



# Unlocking breakthrough value with business transformation

Two transformative IT solutions every organization should explore

## Today, transformation starts with data and actionable insights

Every organization strives to reach more people and customers, develop innovations, and capture market share — and the approach has shifted from a physical to a digital environment. To stay relevant, especially in an ever-changing marketplace, organizations must take advantage of information to empower employees, connect with customers, improve convenience, and drive agility. The challenge is that data availability has exploded and continues to grow in the digital age.

Since the influx of data is challenging to digest, enterprises know that automating data analysis using AI and the ability to process data and perform complex calculations with high-performance computing (HPC) is increasingly crucial. Businesses can use HPC and get actionable insights that translate into accurate decision-making, pioneering breakthroughs, or innovative experiences.

## Data creation will grow...

to more than 180 zettabytes by 2025, about 118.8 zettabytes more than in 2020.<sup>1</sup> The massive proliferation of data has fundamentally changed how organizations try to derive value to their advantage.

“Companies have tons and tons of data, but [success] isn’t about data collection, it’s about data management and insight.”

Professor Prashanth Southeikal, managing principal, Data for Business Performance Institute<sup>2</sup>



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# Digital is not only a differentiator — it's a requirement for survival

Information is the driving force for most organizations and a critical differentiator in increasingly competitive, dynamic business environments. *Forbes* reports that digitally mature companies are 23% more profitable than their less mature peers<sup>3</sup> — and PwC's Annual Global CEO Survey indicates that digitally mature companies outperformed in revenue growth by 53% over the past three years.<sup>4</sup>

In recent years, the CIO's role has evolved to focus more on the business value of IT initiatives. The modern CIO role is now equal parts technologist, strategist, and transformational change agent.

## Unlocking the value of data requires a new approach to technology

Businesses are poised to make significant technology investments, especially in cloud-related transformations as well as artificial intelligence (AI), the Internet of Things (IoT), and digital identity.<sup>5</sup>



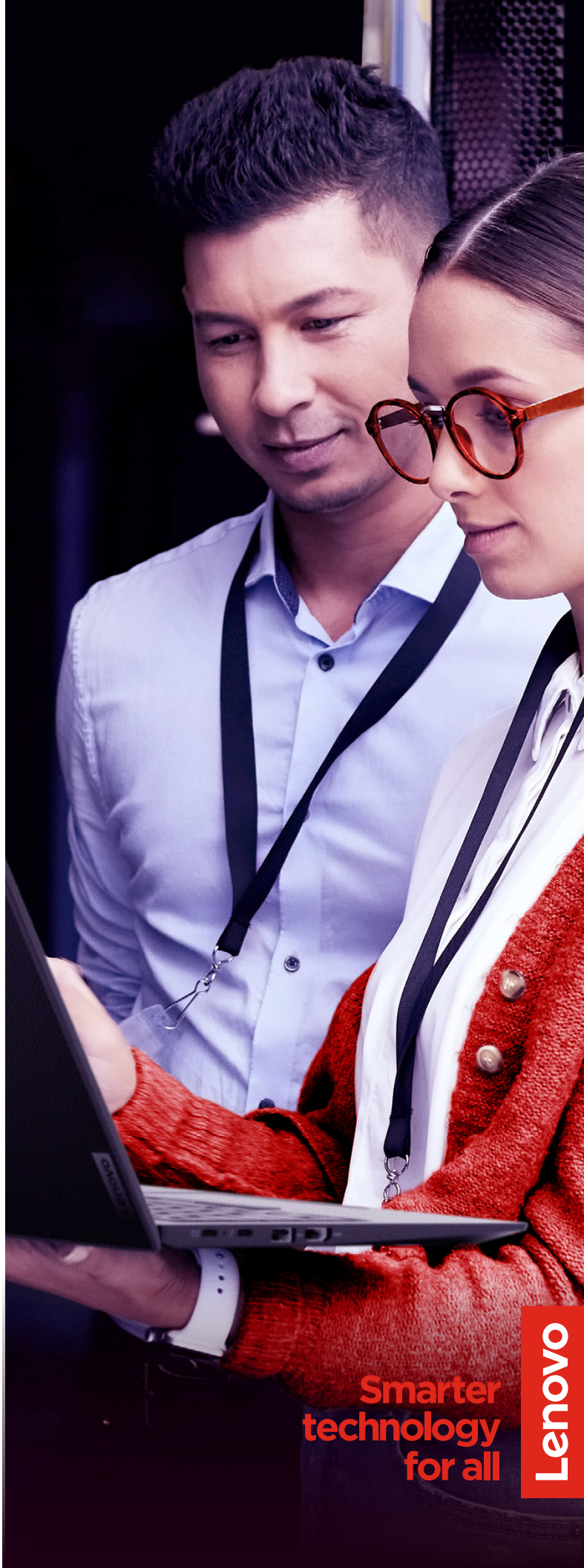
# 60%

of senior executives believe that digital transformation will be critical to business growth.<sup>6</sup>

