrial companies," most players in this sector have yet to accelerate their digitization efforts or establish a strong online presence. But our analysis of 350 industrial companies shows that digital leaders—those that made early investments in automation, e-commerce, and other areas—have already achieved revenues and total returns to shareholders (TRS) that were higher than those of digital laggards. For companies in the top performance quartile, the digital leaders had a TRS of 47 percent in 2020, compared with 27 percent for their peers.

Other industrials can still become early adopters and obtain a first-mover advantage within their sector—a significant benefit in an area where the winners often take all. Although embarking on a digital journey may seem overwhelming and intimidating, six building blocks can help industrials implement a successful end-to-end transformation that goes far beyond simple technology upgrades (Exhibit 1). These elements, which have been successfully applied across industries, can help industrial companies transform their culture, organization, and technology systems, allowing them to enhance services for their diverse customer base.

Exhibit 1

Six building blocks can help industrials succeed at digitization.

Building blocks of digital transformation

1 Create a business-led technology road map	2 Develop and upskill talent	3 Adopt an agile delivery methodology	4 Shift to a modern technology environment	5 Focus on data management and enrichment	6 Drive the adoption and scaling of digital initiatives
Develop and align on a digital vision for the organization, always considering the impact on distributors	Identify talent needs and strategies for filling any gaps. Create new organizational structures to integrate digital talent, and leverage digital learning programs, technology, and external sources to develop talent	Rapidly test digital campaigns and make revisions based on insights gleaned from the field	Create new technology that covers areas including commerce backbone services, front ends, and integration architecture	Consider data-related issues in strategic road maps, such as architecture requirements, and identify specific use cases that will benefit from analytics	Scale change across the organization, with a focus on product, service, and order fulfillment; commercial strategy and execution; and customer service and transactions

[1] Liz Harrison, Dennis Spillecke, Jennifer Stanley, and Jenny Tsai, "Omnichannel in B2B sales: The new normal in a year that has been anything but," March 15, 2021, McKinsey.com.
[2] Ibid.

Creating a business-led technology road map

Before pursuing digital opportunities, leaders must first develop and align on a digital vision for their organization, looking at both the overall digital strategy and value proposition for their companies. They should begin by assessing their capabilities, estimating the resources required, and contemplating potential partnerships that could help them achieve their goals. Other practical issues include the feasibility of the proposed initiatives and their potential value. The basic question underlying all strategic plans is this: How can digital help us transform core business processes or generate new opportunities?

When developing the road map, industrial companies should consider the strategic implications for the incumbent business, including disruptions to any offline distribution channels as digital sales grow. Companies should also address the inevitable channel conflicts in the strategic road map by acknowledging the risks, evaluating the potential impact, and creating a path forward to mitigate any issues. For instance, companies should determine what roles they expect the distributors to play with the new digital channels. Some may decide to eliminate distributors and conduct all business through e-commerce while others may keep offline and online channels. Those that take the latter route can take various steps to mitigate channel conflicts, such as limiting digital channels to lead generation or supporting the development of online platforms for distributors.

Based on the selected digital strategy, companies should consider new engagement, transaction, and fulfillment rules, such as which customers will engage in direct transactions with them and which will be served through distributors or third-party logistics providers. Likewise, they must decide which products will be sold through online platforms, including the specific types and quantities.

Distributor management is also essential. In addition to determining how the new platforms can enable distributor growth, industrials should decide which distributors will be their close partners on these platforms. Some distributors may only be granted access to data analytics, while others will benefit from having customers rerouted to them through the platform for specific parts or services.

If a company decides to enable both online and offline distributor channels, industrials must clearly communicate their online strategy to distributors and support them during the transition. They must also be able to identify whether the customers who land on their platform have existing, offline relationships with distributors. Otherwise, long-time customers might be paired with new distributors who don't understand their needs and protocols, resulting in a subpar experience. For new customers, companies should first determine if they want to serve them directly or encourage a relationship with distributors. If companies do send new business to distributors, the algorithms running their e-commerce sites must be able to identify appropriate partners. For instance, they should be programmed to select a distributor based on the customer's size, geographic location, and other factors.

Finally, any solid digital strategy will consider pricing issues, such as what pre-log-in prices—if any—will be available to all website visitors. This decision can be difficult because B2B pricing can vary widely depending on various factors, including a company's strategic relationship with a customer and the requested order size. (After customers log in, they may see a different price). In B2C, where pricing is fairly standard, pre-log-in prices are less important.

