# Deloitte.

TECH TRENDS 2021

Creating an agile enterprise
built to evolve with Oracle

EXPLORE THE TRENDS
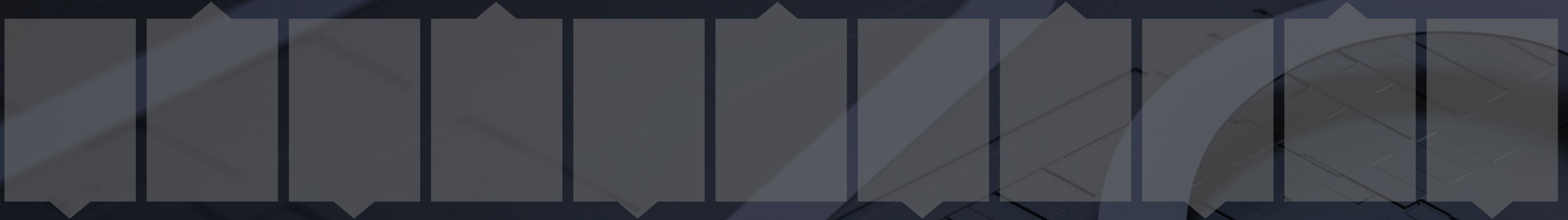
INTRODUCTION

The COVID-19 crisis has driven change in an important and unexpected way. A growing number of organizations across sectors are accelerating their digital transformation efforts not only to make their operations nimbler and more efficient but also to respond to dramatic fluctuations in demand and customer expectations.

Mindful of this state of flux, the Deloitte *Tech Trends 2021* report is themed "resilience." As businesses around the world remain determined to either find a way forward or to make one, many are aligning corporate and technology strategy and turning to technology platforms such as Oracle to modernize the core, incorporate emerging technologies, harness data, produce meaningful insights, and transform their supply chains—all while shoring

up their cyber defenses. Our Deloitte professionals have deep experience in helping organizations to grasp the business value of the Oracle platform and how it can be leveraged to achieve these objectives and more.

This perspective examines the Deloitte *Tech Trends* report through an Oracle lens to explore how organizations can capitalize on each trend by applying Oracle technologies. It includes an overview of the report's nine chapters, accompanied by deep dives into four areas that may be of special interest to Oracle customers. We hope it will spark ideas for harnessing the power of the Oracle ecosystem to accelerate your digital transformation efforts—and ultimately to become more agile and resilient.
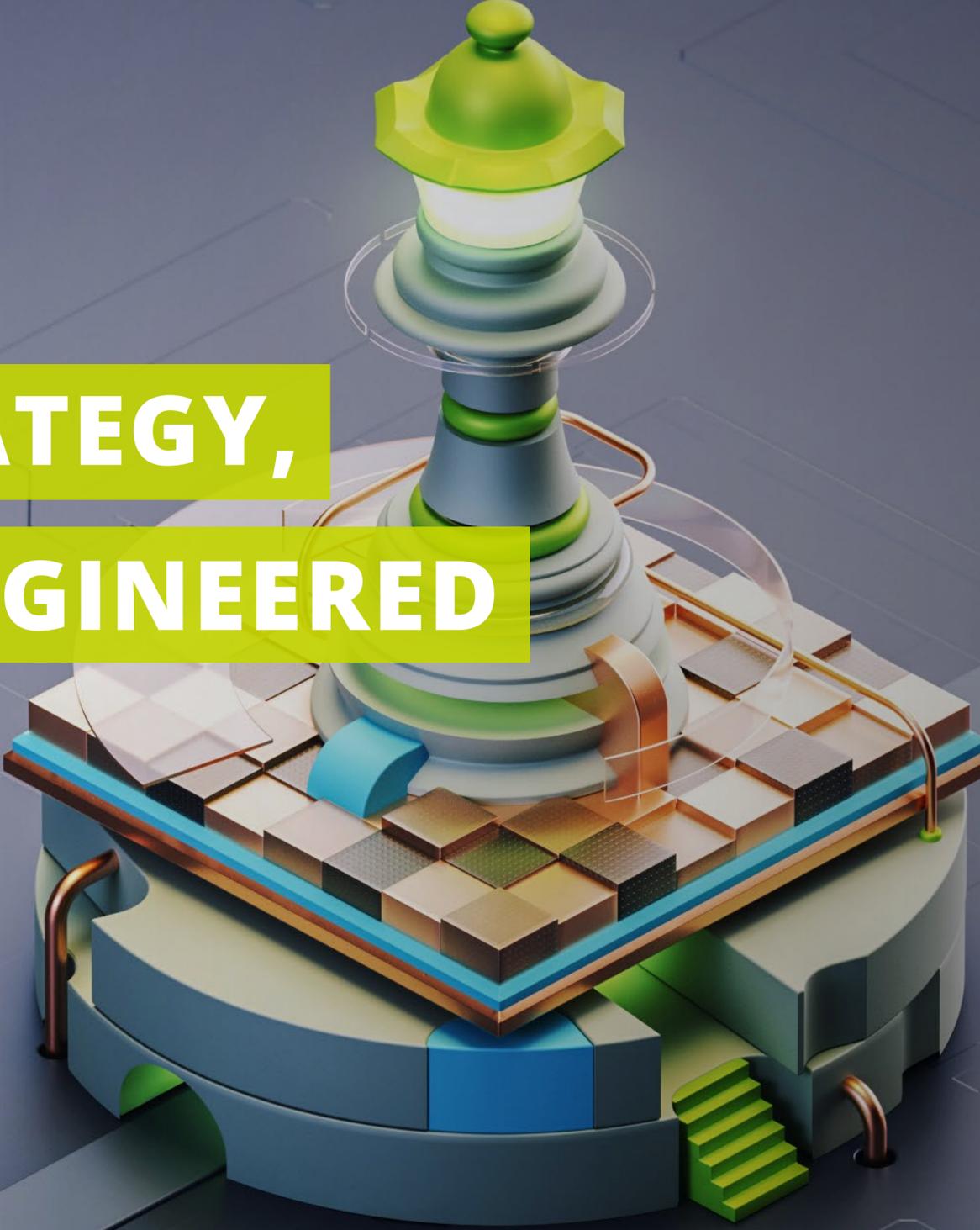
STRATEGY, ENGINEERED

