



Your Guide to Building a Digital Advantage in Industry

E-BOOK

Contents

Scale Digitally in the Next Normal	3
Exploit the Incumbent's Advantage	4
A Framework for Scaling Digital	5
Why Scale Digital?	6
Enable Digital Experiences	6
Drive Operations Excellence	8
What Does Scaling Digital Involve?	11
Modernize Your Digital Core	11
Become a Data-Driven Organization	13
How Can You Scale Digital To Achieve Your Goals?	16
Accelerate Digital Innovation	17
Partner With a Digital Enabler	18
Summary	20

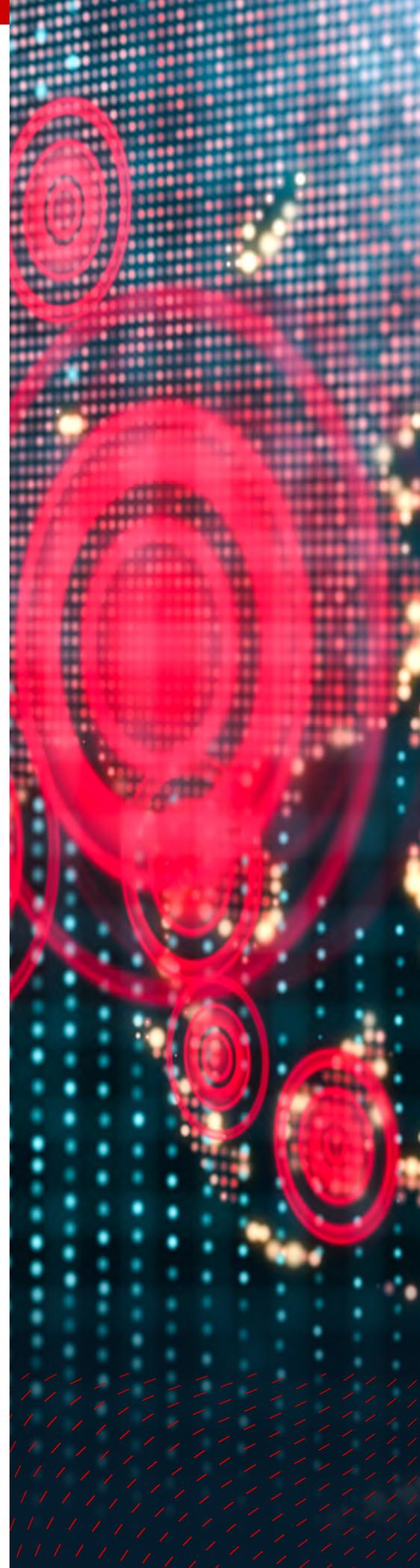


Scale Digitally in the Next Normal

The pace of change has accelerated significantly, causing ongoing market and industry disruption. Companies are working hard to ensure the safety of their employees and customers, enable remote work models and stabilize business operations. They are striving to strengthen customer and employee engagement in a market environment that no one can predict from one day to the next.

C-level leaders realize that they need to create greater organizational agility to proactively respond to new challenges and opportunities in today's fluid business environment. More than ever before, businesses need hyperconnected environments and experiences powered by artificial intelligence (AI), machine learning (ML), business analytics and other tools that allow business processes to be optimized and improved.

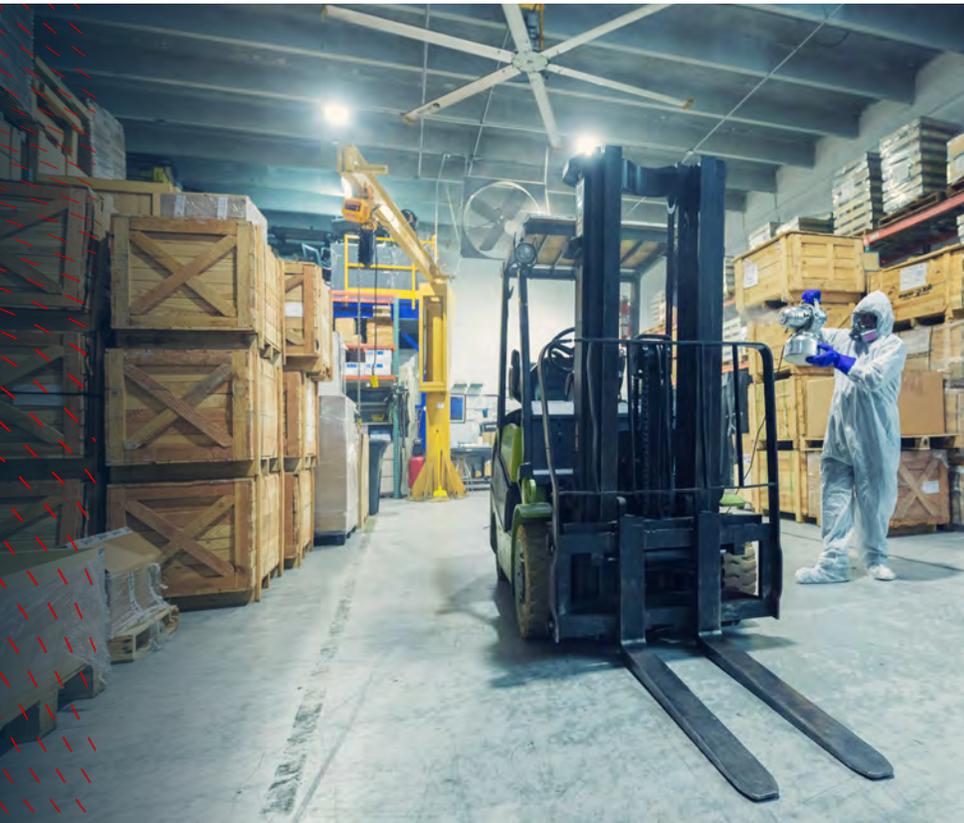
Welcome to the new normal. For companies everywhere, the recent pandemic is now the business case for accelerating digital transformation.



