Where's the Value in AI?

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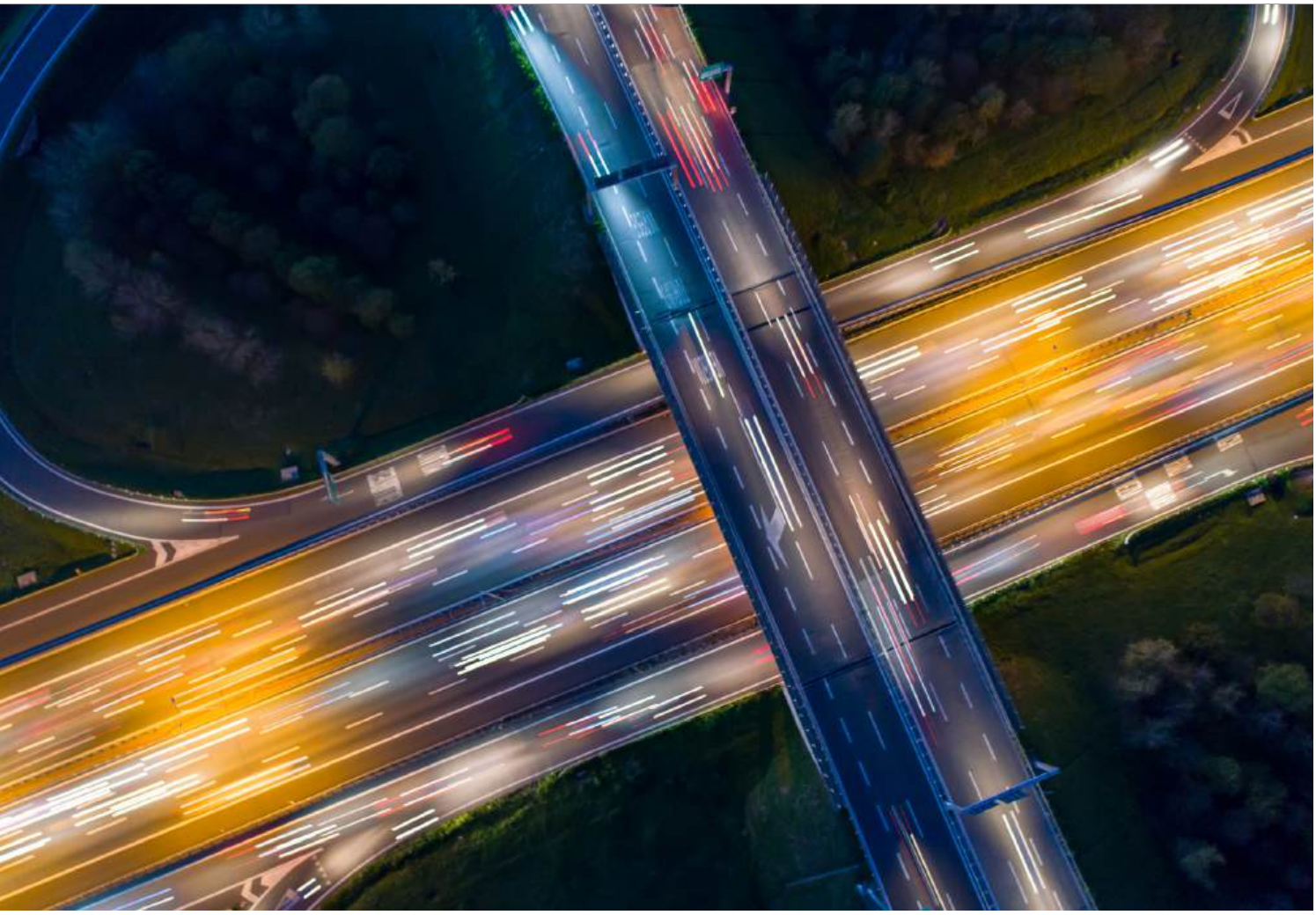


Who's Getting Results from AI and Why?

After all the hype over artificial intelligence (AI), the value is hard to find. CEOs have authorized investments, hired talent, and launched pilots—but only 26% of companies have advanced beyond the proof-of-concept stage to generate value. This report yields important insights into what AI leaders are doing to drive real value from the technology, where others fall short, where the value is coming from, how individual sectors are performing, and how companies can change their own AI trajectories.

Consider these examples of the value being created by AI, including generative AI (GenAI), from companies in three different sectors. A financial institution is committed to achieving $1 billion in productivity improvements, in addition to enhanced risk outcomes and better client and employee experiences, by 2030. A biopharma company is chasing $1 billion in value potential (revenues and costs) by 2027. A major automaker expects to cut its cost of goods sold by up to 2% and accelerate new product development time by 30%.