Technology today is a source of new competitive advantage for some organizations and a threat to ongoing survival for others. As a result, the distinction between corporate strategy and technology strategy is blurring—each needs to inform the other. Savvy corporate strategists are looking beyond their organizations' current tech capabilities and competitive landscape to consider a broader range of future possibilities about how technology can expand where they play and how they win. But the complex range of uncertainties and possibilities can be too much for the human brain to process on its own. That's why strategists are turning to strategic technology platforms equipped with advanced analytics, automation, and AI. Organizations are using these tools to continually identify internal and external strategic forces, inform strategic decisions, and monitor outcomes. As a result, companies are transforming strategy development from an infrequent, time-consuming process to one that's continuous and dynamic, helping strategists think more expansively and creatively about the wide range of future possibilities.

01

At one time, strategy development was about brainstorming ideas, determining an overarching direction, and identifying opportunities for getting there. Today, the velocity of change requires a more structured approach—one that puts continuous innovation at its core. Oracle and Deloitte have developed an offering that brings a disciplined and consistent approach to innovation, so that the right ideas and the right technologies can be brought together in a steady cadence to produce powerful business outcomes.

Recognizing that innovation is instrumental to corporate strategy, the offering is based on 15 levers across four key disciplines that enable organizations to identify growth opportunities and build internal innovation competency. These levers span nearly every aspect of "making innovation real and continuous" beyond just applying technologies to business use cases. This includes setting the innovation agenda, managing the portfolio (including governance and controls), designing and scaling ideas, and fueling innovation within the workforce in a self-perpetuating cycle. Importantly, the offering not only provides a means of harnessing advanced analytics, automation, and AI to support strategy but also of unlocking the potential of Oracle Cloud investments by leveraging the ongoing flow of digital enablers.

CORE REVIVAL

Modernizing legacy enterprise systems and migrating them to the cloud may help unleash an organization's digital potential. Until recently, these undertakings could also bust that same organization's digital transformation budget. For many, the cost of needed cloud migrations and other core modernization strategies can be prohibitive. This is about to change. In what we recognize as a growing trend, some pioneering companies are beginning to use clever outsourcing arrangements to reengineer traditional business cases for core modernization. Likewise, some are exploring opportunities to shift core assets to increasingly powerful platforms, including low-code options. Finally, many are advancing their platform-first strategies by addressing technical debt in ERP systems and migrating nonessential capabilities to other platforms. In a business climate defined by historic uncertainty, these innovative approaches for extracting more value from legacy core assets may soon become standard components of every CIO's digital transformation playbook.

02

Many organizations are simultaneously being challenged to:
1) upgrade their technology and apps so they can run a modern digital business; 2) eliminate the technology debt they've inherited; and 3) institute a culture of continuous improvement and innovation so they can remain agile, drive efficiencies, and keep up with the accelerating pace of business. ELEVATE, a collaboration between Oracle Consulting and Deloitte, is designed to help companies assemble these transformational pieces into a complete picture—all while potentially creating positive cash-flow and decreasing risk by tying payments to successful results.

ELEVATE combines the cloud business acumen of Deloitte with deep technical experience from Oracle Consulting to address many topics that are top-of-mind for leading organizations today:

- What is the fastest way to successfully modernize my complex infrastructure composed of Oracle and non-Oracle technologies?
- How will migrating to Oracle Cloud help us to reduce our technology debt?
- Is there a way to reduce upfront costs so we can transform more quickly?