Exploit the Incumbent's Advantage

The “new normal” has added another dimension to this competitive environment: You must be dynamic and adjust in real time to meet market demands and needs. Although many companies realize that they have to digitally transform to be relevant and present in the new normal, they are still challenged by the question of prioritization.

Industry companies that succeed with digital do so because they have embedded it in the core of their business. When you do the same, you can absorb and fully exploit new technology and architectures, unlock data wherever it lives (on the edge, in core operations and in the cloud), and transform your business model in real time. This allows you to create greater agility and respond faster to dynamic market environments.



\$900 Billion

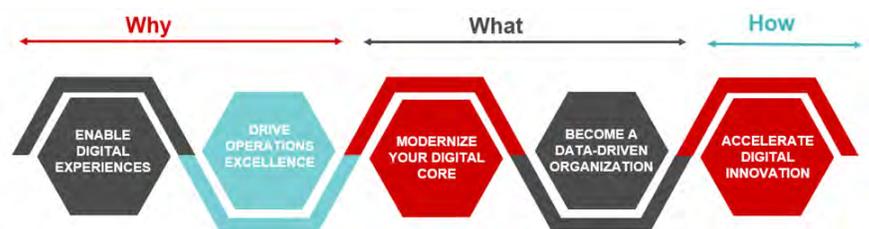
Some \$900 billion in digital transformation spending was wasted¹ in 2018 due to poorly designed programs.



A Framework for Scaling Digital

Your business priorities will determine exactly where you begin your digital scaling initiative. However, to build a sustainable advantage by leveraging data, cloud-based analytics and advanced technology, we recommend the following repeatable framework.

- 1. Answer your “why” questions.** This will help you prioritize the projects. Your business objectives can be centered around assets, people, processes and operational efficiencies, so think about:
 - Enabling digital experiences.
 - Driving operations excellence.
- 2. Consider what you need to change.** Now that you know why you’re transforming, determine which fundamental technical priorities will lay a good foundation for your digital objectives. Look through the lens of long-term digital strategy rather than a single digital project. Think about:
 - Modernizing your digital core.
 - Becoming a data-driven organization.
- 3. Determine how you’re going to accomplish your goal.** How will you scale this digital transformation across your organization and achieve your other digital imperatives? This is about putting in place a repeatable digital methodology and structure that scales and flexes to adapt to your ever-changing business and customer needs. It’s about accelerating digital innovation.



\$700
Million

Your Business Case for CX

Companies that make
\$1 billion a year can earn
an extra \$700 million over
3 years² by investing in the
customer experience.

Why Scale Digital?

Start by doing some introspection. Why does scaling digital make sense for your company? What do you hope to accomplish? This section focuses on two of the most compelling reasons for digital transformation: enabling digital experiences and driving operations excellence.

1 Enable Digital Experiences

Perhaps your company started its digital transformation journey by focusing on customer experience (CX) initiatives. That makes sense because these initiatives drive top-line revenue. Customers naturally gravitate toward providers who can provide a frictionless experience, personalization and added value with digital services.

However, the common thinking about digital experiences (DX) has changed. Customers are no longer narrowly defined as business-to-business (B2B) and business-to-customer (B2C) buyers, but also include partners, suppliers and employees. DX is all about people and their digital journeys. In fact, everyone you connect with now expects an intuitive digital experience. DX across your company not only supports brand engagement and brand loyalty with your B2C customers, but it also can drive employee productivity and process efficiencies with digital employee, supplier and partner experiences. You'll want to optimize key processes so that all key stakeholders can interact effectively and productively across all the channels that they use.

Here are some specific ways to enable digital experiences.

Develop digital personas. Understanding who your stakeholders are and what their needs and pains are can help you focus on creating DX journeys designed specifically for them. Consider the needs of manufacturing plant managers: They need access to information such as orders, inventory levels, production and worker schedules, asset condition, logistics and more from mobile devices as they walk the production floor. Surfacing this data at the point of need is key to improving plant performance. Similarly, a B2B customer may use multiple channels to interact with an industrial company, from sales and marketing to just-in-time production, logistics and receiving. When you integrate all key channels, you get a full picture of customer behavior and any broken processes that should be addressed.



Enhance digital sales and marketing. Advances in technology make it easier than ever to sell complex, multimillion-dollar B2B products and services. Virtual reality, augmented reality and digital-twin technology let your customers explore your new solutions in their full business and production context. Think about the smart cities trend: These complex, multibillion-dollar initiatives are partnerships between governments and technology providers, who must consider the needs, movements and interactions of a complex group of stakeholders, including government agencies, transportation and other service providers, businesses and residents. Using digital-twin technology, a governmental buyer could model how residents would use community, services such as public transportation, city parks and more. For example, these investments and designing services could be prioritized to optimize movement for work, life and play.

Build an omnichannel experience. You can capture and integrate customer, product, service and business data, combining it with big data sources, such as online search, social sentiment and more. By integrating it in a single data platform, you can create a 360-degree view of your customers across all the channels that they use. You can use these customer insights to sense and respond to market trends and changing customer behavior. For example, a transportation company could partner with a retailer to move poorly selling items from one geography to another, where they would sell faster and at higher prices. Similarly, a manufacturer sensing uncharacteristically high demand of an evergreen product, such as bleach wipes or snack foods, could rapidly scale production and logistics.