Developing and upskilling talent

Before implementing their road map, leaders of industrial companies must identify the key roles

necessary for a digital organization and then build their internal talent. Their efforts should encompass the following areas:

— *Strategy.* Leaders of industrial companies should first evaluate their talent needs and identify gaps, looking at both immediate and long-term needs. They should then determine if they can fill any spaces by upskilling employees, forming strategic partnerships, or recruiting external hires. For best results, company incentive systems should encourage employees to achieve their digital goals (for instance, rewarding sales groups for generating a certain portion of revenue from online sales). While some companies may redesign their entire talent strategy, others will focus on select groups or business lines. Taking an approach drawn from venture-capital players, industrials can reinvest any returns from their digital growth initiatives into new programs to continue developing their online presence and technological capabilities.

— *Structure.* Industrials will need a new structure and deployment model to integrate any new digital team members into the organization. They may want to consider creating a new role, directly reporting to the CEO, that oversees digital initiatives. At some companies, the title for this role may be chief growth officer or chief digital officer. Major responsibilities will include reducing costs and generating real impact from digital initiatives throughout the end-to-end customer journey. As part of this effort, the executive must establish metrics for e-commerce, such as those related to acquiring new users, increasing convert-to-purchase rates, and improving lifetime value from customers by raising retention. While e-commerce teams will have some responsibility for delivering results on these metrics, core business roles, such as those in sales, marketing, and operations, will also be involved.

— *Skills.* Industrials should introduce digital-learning programs to increase knowledge and capabilities across the organization. They should also encourage employees to embrace a growth mindset that enables continuous learning and breaks them out of fixed routines. Constant experimentation will become the norm as companies shift to a learn-and-pivot mindset that makes it safe to fail.

— *Systems.* Modernized systems and applications, such as workflow-management tools, help reduce onboarding time for new employees, increase productivity, and decrease human errors. Digital employees can leverage these technologies to increase client engagement and optimize sales and marketing.

— *Signals.* The best companies will leverage external sources, including their business partners, to enhance capabilities and promote additional cultural shifts along the entire value chain. For instance, they could invite external thought leaders to speak to employees about innovation and growth. These events and similar initiatives should occur frequently to keep the focus on continuous learning.

Adopting an agile delivery methodology

Moving to an agile model requires change at all levels. While top leaders may be accustomed to setting strategy independently, an agile workplace requires a more collaborative approach and frequent meetings with other managers. And rather than having functions work in isolation, interdisciplinary teams will share ideas and information. Companies must also create an environment that makes it possible to test new approaches or technologies quickly and then iteratively make improvements based on customer feedback, all while managing risks.

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A B2B packaging company recently wanted to deliver an e-commerce platform to interact with customers directly. One major objective was to provide a low-cost channel to serve small and medium-size businesses that had been historically overlooked by the sales force because they delivered relatively low returns. To ensure the new platform best reflected customers' needs and to minimize waste, the company assembled a cross-functional agile team from commercial, supply chain, design, and technology and began the program with a series of concept sprints. During the sprints, the team interviewed customers; observed how they purchased packaging; and made notes about their behaviors, needs, pain points, and emotions. The company then gathered even richer details through larger-scale surveys.

Using this fact base, the team hosted an ideation workshop with other stakeholders to collectively determine how the company could improve the customer's end-to-end purchasing journey. With the ideas generated, the designers sketched out future-state solutions and worked with the engineers to build a clickable prototype to gather customer feedback. They found that customers valued easy search capabilities, transparency about

lead times, and access to their order history. The resulting insights helped the company understand their customers more thoroughly before it embarked on another round of idea generation and solution design. Eventually, the company aligned on a vision for an enterprise grade e-commerce solution that met all customer objectives and successfully vetted it in the field.

Shifting to a modern technology environment

New technology capabilities form the foundation of any digital transformation. Ideally, industrials will describe these capabilities in their road map, providing specific details about various areas, including commerce backbone services, front ends, integration architecture, front- and back-end integration, digital platforms for development and operations, software as a service, custom (micro) services, and data-intensive services. To facilitate rapid scale-up, companies should try to draw on legacy systems when building new capabilities, rather than replace them entirely.

As companies evaluate their application and data infrastructure, they should identify gaps that might

prevent them from achieving their digital vision, as well as potential opportunities. One industrial company that took this step identified significant capability gaps related to A/B testing, campaign management, real-time bidding on search-engine marketing, and customer data platforms. Its research helped determine where the company should focus its technology-modernization efforts over the next one to two years.

Focusing on data management and enrichment

Most industrials encounter some common challenges as they mine their data for insights. Much of their information may only be available in aggregate form, for instance, or there may be inconsistent processes for managing and integrating data flows. Most processes, including those that link data, may be hardwired in individual systems that have minimal or weak connectivity to others. Many systems only enable batch processing overnight and issue standard reports, either in Excel or executed through a non-user-friendly business-intelligence tool. Such legacy technology and storage systems are costly, despite their many drawbacks.

Without robust, data-driven insights, most industrials have difficulty identifying priority actions and finding synergies across business lines. To reverse this situation, companies should consider data-related issues in their road maps. What are the data-architecture requirements and how can they resolve any gaps? What sort of data governance is essential? And how should they prioritize data solutions?