ELEVATE is designed to leverage modern, industry-leading cloud infrastructure and SaaS applications, along with frameworks and leading practices for reducing risk and promoting continuous innovation. By combining these elements, ELEVATE can help answer these questions and more, wherever an organization presently stands on its journey to revive the core and to digitally transform.
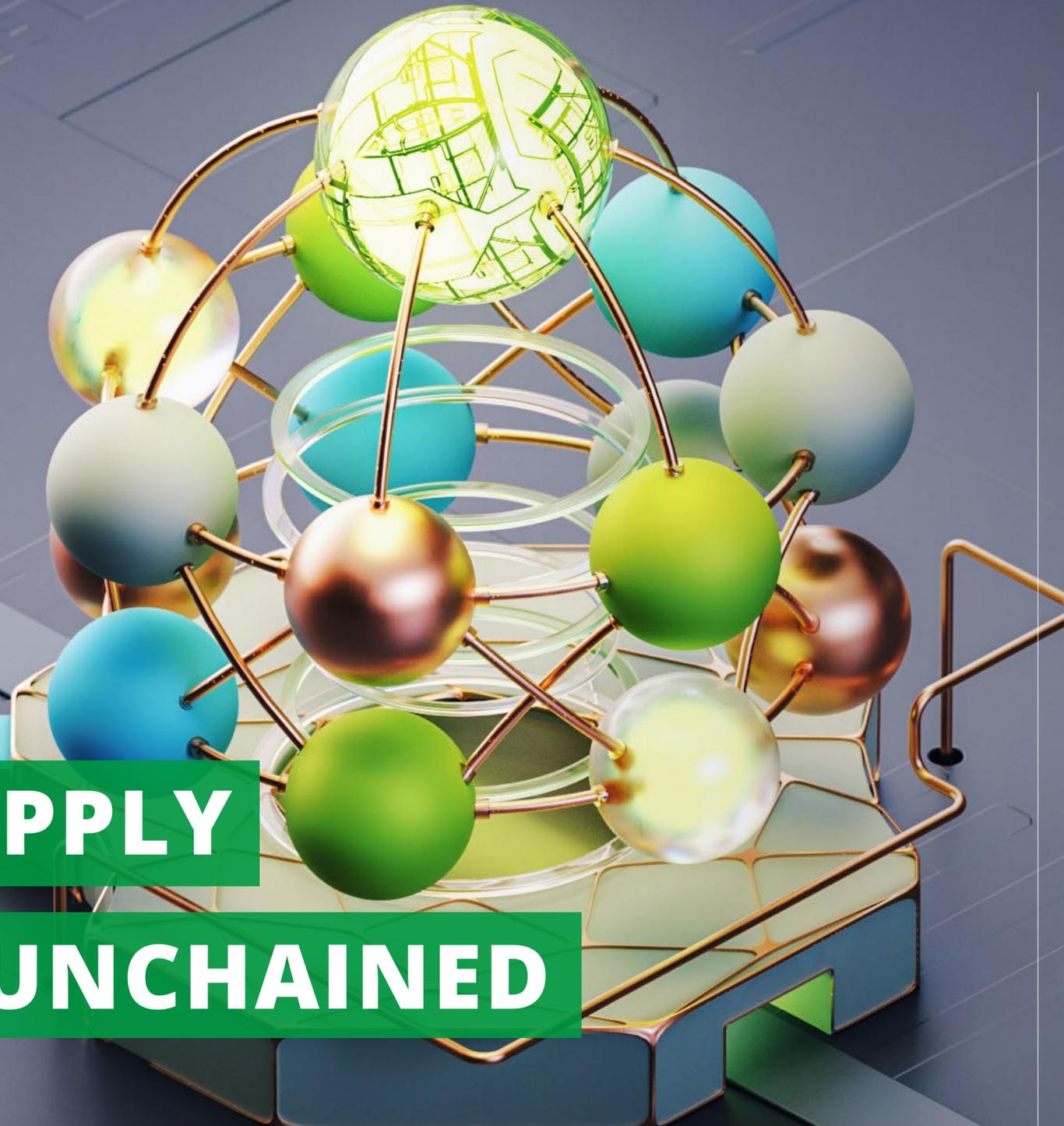
SUPPLY UNCHAINED

Long considered a cost of doing business, supply chains are moving out of the back office and onto the value-enabling front lines of customer segmentation and product differentiation. Future-focused manufacturers, retailers, distributors, and others are exploring ways to transform the supply chain cost center into a customer-focused driver of value. They are extracting more value from the data they collect, analyze, and share across their supply networks. Finally, some of these organizations are exploring opportunities to use robots, drones, and advanced image recognition to make physical supply chain interactions more efficient, effective, and safe for employees. Granted, transforming established supply chains into resilient, customer-focused supply networks will be a challenge, and for most organizations, it will be an ongoing journey—one of critical importance. The kind of disruption we have seen with the COVID-19 pandemic could well become the norm. When the next global event hits, technology and supply chain leaders won't be able to claim they didn't see it coming.

Supply chains are stepping into a new value-enabling role. While automation within the manufacturing process is not new, supply chains are increasingly being transformed into dynamic, flexible, interconnected systems. Accordingly, many companies are shifting away from a discrete progression of design, plan, source, make, and deliver, and towards a virtuous circle of connected customers, synchronized planning, dynamic fulfillment, digital development, intelligent supply, and smart factories—all built around a digital core.