Create smart spaces. Creating smart spaces by using sensors, connected equipment and AI can transform the spaces in which we live and work. In your facilities, smart spaces can align power, heating and cooling to user and production needs, enhancing comfort, providing technology services at the point of need, and reducing energy waste. In your plants, you can use connected equipment, robotics and automation to streamline production and analytics. Similarly, video and 3D lidar can reveal how your workforce uses spaces, enabling you to make changes that increase throughput or improve worker safety.

Support Scaling With Conversational Chatbots

Many businesses are taking advantage of AI-enabled conversational chatbots as a way to scale their response to demand for information from both customers and employees. Especially now, during the pandemic, many call centers and internal teams can't handle the workload, and their organizations don't have the time or money to scale with people. Chatbots easily scale to carry the load, and they can be made available in omnichannel experiences spanning web, mobile and social media channels, as well as via virtual assistants, such as Amazon Alexa and Apple's Siri.

A Focus on the Automotive Industry

A very large Japanese automotive manufacturer and CX pioneer wanted to create a unified view of automotive customer data to provide a holistic experience and foster brand loyalty. The company worked with Hitachi Vantara to create an owners' platform that gave customers a one-stop shop, including:

- One source for relevant, personalized data regarding each owner's vehicle, brand information, owner benefits and more.
- Aggregated utilitarian and community features.
- Login, forums, groups, search, content management, document management and many more features.
- Access to manuals, safety campaigns, services and dealer information.
- A timeline feature aggregating all past, current and future milestones on a per-vehicle basis.

Prioritize health and safety. The COVID-19 pandemic has changed the game for companies, making it imperative to protect workers on job sites. Ensuring the health and safety of your workers is critical to maintaining your pace of operations and ensuring business continuity. You can use 3D lidar or thermal imaging cameras to scan employees for evidence of elevated temperature as they arrive for work and leave each day. Because this technology doesn't collect any personally identifiable information, it can also be used in private spaces to monitor handwashing compliance: It can inform your efforts to create programs to educate workers on the importance of effective health and sanitation. It also can be used to monitor the movement of your workforce to enforce social distancing norms or redesign workspaces for lower population density.

Digitalize products and services. Many companies have moved from selling assets to selling connected equipment and data as a service. Assets provide a continuous stream of information about their location and condition that companies can use to improve their management, schedule maintenance and automate upgrades. When you deliver data as a service (DaaS) to customers you deliver significant benefits. DaaS lets you not only drive ongoing subscription revenues, the ultimate object of stable revenues, but also use data to improve product upselling and cross-selling, schedule asset maintenance and drive product innovation.

Enhance field services. Digital tools, such as route planning and schedule optimization tools, help your field force drive throughput. Meanwhile, data from handhelds and connected equipment allows your staff to connect to critical information and services on the job site. All of this adds up to a better customer experience, where repairs are done on schedule and at first touch.

2 Drive Operations Excellence

The other top reason to digitally transform is to bring your operations up to the level required by today's new normal. Before the pandemic, digital transformation was fast becoming an imperative. Today, the rapid and unprecedented changes the crisis has created have accelerated that imperative by at least two years. Your operations need to be able to respond to real-time market demands and just-in-time adjustments. Success in the new normal is all about expecting the unexpected and rapidly adjusting your processes and systems to it.

Industrial companies already possess a magic elixir for digital transformation: They are process-intensive and data-rich. Now, they are also living laboratories for operational optimization. Thanks to wireless connectivity,

\$2.3 Trillion

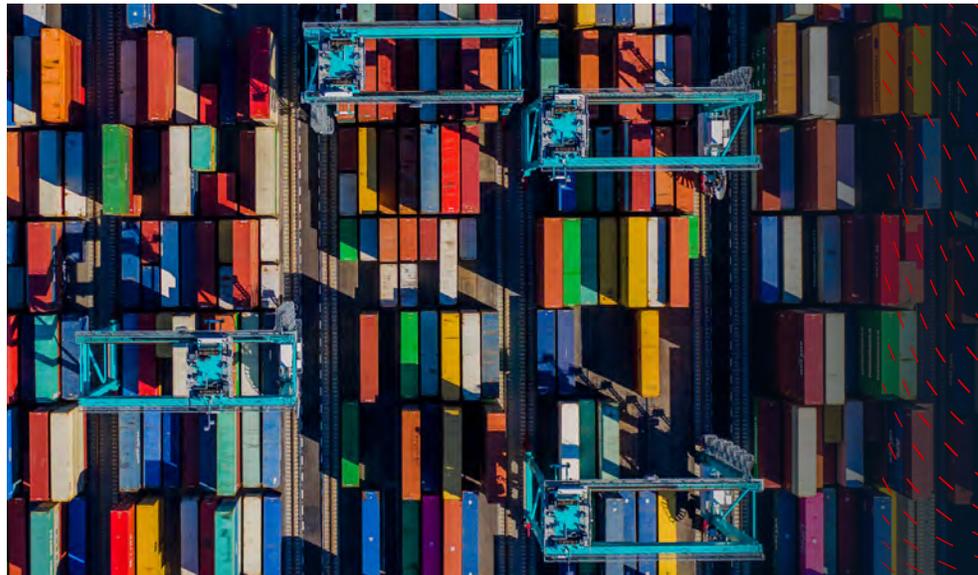
Worldwide spending on digital transformation will reach \$2.3 trillion in 2023³ and will account for 53% of all information and communications technology spending.

the falling prices of sensors, and simplified internet-of-things (IoT) low-code or no-code platforms, you can connect all your operational and technology assets to develop systems of intelligence. When you apply AI and ML to this data, you gain insights you can use to transform performance.