Proven business strategies like the hybrid cloud ensure flexibility and scalability by helping organizations to manage transformation and risk better — allowing IT leaders to allocate critical staffing resources to mission-critical business transformation initiatives. No longer anchored to maintaining operational infrastructure, IT leaders can shift to strategies that the C-suite has been demanding.



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## IT solutions designed to transform your business together

The tools required to capitalize on this information have become more sophisticated as more data is captured. But what's an organization to do with massive amounts of rich data? It comes down to how you manage, act, and deliver information.

### The fundamentals of insight

For the data-centric, insights are essential to giving your organization a competitive edge. Most organizations' challenges are developing the right strategy and architecture to improve productivity, efficiency, and effectiveness.

To gain insight, IT teams must address the growing data volume and assess the value. Value is dependent on what the organization is trying to achieve. While the immediately obvious value is business intelligence, exploring other implications helps drive innovation. Whether it's a sports team utilizing player analytics, an e-commerce team exploring customer web behavior, or animators looking to process the volumes of code and graphics, taking the time to define outcomes is critical.

That being said, the potential for value can change over time — and having scalable systems that can collect, consolidate, and store is the foundation of that strategy. Given the volatile nature of data, options like hybrid cloud provide the flexibility and scalability needed to establish this foundation: private solutions when the data is mission-critical, public cloud for augmented scale.

### Implications of analytics and AI

Once data has been captured, leveraging analytics and AI is an immediate opportunity. AI is the product of automated data analysis using algorithmic artificial intelligence models and machine learning (ML) technologies. These automations can uncover new business intelligence, create new experiences (such as expediting service requests), or isolate actions that will elevate outcomes. These technologies reveal patterns enterprises use to automate and optimize routine processes and tasks, increasing productivity and operational efficiencies.

AI is a broad umbrella definition of any automation system that learns on the job. It's a machine that performs any task associated with human intelligence. Today, when we talk about AI, we usually talk about machine learning — where a program performs tasks without explicit programming. ML uses techniques like clustering and regression to crunch a lot of data to develop predictions. ML, although quite effective, is human-effort intensive when it comes to extracting data features to analyze.



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## High-performance computing (HPC) at its core

Time is every IT organization's enemy. Whether sifting through millions of data transactions to find profitable selling opportunities, processing huge volumes of digital animation code, or running algorithms to uncover new insights from cross-tabbed laboratory experiments, time is your constant challenge. Organizations that quickly unlock the insights from the information have the upper hand.

HPC allows processing data and performing complex calculations at high speeds. To put that into perspective, a 3GHz processor can perform around 3 billion calculations per second. While much faster than any human, it pales compared to HPC solutions that can perform quadrillions of calculations per second.

As technologies like IoT, AI, and 3D imaging evolve, the amount of data organizations must work with is growing exponentially.

To keep ahead of the competition, organizations need lightning-fast, highly reliable IT infrastructure to process, store, and analyze massive amounts of data.

Lenovo is helping to solve humanity's greatest challenges with HPC. We're using supercomputers everywhere: car and plane design, oil field exploration, financial risk management, genome mapping, weather forecasting, and essential research.

### Leading the industry in sustainable supercomputing

According to Top500.org, Lenovo is the number one supplier of supercomputers in the world<sup>7</sup> with award-winning HPC solutions like ISC Vendor Showdown and multiple HPCWire awards — also ranked #1 in reliability for x868 and a leader in performance benchmarks.

Our holistic approach to energy efficiency spans hardware, software, and infrastructure. With our processes, you can save up to 40% in energy costs compared to a traditional air-cooled data center.