Smart factories are an essential part of this shift. Through its Smart Connected Factory solution, Oracle provides a modern platform for building value-enhancing digital supply networks and collaboratively managing and improving manufacturing processes. The solution leverages a modern cloud platform, IoT connectivity, big data analytics, predictive intelligence, and cloud supply chain tools to help companies better predict and resolve maintenance requirements, correlate quality issues to machine and environmental factors, reduce downtime, and improve quality.
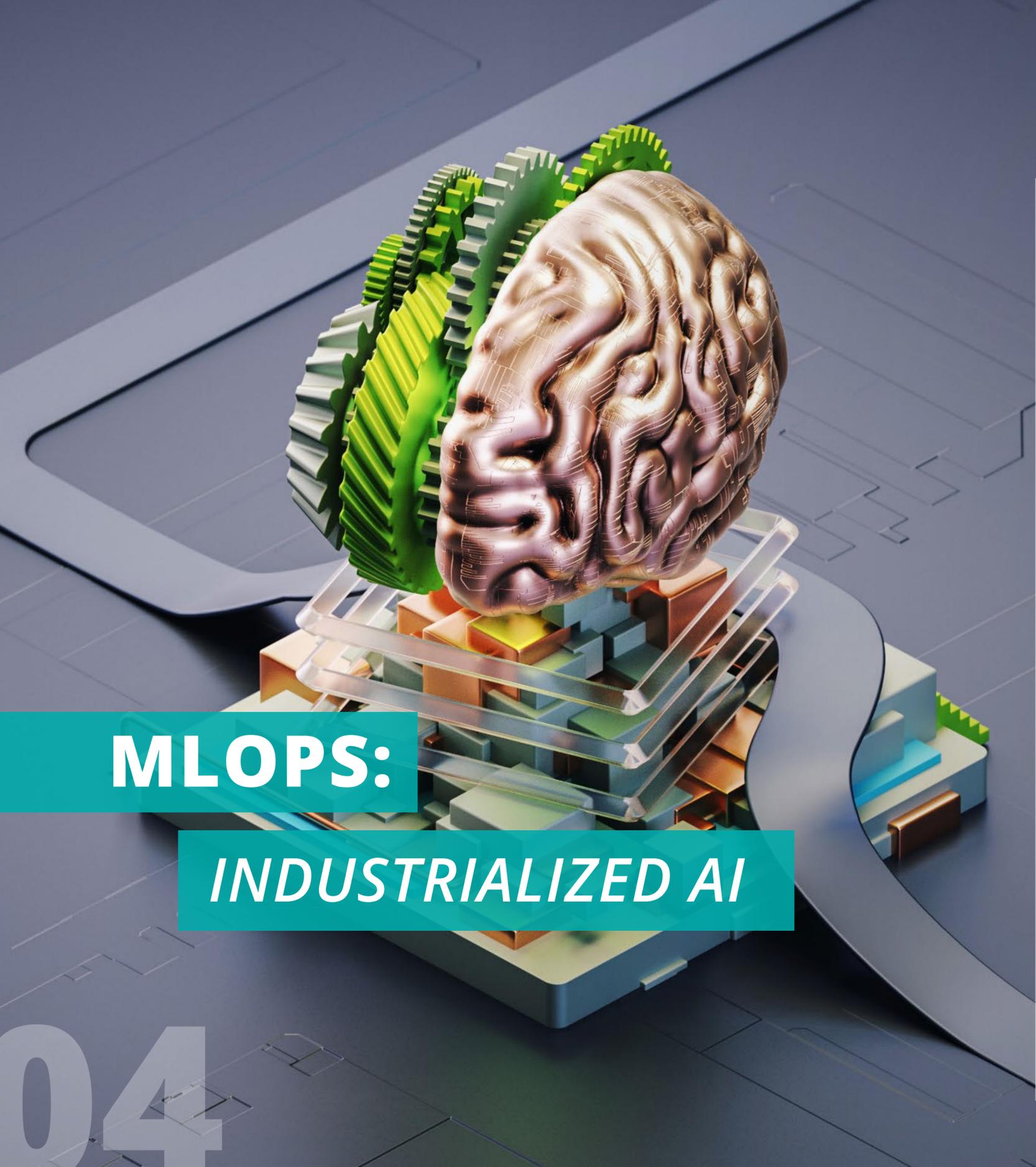
MLOPS:
INDUSTRIALIZED AI

Sophisticated machine learning models help companies efficiently discover patterns, reveal anomalies, make predictions and decisions, and generate insights—and are increasingly becoming key drivers of organizational performance. Enterprises are realizing the need to shift from personal heroics to engineered performance to efficiently move ML models from development through to production and management. However, many are hamstrung in their efforts by clunky, brittle development and deployment processes that stifle experimentation and hinder collaboration among product teams, operational staff, and data scientists. As AI and ML mature, a strong dose of engineering and operational discipline can help organizations overcome these obstacles and efficiently scale AI to enable business transformation. To realize the broader, transformative benefits of AI and ML, the era of artisanal AI must give way to one of automated, industrialized insights. Enter MLOps, also known as ML CI/CD, ModelOps, and ML DevOps: the application of DevOps tools and approaches to model development and delivery to industrialize and scale machine learning, from development and deployment to ongoing model maintenance and management.

04

As the potential of AI and ML becomes widely acknowledged, companies are being challenged to move beyond occasionally developing models to save the day and to embark on a program of continuous development to support business strategy. Oracle has responded to this need for scale and efficiency by introducing the Oracle Data Science Cloud Service. The service can enable data science teams to easily organize their work, access data and computing resources, and build, train, deploy, and manage models on Oracle Cloud. With Oracle Cloud Infrastructure Data

Science at its core, the Service also automatically selects optimal training datasets through AutoML algorithm selection and tuning, model evaluation, and model explanation.