Operational transformation can prepare your business to meet the demands of the new normal when you:

Create hyperconnected systems and processes. Connecting the manufacturing execution systems you use on production floors to your enterprise resource planning (ERP) and customer relationship management (CRM) systems can give you valuable insights across your business. With this “digital thread,” or complete visibility into data, you can build end-to-end processes, such as quote-to-cash, or drive operational efficiency programs.

Get a 360-degree view of assets and production. With the insights generated by hyperconnected systems, you can blend human, machine and IT data to gain a holistic view of operations and assets. You can use these insights to improve processes such as production scheduling, raw material ordering, asset maintenance and more.



Build predictability into your processes and operations. [Digital models of physical systems](#)⁴, also known as digital twins, help you to analyze complex systems and their interactions between people, processes, systems and places. Your teams can use these insights to identify gaps and faults in equipment that aren't readily detectable, model the impact of changes before making them, and transform maintenance programs, among other gains. For example, manufacturers can combine digital twins with video, 3D lidar and connected equipment to guide technicians to machines needing repairs, as well as assist with issue diagnosis.

Optimize your supply chain. Meeting market demand in the new normal requires a faster and more efficient supply chain. Use advanced technology to connect systems and networks and share market and customer intelligence across your value chain. Always-on, intelligent supply chains can automatically order new raw materials, schedule production and logistics, and match product distribution and logistics to local market demand. Meanwhile, robots can increase production throughput and work alongside workers as collaborative robots or cobots, increasing your business continuity. Connected B2B customers can auto-order products without any manual intervention, reducing purchasing friction and aligning production to actual needs to decrease waste due to overstocks.

A Focus on the Food Production Industry

Maple Leaf Foods, a leading consumer protein company, makes high-quality, innovative products under several national brands in Canada, the U.S. and Asia. The company wanted to create a modern, mobile digital experience for its plant operators and plant managers to help them improve operational efficiencies to boost yields and improve product quality.

Working with Hitachi Vantara, the team focused on bottleneck monitoring, worker effectivity, inventory levels and production scheduling, and leading indicators to improved yields. The team built the new experience using persona development, journey mapping, business process redesign for four use cases, mobile UX design, end-to-end solution design, IoT sensors/lidar/cameras, a cloud data lake, mobile IOS apps, and managed services. With their new digital experience, the company gained:

- Increased yield.
- Increased labor productivity.
- Increased yield predictability.
- Improved food product quality.

Reduce unplanned downtime with predictive maintenance. Connected machines provide a continuous stream of data that you can use to [schedule and guide preventive maintenance](#)⁵, reducing costly downtime. This data can also be used to improve other key processes, including enhancing production scheduling, performing root cause analyses, reducing spare parts inventory and enhancing employee safety. Ultimately, you will want to build AI and ML capabilities to enable self-healing, where equipment can self-diagnose issues and trigger automated repairs. Consider data centers, which enable mission-critical operations for their corporate users.





If equipment overheats, it could malfunction and cause outages across the multiple firms that depend on it. AI, analytics and sensors can monitor, analyze and self-correct temperature and airflow in data centers, protecting equipment, boosting storage capacities, and [saving more than a third on annual operating costs](#)⁶.

Improve asset efficiency and product quality with a smart factory.

Industrial companies can use smart factory technology like cloud services, IoT, cognitive computing, AI and ML to perform command-and-control functions across individual plants and facilities and broader networks. [Smart factory systems](#)⁷ dynamically ingest real-time information, immediately adapting processes to drive performance. They can improve asset efficiency by up to 20%, product quality by up to 30%, and safety and sustainability by 10%. Industrial companies that deploy smart factories can also reduce costs by 30%.

What Does Scaling Digital Involve?

Now that you know why scaling digital makes sense for your company, the next questions begin with “what.” What priorities should you focus on? What do you need to consider to make your transformation smooth and successful? The following recommendations fall into two phases: first modernizing your digital core, and then becoming a data-driven organization.

3 Modernize Your Digital Core

Many companies are going digital-first to increase agility and speed and unlock the business advantage of their data and processes. You need to develop an adaptive digital core of critical applications and infrastructure to power your business operations and customer interactions. Hybrid cloud will be the dominant operating model, with [91% of manufacturers saying it is their ideal IT model](#)⁸ for connecting their edge, data center and cloud environments and ensuring their performance, reliability and agility.

The following are some of the modernization efforts you should consider.

Develop a hybrid cloud strategy. You need to decide which systems stay on premises for greater control; which move to the public cloud to increase speed, scale and growth; and which move to the private cloud for performance, security and business continuity advantages. Some [56% of manufacturers are running enterprise applications in the private cloud](#)⁹ to protect their data and mission-critical operations.

Transform Technology Across Industries

For more real-world examples of how Hitachi Vantara transforms technology across industries, review these case studies.

Magyar Telekom¹⁶ consolidated its storage to one environment with virtualized hybrid-flash systems, to keep pace with 10% yearly data growth due to increased mobile device and online service use.

BOE Technology Group Company Limited¹⁷ moved from traditional PCs to a virtual desktop cloud to simplify IT management, scale with business growth and secure company data.

BOS¹⁸ replaced disparate, home-grown automotive production monitoring and management solutions with a centralized data visualization solution that provides global insight into data.

The SFS Group,¹⁹ mechanical fastening systems and precision-formed parts supplier, replaced an end-of-life data center solution with a highly flexible private cloud solution that is fully automated, integrated and converged.