**"The point of digital transformation isn't to become digital. It's actually to generate value for the business."**

Rodney Zimmel, global leader, McKinsey Digital<sup>9</sup>

If your organization is exploring how to drive greater value from the growing amounts of data being collected, you're headed in the right direction, but you aren't alone. Lenovo's rich history from the IBM legacy and continued focus on transformative technology provide a trusted partner you can lean on. From ThinkSystem™ and ThinkAgile™ technology, accelerated by Intel® Xeon® Scalable processors, to TruScale Infrastructure as a Service, our experts can help you architect the right solution for your organization. [Explore the data checklist.](#)



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#### Sources

- 1 Statista, "Amount of data created, consumed, and stored 2010–2020, with forecasts to 2025," August 2022
- 2 MIT, "10 best practices for analytics success (including 3 you can't ignore)," September 2020
- 3 Forbes, "Funding Digital Transformation Growth In 2022," February 2022
- 4 PwC, "Reimagining the outcomes that matter," January 2022
- 5 IDC, "New IDC Spending Guide Shows Continued Growth for Digital Transformation as Organizations Focus on Strategic Priorities," November 2021
- 6 PwC, "PwC Pulse Survey: Executive views on business in 2022," 2022
- 7 Statista, "Top 500 supercomputers vendor market share 2022," June 2022
- 8 ITIC, "ITIC Global Reliability Survey 2021–2022 Winter Update," February 2022
- 9 McKinsey, "Digital transformation on the CEO agenda," May 2022

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# Digital transformation is a matter of survival

IT leaders seek new ways to leverage legacy, existing, and future technologies to deliver exceptional customer experiences in today's ultra-competitive environment. Digital transformation in the form of innovative customer experiences is the new normal.

Given the hurdle of the complexity of building the infrastructure, it's no wonder that many IT organizations have put off these initiatives (often to their disadvantage).

McKinsey estimates that as many as 50% of businesses have not yet started on their analytics/AI journey. But it's not too late to start. The principal considerations before getting started with analytics/AI include:<sup>1</sup>

## ☐ Define the vision.

Clearly state what you want your business to become and why. How does it benefit your customers and your team?

## ☐ Assemble a transformation leadership team.

Create a cross-functional team of senior stakeholders who represent your internal and external customers and champion the vision and strategy.

## ☐ Document the "as is."

Define where you are today from your customers' perspective to identify what needs to change to achieve your vision.

## ☐ Identify key requirements.

From access and control to regulatory requirements, keep these mandates front of mind as you architect the solution.

## ☐ Develop the plan.

Identify the tasks that need to be completed throughout the course of your digital transformation strategy to help build your roadmap.

## ☐ Find a trusted partner.

Ensure the partner has an intimate understanding of hybrid cloud architecture, the latest technology, an open software ecosystem, and a global service footprint — and most of all, the credentials and proven case studies.

## ☐ Explore as-a-service options.

It's critical to accelerate development and deployment while taking advantage of scalable subscription models.



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### Sources

<sup>1</sup> Pattern, "How to Approach a Successful Digital Transformation for your Business," 2022

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# Digital transformation enabled by Lenovo

The added value of an expert partner that has helped hundreds of IT organizations transform their business enterprises will ensure your organization's performance is maximized to gain full advantage of emerging IT technologies. We look at the business outcomes you want, then put our innovation to the task.

## TruScale Infrastructure as a Service

Enhance your ability to scale your IT hardware, software, and support capabilities as your rapidly changing infrastructure needs evolve. Lenovo TruScale Infrastructure Services give you all the power and strategic advantage of the latest data center hardware through a pay-as-you-go business model.

## TruScale Everything as a Service

From the data center to the pocket, Lenovo offers a complete portfolio of IT solutions under the TruScale "as a Service" umbrella. One solution, one vendor, one contract, and one single point of accountability.

## Proven solutions from a trusted partner

Through smarter enterprise solutions and services, Lenovo is focused on delivering practical innovation to strengthen our customers' competitive advantage. The real-life application of Lenovo solutions is proven, tried, and tested in our corporate environment. With a field network of 20,000+ technicians across a footprint of more than 180 markets, we're helping our customers transform their businesses worldwide and locally.

## Good for our planet. Good for business.

As more organizations turn to IT to drive their environmental, social, and governance (ESG) strategy, Lenovo is making future-ready sustainable technology accessible today. Through services like asset recovery to reduce electronic waste and carbon offsetting capabilities to compensate for the emissions associated with your hardware transaction, Lenovo is partnering with businesses to help them advance their sustainability goals.

Talk to your Lenovo sales representative or Lenovo Authorized Reseller of choice. To learn more about smarter hybrid cloud solutions from Lenovo, visit [www.lenovo.com/Hybrid-Cloud-Solutions](http://www.lenovo.com/Hybrid-Cloud-Solutions).



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