Complementing the Oracle Data Science Cloud Service, Deloitte can help organizations to establish an AI center of excellence (COE). An AI COE can assist companies in persistently identifying and prioritizing use case opportunities for fueling a continuous model development process.
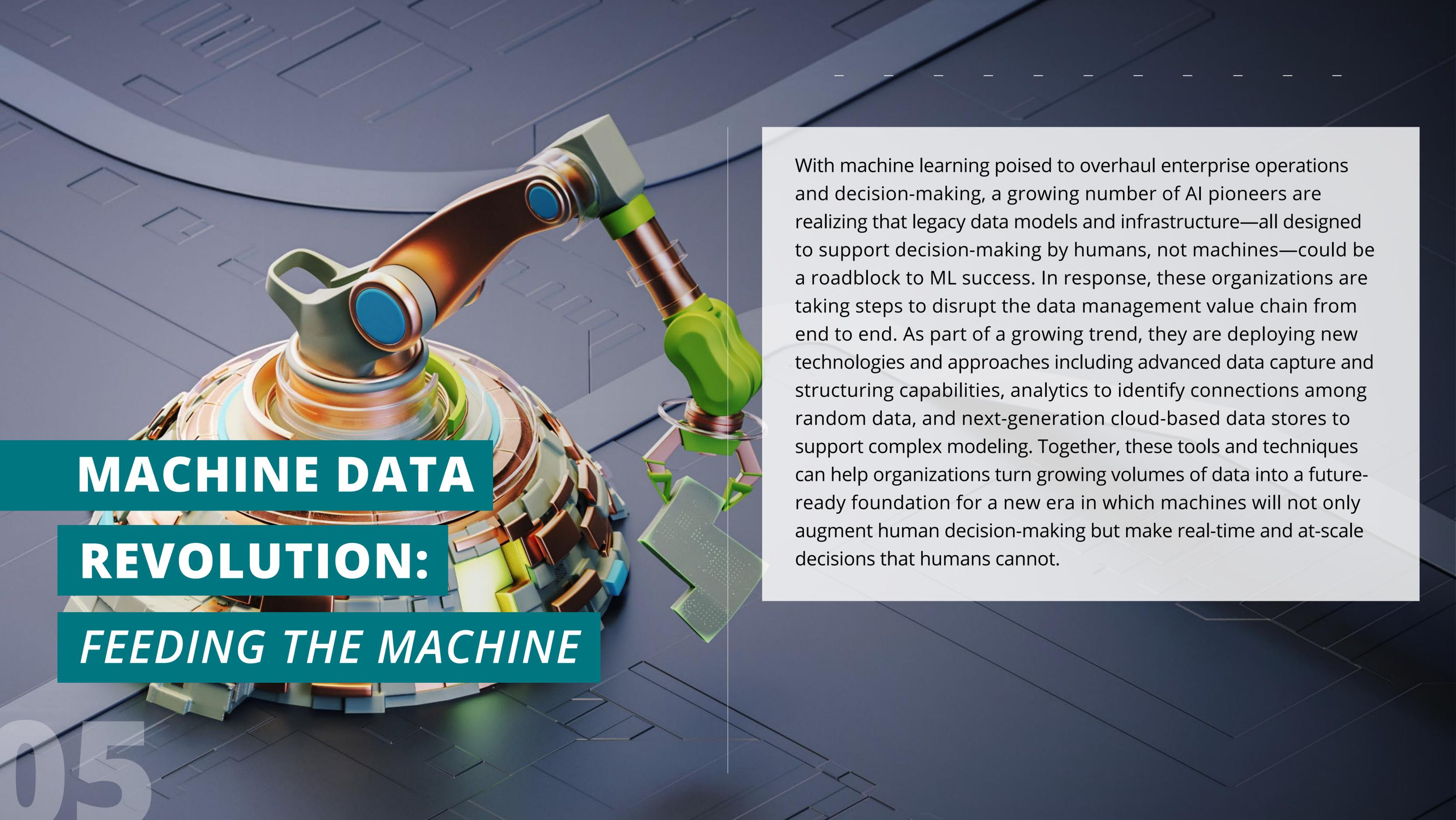
MACHINE DATA REVOLUTION:
FEEDING THE MACHINE

With machine learning poised to overhaul enterprise operations and decision-making, a growing number of AI pioneers are realizing that legacy data models and infrastructure—all designed to support decision-making by humans, not machines—could be a roadblock to ML success. In response, these organizations are taking steps to disrupt the data management value chain from end to end. As part of a growing trend, they are deploying new technologies and approaches including advanced data capture and structuring capabilities, analytics to identify connections among random data, and next-generation cloud-based data stores to support complex modeling. Together, these tools and techniques can help organizations turn growing volumes of data into a future-ready foundation for a new era in which machines will not only augment human decision-making but make real-time and at-scale decisions that humans cannot.