The American Heart Association (AHA)²⁰ used cloud technology to architect a custom cardiovascular research environment, gain greater data visibility, and get enhanced collaboration tools.

Wiggle²¹ relied on Hitachi cloud solutions for the business intelligence, implementation skills and support it needed to transform from a small U.K. bike shop into a leading global online retailer.

Strengthen IT networks. Like other verticals, industrial companies have seen a tremendous surge in demand for VPN connections and cloud services, such as collaboration tools and online meetings, during COVID-19. IT leaders are taking a hard look at data center capacity and which workloads can now be moved to the cloud for greater scale.

Develop a modern architecture. Pivot from product-centric to customer-centric, service-oriented architectures that use loosely coupled microservices, containers and orchestration platforms like Kubernetes. These types of architecture empower your DevOps teams to innovate, future-proof application development, and gain cloud advantages like agility and speed. Partners can connect directly to your business processes via open APIs, making it easier than ever to optimize an entire value chain.

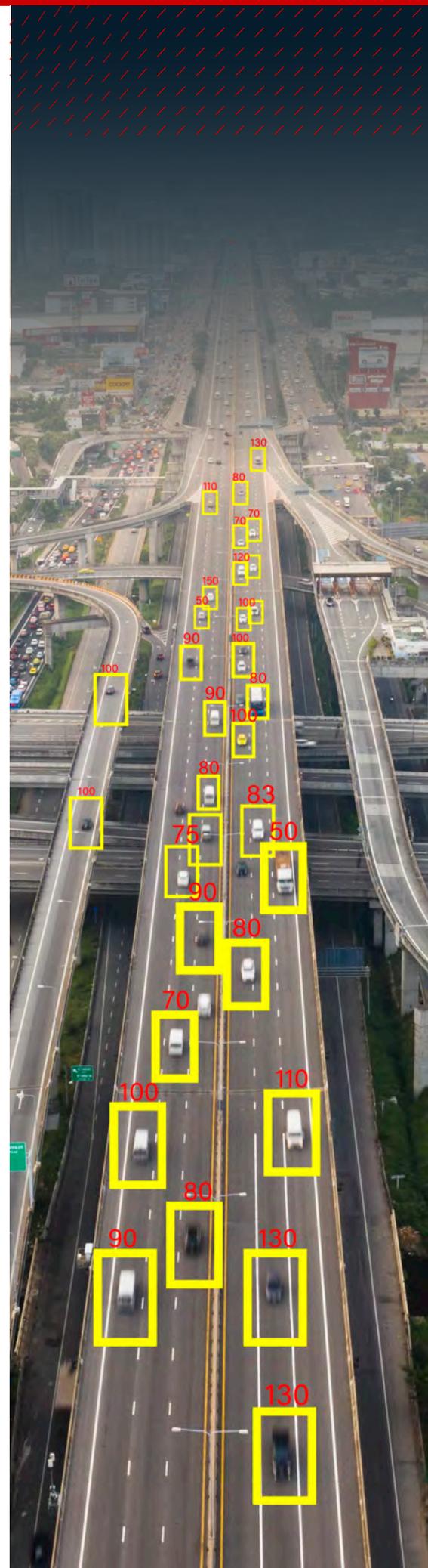
Transform your application portfolio. Evaluate your application portfolio and apply the 5R model, determining which can be rehosted, refactored, rearchitected, rebuilt and replaced. Rehosting (“lifting and shifting”) may be the right choice for applications that are needed but that don’t require code changes. You can simply migrate these legacy apps to the cloud in hours or days for fast access to key functionality. They can be used to drive business value right away, and then ultimately be replaced with intelligent cloud applications. Across your application portfolio transformation, the emphasis is on creating loosely coupled, reusable systems that can be constantly evolved as needed. When speed is of the essence, you can also simply connect to partners’ platforms via open APIs, gaining new capabilities without committing to the time and cost of building.

4 Become a Data-Driven Organization

With your cloud strategy in place, you know which applications to modernize. The next question is: What do you do with all of these consolidated applications and the data that’s flowing in from them and other sources?

You now possess a wealth of data you can use to drive your business forward: from creating new products and services to optimizing operations. IDC has found that [companies only analyze 2.5% of their data holdings](#).¹⁰ However, this data is often siloed or out of reach: trapped in business applications, processes, databases and equipment, among other locations. Though it’s easy to connect equipment with sensors, you need a scalable way to aggregate, integrate and transform this data, combining it with business and big data to create a full picture of your organizational and operational performance.

And data silos are not the only challenge you face. You also have organizational boundaries that make it difficult to provide key users with the data they need for decision-making. These users want to be able to combine historical and real-time business and operational data and big data to understand performance and implement predictive analytics.



Here are some ways in which your organization can meet these challenges.

Create an enterprise data strategy. It should be clear by now that you can't and shouldn't look at any of this without having a data strategy in mind. Many companies make decisions on only a fraction of their data, due to the complexity of integrating multiple data sources. Partners can help you develop an overall data strategy to create a single version of truth that all

The Current Disconnect With Data Analytics

A recent industry survey¹¹ found that:

- 80% of respondents said they need to perform analytics on more than 100 data sources.
- 92% said it takes them more than a day to provision a new data environment.
- 30% said it took them more than a week to generate analytics insights.
- More than half said it took them more than three days to generate these insights.

However, according to Gartner, "by 2022, more than half of major new business systems will incorporate continuous intelligence that uses real-time context data to improve decisions¹².

of your businesses can use. They can also help you prioritize use cases to build toward it and create a scalable data platform that can ingest, integrate and operationalize torrents of data.