Companies will also improve data management if they focus on identifying specific use cases that will benefit from analytics and define how they will collect, store, present, and use customer information. One industrial identified 22 analytics use cases relevant to its e-commerce platform that fell into four categories:

— product innovation, such as developing more attractive features

— journey analytics, including those related to conversion and bundling

— marketing and sales (for example, dynamic pricing)

— supply chain, such as better delivery-time prediction

Other companies can follow this example by uniting customer, product, sales, and transaction data into a solid foundation that yields meaningful insights. For example, if companies have data on how customers actually use their products in the field, the information can help engineers who are attempting to enhance different features. Service requests can likewise provide important information that informs product design.

Driving the adoption and scaling of digital initiatives

While digital pilots may produce solid returns, industrials must implement programs across the entire organization to drive real impact. Scale-up will require new enterprise-wide business processes. Since traditional channels, including in-person interactions, will remain important, industrials will also need to manage potential conflicts as their online presence grows. Overall, changes must occur in three categories (Exhibit 2):

— *Product, service offer, and order fulfillment.* For products and services, companies can create simple, standardized online offerings, as well as related services, to expedite ordering. They also need a new supply-chain strategy that increases transparency during order tracking. B2B supply chains don't have to reach the same standards as large retail giants right away, but they should be able to tell customers when their shipment will be ready. In all cases,

Exhibit 2

To succeed at digitization, industrials must change processes in three categories.

Main business processes to update

	Product, service offer, and order fulfillment	Commercial strategy and execution	Customer service and transactions
Primary	• Product and service offer • Order fulfillment	• Channel partner management • Pricing • Sales incentives and crediting	• Customer service issue resolution
Secondary	• Master data, including contracts and creation of new accounts	• Customer onboarding • Sales analytics • Customer, sales commissions, and change management	• Transactions/finance (accounts receivable, credit check, credit cards, tax, collections)

they should at least be able to provide the same level of transparency about shipment dates as they do with their offline orders. Eventually, B2B companies should strive to provide real-time updates about order status.

For all master data—information about contracts, new accounts, and other important areas—industrials must improve governance. They should also ensure that the data are "clean," meaning they are accurate and complete. Without these controls, industrials will have difficulty guaranteeing the integrity of customer and product information.

— *Commercial strategy and execution.* Important moves in this area include creating the new distributor and pricing guidelines, as discussed earlier, and revising sales incentives to encourage the shift to e-commerce. One strategy might involve providing higher commissions for any sales made through online channels, for example. With so many shifts occurring, industrials will benefit from

a solid change-management plan, as well as internal and external communications about e-commerce options.

— *Customer service and transactions.* Companies must create a streamlined process for resolving issues and simplify their financial processes (for instance, tax reporting and credit checks) to provide a smooth customer experience. They should also quickly enable online credit-card payments since most buyers now expect this convenience. While virtually all B2C players and many B2B companies already accept online payments, industrials have lagged behind in this area.

The adoption and scaling phase is typically the most difficult part of any digitization effort. To succeed, industrial companies must constantly reevaluate their priorities for domains, value levers, solutions, and use cases. If there are any changes, they should shift funding and resources across the portfolio to align with their new goals—for instance, moving funding to business areas or geographies

where they would like to achieve scale most rapidly. Teams should assign clear owners for digital tasks, sometimes adding or adjusting roles, and they should keep top leaders involved to ensure that the company's strategy and business processes fully support any digital programs.

Guiding principles

While all these building blocks are essential to digitization, they will not guarantee success. Industrials must also adopt a new mindset about transformations. When implementing change, they should focus on creating an integrated digital ecosystem, rather than developing siloed solutions for individual building blocks. One team should oversee all digital initiatives and serve as an air-traffic controller to coordinate the many moving parts. It will own the program and transform the company culture, processes, and operating model, always keeping the focus on the business and customer needs.

Industrials must accept that they can't undertake such a complex transformation alone. While they may be accustomed to working independently, they should consider engaging external experts and platform partners that have digitization experience in other industries. Such collaborations will help them avoid many common pitfalls that companies encounter when they begin to undertake digitization efforts, increase value, and reduce time to impact.

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Industrials may lag behind other B2B companies in digitization, but this could be an advantage. Rather than reinventing the wheel, they can develop best-practice programs that draw on insights gained from companies in other sectors. But industrials must move quickly from the planning phase to implementation to achieve a first-mover advantage and capture value from customers who are eager to find businesses that offer a seamless multichannel experience. Companies that rely on the building blocks described in this article are most likely to make the leap successfully and to maintain their momentum.

Chris Angevine is a partner in McKinsey's Atlanta office, **Jacklyne Keomany** is a consultant in the Chicago office, and **Jannick Thomsen** is a partner in the New York office, where **Rodney Zemmel** is a senior partner.