05

ORACLE PERSPECTIVE

All too often organizations do not realize that Oracle tools and technologies readily fit together into a powerful analytical ecosystem, the elegance of which begins with the data itself. Oracle technologies are well suited for enabling the rapid flow and analysis of data—without having to send data outside the Oracle ecosystem in order to derive meaningful insights. Instead, the idea is to bring algorithms and data visualization techniques to the data that is already sitting in the Oracle database, rather than incurring the inefficiency and security risk of sending that data somewhere else.

Deloitte can help organizations to understand how the pieces of the Oracle analytics ecosystem fit together to address specific business problems, such as how to:

- Predict a certain type of behavior. For example, which customers are most likely to go to a competitor?

- Forecast future outcomes in terms of metrics. For instance, what will our profit be under certain economic circumstances?

- Identify fraud and anomalies within specific functions. For example, by detecting and eliminating vendor overpayments, a company could quickly reduce its costs.

While there is much talk in the marketplace about the promise of ML, the reality is that a great deal of work must happen behind the scenes in order to achieve the desired outcomes. The Oracle ecosystem, in concert with Deloitte, can accelerate that work, ranging from data access and manipulation to complex modeling and scoring, thus shortening the path to business value.

ZERO TRUST:
NEVER TRUST, ALWAYS VERIFY

Sophisticated cyberattacks and shifting enterprise environments have undermined the traditional—and somewhat flawed—castle-and-moat approach to cybersecurity. Zero trust is rooted in the concept that modern enterprise environments necessitate a different approach to security: There's no longer a defined perimeter inside which every user, workload, device, and network is inherently trusted. In zero trust architectures, every access request should be validated based on all available data points, including user identity, device, location, and other variables that provide context to each connection and allow more nuanced, risk-based decisions. Data, applications, workloads, and other resources are treated as individual, manageable units to contain breaches, and access is provided based on the principle of least privilege. The automation and engineering required to properly implement zero trust security architectures can help strengthen security posture, simplify security management, improve end-user experience, and enable modern enterprise environments. But the move to zero trust could require significant effort and planning, including addressing foundational cybersecurity issues, automating manual processes, and planning for transformational changes to the security organization, the technology landscape, and the enterprise itself.

Deloitte can help organizations to build zero trust thinking into their solutions by leveraging the security capabilities inherent in many Oracle offerings. This thinking can be applied to nearly every aspect of the Oracle stack, ranging from SaaS Oracle Cloud ERP deployments to bare-metal installations of Oracle Cloud Infrastructure (OCI).

To assist companies in taking a holistic approach to cybersecurity, Deloitte has developed a zero trust framework that is built on five pillars: identities, workloads, data, networks, and devices. Telemetry and analytics as well as automation and orchestration are implemented as supporting capabilities across all five columns. By referencing this framework during Oracle implementations, Deloitte can assist clients in assessing, strategizing, architecting, implementing, and in select cases, managing next-generation security capabilities.

REBOOTING THE DIGITAL WORKPLACE

As the world's largest unplanned work-from-home experiment continues, many business leaders are asking as yet unanswered questions: When the dust settles, will remote work become the rule or the exception? Is a permanently remote workforce sustainable? How will productivity and well-being be affected? Will innovation suffer in the absence of face-to-face peer connections? What will be the role of the physical office? Companies may be able to overcome the digital workplace's deficits and ambiguities by more intentionally embracing its positive aspects, including the data generated by workers' tools and platforms. This can help organizations optimize individual and team performance and customize the employee experience through personalized recommendations, enabling remote work to be far more than a diminished proxy for the traditional office. And as onsite workspaces and headquarters evolve, organizations can use this data to create thriving, productive, and cost-effective offices that are seamlessly interwoven with the remote experience.

07

ORACLE PERSPECTIVE

What will it take to support remote work arrangements moving forward? When asked what factors were most important to sustaining remote work, surveyed executives in the *2021 Deloitte Global Human Capital Trends* report chose technology-enabled options such as introducing new digital collaboration platforms (39%), allowing for personal choice in how work gets done (36%), establishing new scheduling and meeting norms (31%), investing in team leader training (24%), and providing home access to the internet and needed technologies (23%).[1]

Oracle Human Capital Management (HCM) is natively built for the cloud, so it is naturally capable of empowering the digital workforce in a remote environment. By connecting every human resource process from hire to retire, it enables one source of truth for HR data to improve decision-making, while providing a consistent user experience, even when working from home. This experience can be further enriched and customized through innovative digital tools, such as tailored workflows, voice-based user-interfaces, and digital assistants that enable employees to get quick answers and execute processes from any device.