Build a data-driven culture. Everyone in your company, from senior management to individual users, must understand the value of data and analytics mastery. Your teams must work together to develop the platform and internal competencies they need to harness data as a competitive asset.

Build an AI-first approach to everything you do. Data alone won't get you very far. But when you build AI into every application and process, your data

can give you the insights you need to drive operational efficiencies, support innovation and strategize for the future.

Connect the edge to the cloud and everything in between. Your data is increasingly being created at the edge: on connected equipment, user devices, third-party apps and cloud services. It's likely not cost-effective or desirable to move that data to a centralized location for processing. An edge-to-cloud data fabric can help you process that data where it exists and orchestrate data flows from the edge to the cloud and back. It delivers the



A Focus on the Plastics Industry

Kirchhoff Datensysteme Software¹³ has empowered business users with self-service analytics, with Hitachi's support. The new solution:

- Provides an open architecture that makes it easy to load and process data from multiple IT systems relevant to plastic compounding.
- Integrates data such as ERP, energy management, production planning and quality management.
- Lets users run reports such as gross profit analysis, production or idle time, and inventory, without IT support.

right data to the right place at the right time, through rich metadata, secure governance and policy-based orchestration.

Develop a DataOps function. Empower your data users with real-time access to critical data for analytics and decision-making. A strength of DataOps is that it is a collaborative data management practice. Data managers and data consumers alike benefit from the focus on communication and the integration and automation of data flows. You can achieve this benefit by building data pipelines and automating key processes such as data discovery, integration, transformation, cleansing, visualization, data lake onboarding, machine learning processes and analytics delivery.

Speed development cycles. Give your DevOps teams the environments, tools and processes they need to build and evolve apps more quickly.



Software is no longer issued as major releases, but instead may be refreshed as frequently as multiple times a day. Your customers expect and want this constant cadence of innovation, which provides new features and also increases environment stability.

Provide self-service capabilities. No-code analytics platforms are putting self-service capabilities in reach of business users, converting costly, data scientist-driven projects into simple, everyday occurrences. Imagine what you could achieve if business users in your organization were able to perform real-time analytics on your vast data wealth: Scale up to understand enterprise performance and drill down to the business function, product and service, and asset level for more granular insights.



How Can You Scale Digital To Achieve Your Goals?

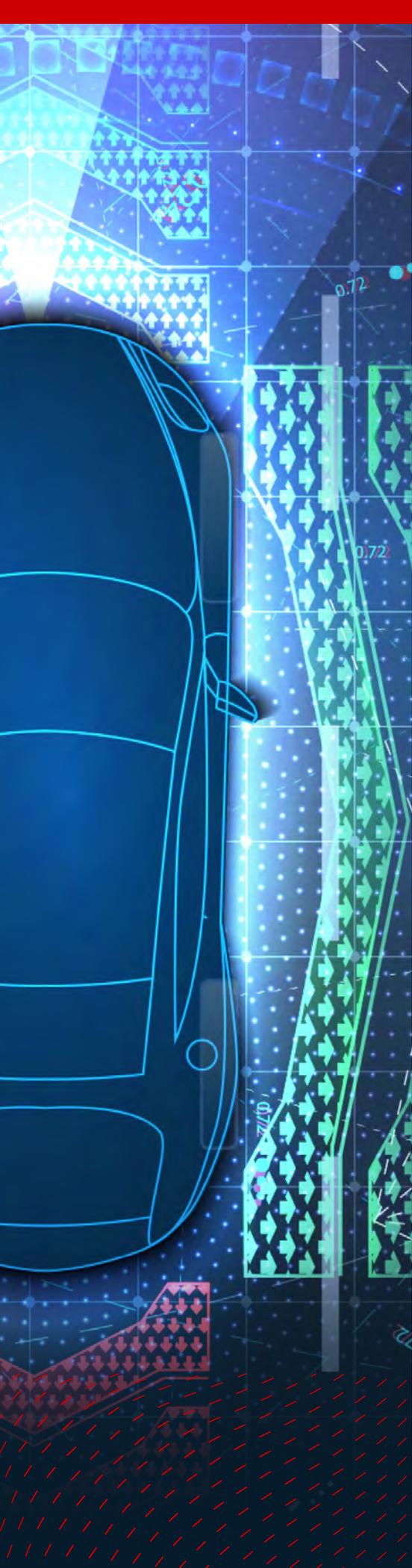
With the “why” and the “what” questions answered for your specific business, you’re ready to look at the biggest questions of all: How do you ensure that your digital transformation will scale to meet your customers’ demands and your company’s vision? What do you need to do to keep innovating in a scalable way?

Digital transformation can be understood as a continuum. It can start with operational effectiveness, which primarily focuses on doing existing things better (increasing operational efficiency, improving employee or customer

Secrets of Success

Companies successful at scaling digital share a number of characteristics.

- They plan early to manage people and organizational change. They understand that digital transformation cannot take place without simultaneous culture and process transformation. By acknowledging that it is a change program, they establish governance to prioritize and manage concepts and strategies.
- They are able to run “proof of value” analyses, with stage-gates, to assess and prioritize innovation.
- They maintain a relentless focus on the evolving needs of their customers as a digital initiative proceeds.



experience, and boosting productivity, for example). At the other end of this continuum are more transformational activities, such as:

- Delivering entirely new, digitally enabled products and services.
- Creating new business models (or enhancing existing ones) in innovative ways.
- Creating new operating or service models to deliver revenue uplift.
- Extending the customer relationship in new ways to generate longer-term monetization potential.

Realizing the complete potential of your digital transformation means accomplishing goals such as these. At the same time, you'll be building in scalability so that you are always current and caught up — if not one step ahead.