[1] 2021 Deloitte Global Human Capital Trends, "The social enterprise in a world disrupted: Leading the shift from survive to thrive," pg. 14.
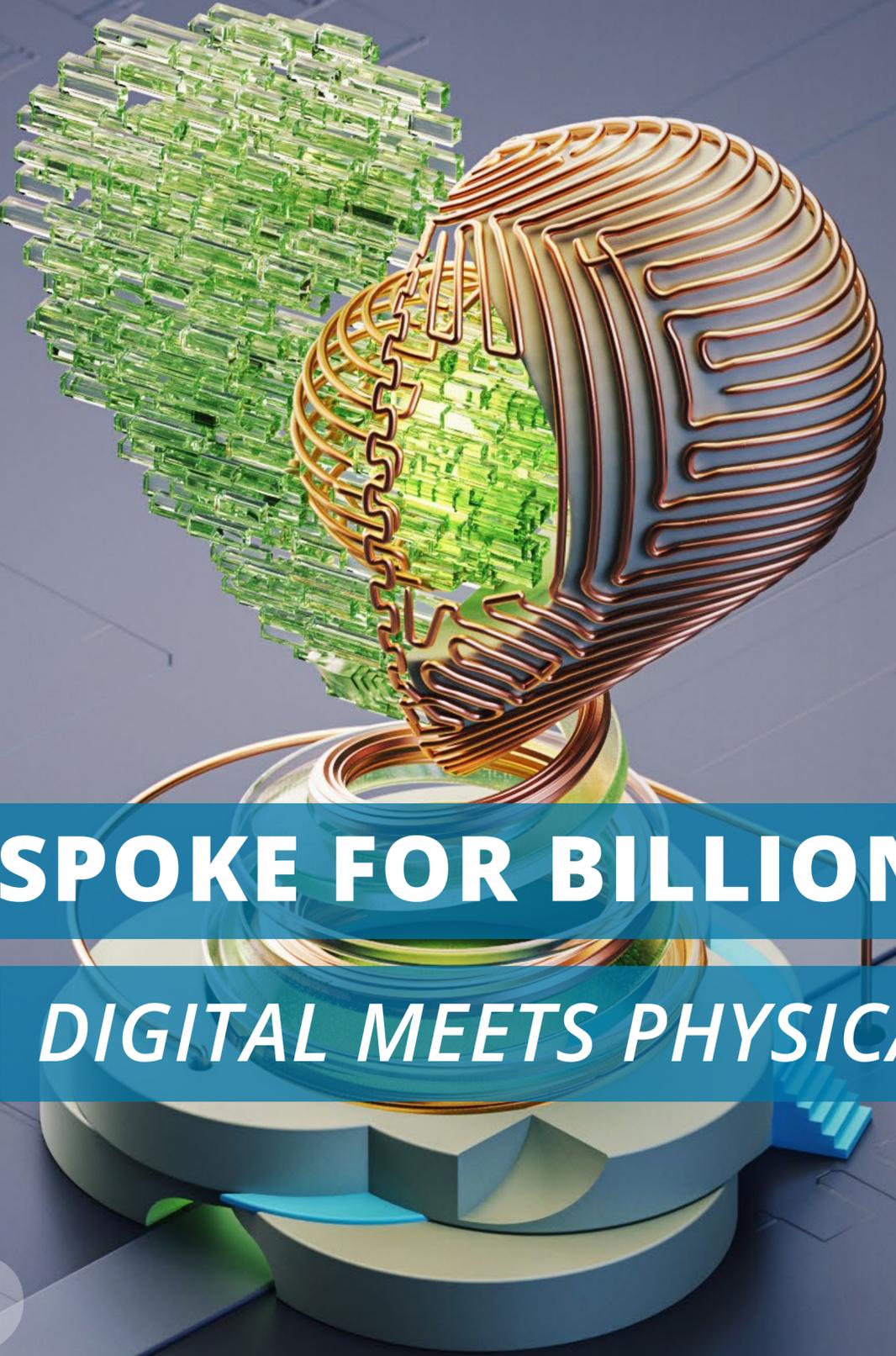
BESPOKE FOR BILLIONS:
DIGITAL MEETS PHYSICAL

When we look back, 2020 will likely be the turning point when most of the population adapted to digital interactions to conduct their everyday lives, whether working from home, online schooling, or ordering groceries. Yet the prevalence of digital interactions has left many of us pining for the days of in-person interactions. As we look to the future, we expect consumers will no longer be satisfied with distinct physical or digital brand experiences: They will expect a blend of the best of both—highly personalized, in-person experiences without sacrificing the convenience of online transactions. In the next 18 to 24 months, we expect in-person and digital experiences to become more seamless and intertwined. Online and offline interactions will not be separate experiences anymore—the customer's journey will be made up of in-person and digital elements that are integrated and intentionally designed to create a seamless brand experience that's tailored to fit the individual customer's behaviors, attitudes, and preferences.

08

While the pandemic highlighted both the convenience and necessity of online commerce, it also illuminated its shortcomings—mainly the empathetic connections and creative problem-solving capabilities that can only be provided in-person. Moving forward, technology solutions will need to support both physical and virtual interactions in an intertwining, continuous dance.

The Oracle Cloud CX platform provides the tools and emerging technologies to enable a personalized, omnichannel customer experience. It is one of the few platforms that can connect all aspects of the customer journey through marketing, sales, service, and commerce—from the front office to the back office—to deliver a unified customer experience. The Oracle Cloud CX platform also takes a data-first approach, which allows organizations to leverage data from various applications and back-office systems to inform sales and marketing decisions and to tailor the customer experience in real time.
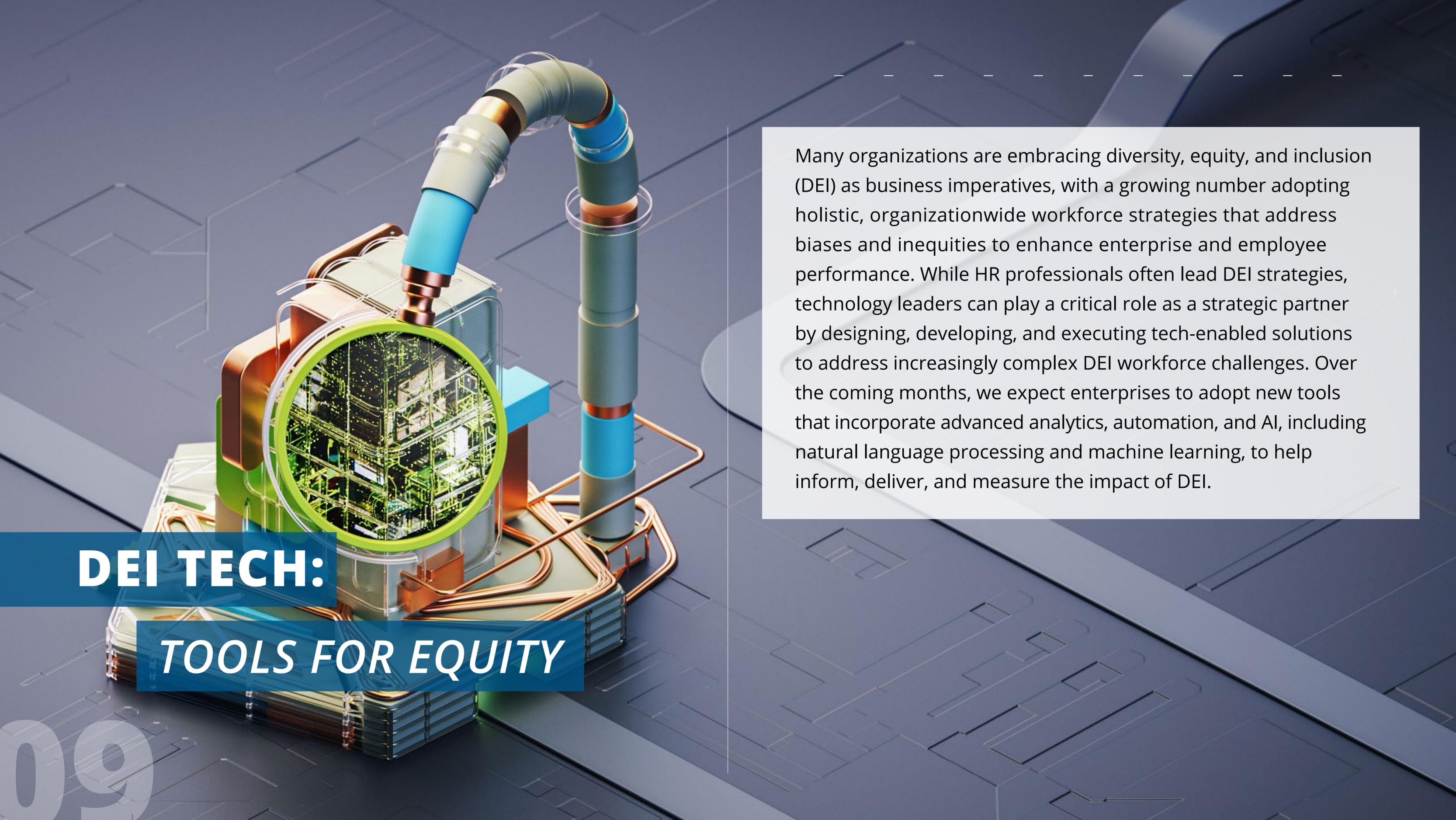
DEI TECH:
TOOLS FOR EQUITY

Many organizations are embracing diversity, equity, and inclusion (DEI) as business imperatives, with a growing number adopting holistic, organizationwide workforce strategies that address biases and inequities to enhance enterprise and employee performance. While HR professionals often lead DEI strategies, technology leaders can play a critical role as a strategic partner by designing, developing, and executing tech-enabled solutions to address increasingly complex DEI workforce challenges. Over the coming months, we expect enterprises to adopt new tools that incorporate advanced analytics, automation, and AI, including natural language processing and machine learning, to help inform, deliver, and measure the impact of DEI.

09

DEI initiatives are on the rise as a means of enhancing employee well-being and improving retention and productivity. Deloitte, for instance, has formed a strategic alliance with The Female Quotient to help advance inclusion in the workplace by developing innovative client solutions and creating a community where thought leaders can brainstorm solutions and cultivate a spirit of mentorship. Overall, the alliance seeks to create value by inspiring conversation, growing leaders, and accelerating research. Organizations are increasingly recognizing the potential for technology to enable DEI goals like these. For example, data and applications within the Oracle ecosystem can provide insight into questions such as: Do we pay and promote employees equally? Do we have diverse representation across our organization? Do we have an organizational structure that supports all employees? With embedded tools such as advanced analytics, automation, and AI, we expect executives to increasingly look to the Oracle ecosystem for help in delivering DEI initiatives and measuring their impact.

EXPLORE MORE

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