Scaling a digital initiative means moving beyond one-off projects or proofs of concept (PoCs) to fully operationalize digital solutions. It means embedding digital mindsets and processes across your organization so that your solutions (and their offspring) are sustainable and growth-creating. Scaling is about the business change journey from incubation to benefits realization, and accelerating digital innovation is the key.

5 Accelerate Digital Innovation

Organizations with a history of successful innovation have a process for managing that innovation. They have well-defined, long-term digital strategies with executive sponsorship, business cases and key resources committed to driving progress forward. To achieve their goals, they're willing to adopt new organizational and business models and create flexible enterprise architectures, as long as they achieve desired measurable business outcomes and continue adding value.

At Hitachi, we have the expertise, technology, and unique perspective to help your organization formulate and execute your own digital strategies. With our advisory and consulting services, we can help you accelerate your digital innovation by linking technology to outcomes: We augment your existing resources with business architecture planning, digital centers of excellence (CoEs), data science and product engineering services, and more.

Scaling digital is about moving beyond POCs and science projects to true digital transformation at scale.

Here are a few ways you can scale faster.

Prioritize business cases. Carefully define business cases and articulate how a project will contribute to key objectives, such as increasing sales and market share, reducing costs, or generating new products and services. We can help you brainstorm how to evolve your business model to support

emerging customer needs. We'll help you bring key stakeholders together, review your business needs, and apply design thinking to help you craft a compelling strategy that provides quick wins and delivers ongoing value. Tap the power of more than 700 predefined use cases we've developed across markets and implemented successfully at myriad companies. You reap the value of working with a partner who has developed and scaled digital and has considerable IP to ease your path forward.

Set up a center of excellence. A CoE drives innovation and improvement, and breaks down geographic and organizational silos. CoEs bring together like-minded people with similar business goals to share knowledge and success. You can dramatically speed results by setting up a CoE to review initiatives and make decisions about what to prioritize. We provide end-to-end services, designing, developing and implementing digital programs when you need to move faster or focus on your core competencies.

Develop modern, cloud-ready products and apps. Reinvent your business model by investing in modern architectures, products and services that can create new business for you and bring value-added benefits for your customers. Leverage our staff and repeatable processes to develop your most important apps at a quality and speed you may not be able to achieve internally. This service can help companies overcome a talent gap, deliver an exceptional customer experience that meets market expectations, and save on costs.

Accelerate your hybrid cloud strategy. To get the most out of your data, your applications need to be in the right place: the cloud. When you migrate to the cloud, you gain the IT agility needed to efficiently use data across a wide variety of applications. But first you need a cloud strategy. Many organizations are taking a hybrid approach when choosing which combination of clouds make the most sense for their business. We can help you prioritize workloads to move to the cloud, helping you accomplish critical business and technology objectives while benefiting from cloud scale, agility, business continuity and economics.

Partner With a Digital Enabler

Few would suggest that scaling digital is easy. Being successful at scaling digital depends on more than having the right technology.

Companies must balance their need to maximize the remaining value of their current business model against their need to "jump the S-curve" to begin a new era of innovation and growth. It is virtually certain, however, that companies able to become more agile businesses at their core will be best placed for the future.

By 2023, more than

33%

of large organizations will have analysts practicing decision intelligence, including decision modeling¹⁴.

Digital is not just about one thing: a technology, an architecture or a methodology. Nor is it only about different mindsets and skill sets, new business models or different ways to engage with consumers. From Hitachi's perspective, digital is all of these things. It is ubiquitous technology, along with the accompanying changes in processes and behaviors, embedded in almost everything we have or do, at both a corporate and a personal level. Digital is

Logan Aluminum¹⁵, an aluminum rolling mill and single-can sheet supplier, was facing increased market competition and wanted to turn its data into a source of competitive advantage. The company collected data from 2,000 to 3,000 smart sensors but could only use 5% of it. We helped Logan Aluminum:

- Adopt a broad-ranging five-year digital transformation strategy.
- Establish a secure industrial network to improve data flow between front- and back-end systems.
- Use smart sensors and video analytics to monitor employee safety zones.
- Use machine learning to identify optimal production zones and trigger alerts when deviations are spotted.
- Build financial models that accurately predict supply and demand.
- Capitalize on insights to improve production, adopt preventive maintenance, increase asset life and availability, reduce workplace accidents, and improve budgeting and forecasting.

"Hitachi Vantara has helped us develop a culture and a mindset for digital transformation," says Business Transformation Leader at Logan Aluminum, Vijay Kamineni. "By digitalizing our products and unlocking our data, we will be able to deliver the best products to our customers in an increasingly competitive market."

inherently focused on business outcomes, innovation and business value, and on requisite changes to IT systems, business models, leadership and culture.

Find a partner who understands the complexity of this process: one who has done it over and over again for themselves and for their customers and can make it seamless for you. Your partner should understand both the power of

Top Three Benefits of Digital Transformation

Leaders say that the top three benefits²² they have achieved with digital are:

- Operational efficiency – 40%.
- Faster time to market – 36%.
- The ability to meet customer expectations – 35%.

digital customer interactions and digital business models. At Hitachi, we help companies scale digital with:

- Precision engineering, which powers both our internal work as an industrial conglomerate and our customer initiatives.
- Continuous innovation, with a \$3.4 billion R&D budget focused on building repeatable solution cores our customers use to drive outcomes.
- More than 70 years of consulting experience, with a partnership-based focus on delivering value for our customers.
- 700 algorithm-driven use cases across key markets.
- A strategic engagement model that helps you prioritize and execute initiatives.
- Hitachi's Lumada platform, which accelerates data discovery and automates data management across multicloud, core and edge systems.
- Faster time to value, with automation that drives results.
- Key alliance partners, including Amazon Web Services (AWS), Google Cloud, Microsoft, Oracle, SAP and more.

Summary

Industrial companies are at an exciting but extremely challenging juncture with digital transformation. Whatever your state pre-pandemic, it's likely that your leadership team is reviewing your business and its current strategic bets on scaling digitally to see how you can move faster. Hitachi can help you whether your priorities are enabling digital experience, driving operational excellence, modernizing your digital core, becoming a data-driven organization, or accelerating your digital innovation. Ideally, we'll be helping you accomplish all of these goals in a prioritized manner that drives revenue, decreases risk and reduces cost.

When you commit to digital mastery, you'll be able to harness the full power of your data, a flexible technology backbone, and organizational agility to move nimbly to address new challenges and capture emerging opportunities. From anticipating changes in customer behavior, to bundling products with data-as-a-service offerings, to improving performance across your entire value chain and placing new strategic bets, you'll be able to make decisions and execute with precision, outpacing competitors. As the market has ably demonstrated, digital leaders deliver a better customer experience, innovate more rapidly, and outpace others during disruption to create significant advantage that becomes insurmountable over time.

As you prepare to accelerate digital transformation, partner with a leader who has developed and scaled digital across thousands of use cases in industry. We bring a wealth of insight, know-how and intellectual property to help you achieve the business outcomes you need. Hitachi can help you bring greater clarity and certainty to your business, navigate storms with a steadier hand, and get ready to seize the opportunities the future will bring.

Ready to start building your digital advantage today? Click [here](#) to learn how we guide you from what's now to what's next.



We Are Hitachi Vantara

We guide our customers from what's now to what's next by solving their digital challenges. Working alongside each customer, we apply our unmatched industrial and digital capabilities to their data and applications to benefit both business and society.

¹ "Why Digital Transformations Fail: Closing The \$900 Billion Hole In Enterprise Strategy," Steven ZoBell, Forbes Technology Council, March 13, 2018

² "100 Stats On Digital Transformation And Customer Experience," Blake Morgan Senior Contributor, CMO Network; Editor's Pick, Forbes, Dec. 16, 2019

³ "Worldwide Spending on Digital Transformation Will Reach \$2.3 Trillion in 2023, More Than Half of All ICT Spending, According to a New IDC Spending Guide," IDC, October 28, 2019

⁴ "How to Get Started with the Digital Twin," David Greenfield, Automation World, Oct. 25, 2018

⁵ "Predictive maintenance: Think big(ger)," Rajesh Devnani, blog, Hitachi Vantara, May 9, 2018

⁶ "AI Powers 'Self-Healing' Technology: Organizations use artificial intelligence to automate operations as IT grows more complex," Sara Castellanos, The Wall Street Journal, July 2, 2019

⁷ "Smart Factory for Smart Manufacturing: Start the journey with scalable smart factory solutions," Deloitte, www2.deloitte.com

⁸ "Manufacturing Industry Gears Up to Outpace Average Adoption of Hybrid Cloud by 2020 Reports Nutanix," Bloomberg, June 12, 2019

⁹ "IDC Analyst Connection, sponsored by Hitachi Vantara, Achieving Intelligent Data Operations, June 2019

¹⁰ "DataOps Unlocks the Value of Data," Black and White Paper, 451 Research, commissioned by Hitachi, January 2020

¹¹ "Smarter with Gartner, Top 10 Data and Analytics Trends," November 5, 2019, <https://www.gartner.com/smarterwithgartner/gartner-top-10-data-analytics-trends/>

¹² "Kirchhoff Datensysteme Software Thrives With Data: Analyzes Data for Efficiency," Hitachi Vantara case study

¹⁴ "Gartner Top 10 Trends in Data and Analytics for 2020," "Smarter With Gartner Contributor Laurence Goasduff, Gartner.com, June 9, 2020

¹⁵ "Logan Aluminum Fast-Tracks Digital Transformation With Hitachi Vantara," Hitachi Vantara case study

¹⁶ "Magyar Telekom Delivers Innovation and 24/7 Services With Hitachi Solutions," Hitachi Vantara case study

¹⁷ "BOE Technology Group Transforms Operations, Implements a Virtual Desktop Cloud With Hitachi Solutions," Hitachi Vantara case study

¹⁸ "BOS Requires High-Quality Reporting: Manufacturer Needs Analytics," Hitachi Vantara case study

¹⁹ "SFS Group Moves Toward a Successful Future With a New Private Cloud Infrastructure From Hitachi," Hitachi Vantara case study

²⁰ "Cloud Technology Brings the American Heart Association Precision Medicine Platform to Life," Hitachi Vantara case study

²¹ "Transformation Award: Wiggle Is Transforming from Retailer to Global Leader," Hitachi Vantara video case study

²² "100 Stats On Digital Transformation And Customer Experience," Blake Morgan Senior Contributor, CMO Network; Editor's Pick, Forbes, Dec. 16, 2019

Hitachi Vantara



Corporate Headquarters
2535 Augustine Drive
Santa Clara, CA 95054 USA
hitachivantara.com | community.hitachivantara.com

Contact Information
USA: 1-800-446-0744
Global: 1-858-547-4526
hitachivantara.com/contact

HITACHI and Lumada are trademarks or registered trademarks of Hitachi, Ltd. Microsoft is a trademark or registered trademark of Microsoft Corporation. All other trademarks, service marks, and company names are properties of their respective owners.

GEN-61-A BTD September 2020