These results are typical of the value that leaders across industries are achieving by building digital capabilities to a level at which they can implement AI programs at scale. BCG's latest research into AI adoption, a continuation of our studies into digital transformation and AI maturity, found that of the 98% of companies that are at least experimenting with AI, only 26% have developed the necessary capabilities to move beyond proofs of concept and begin extracting value. (For more on how we define AI and our research methodology, see the Appendix.) And only 4% are at the forefront of AI innovation, systematically building cutting-edge AI capabilities and scaling them across the organization.

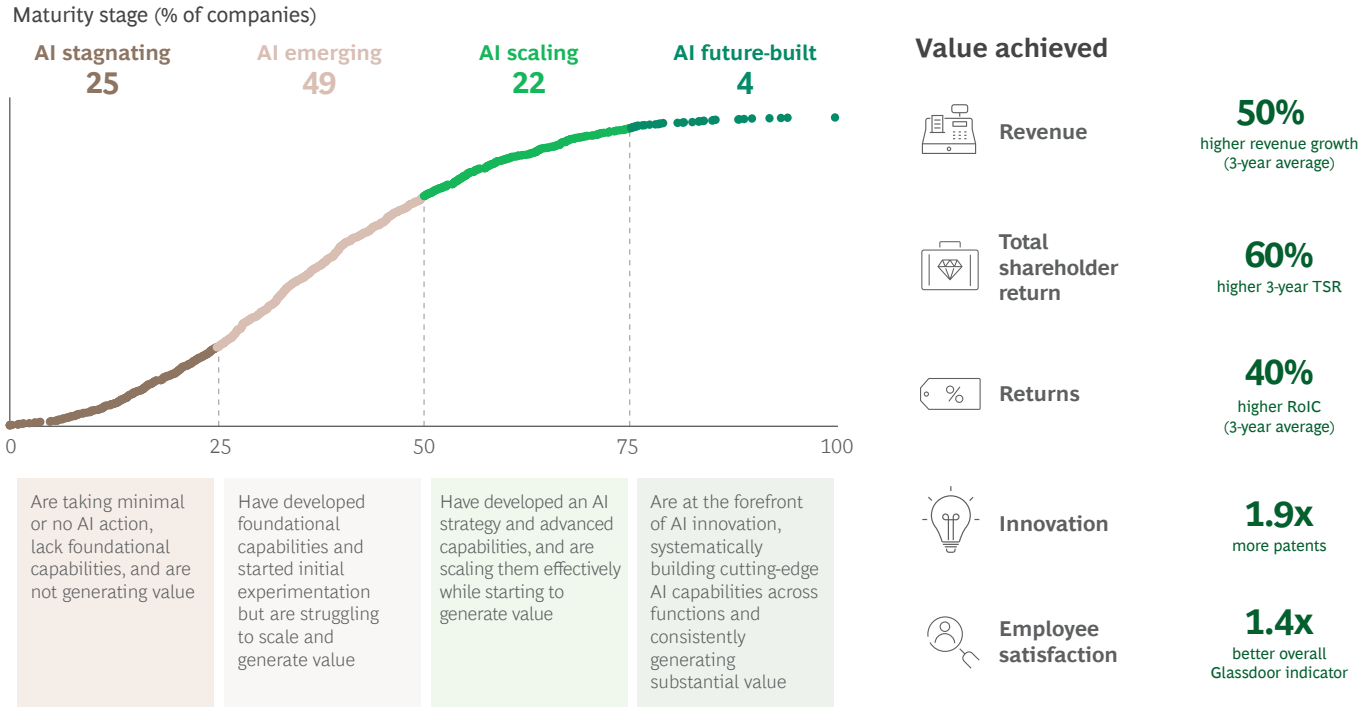
Here's our latest look at who the top 26% of companies are and how they are generating superior value from AI. The two chapters of the report that follow look at where companies are extracting value and what you need to do to move your company up the AI maturity curve.

A Steep Curve

Building AI capabilities is a complex challenge. Our latest research, involving more than 1,000 companies worldwide, shows that only 4% have developed cutting-edge AI capabilities across functions and are using them to consistently generate substantial value. (See Exhibit 1.) Another 22% have an AI strategy and advanced capabilities and are starting to generate value. We call these companies leaders. The remaining 74% have yet to show tangible value from their use of AI.

These categorical distinctions are important because leaders far outperform the others. Over the past three years, leaders' revenue growth has been 50% greater than the overall average. Their total shareholder returns are 60% higher, and they gain 40% higher returns on invested capital. These companies also excel on nonfinancial factors, such as patents filed and employee satisfaction, and they are in pole position to benefit as AI platforms and tools mature.

Exhibit 1 - Leaders Have Built the Capabilities Needed to Implement AI at Scale, Reaping Diverse Benefits over Less Mature Companies



Source: BCG Build for the Future 2024 Global Study (merged with DAI).

Note: "Leaders" include AI future-built and AI scaling companies; "less mature" or "other" companies" include AI stagnating and AI emerging companies. RoIC = return on invested capital; TSR = total shareholder return.

What Leaders Do Differently

Leaders have six differentiating characteristics.

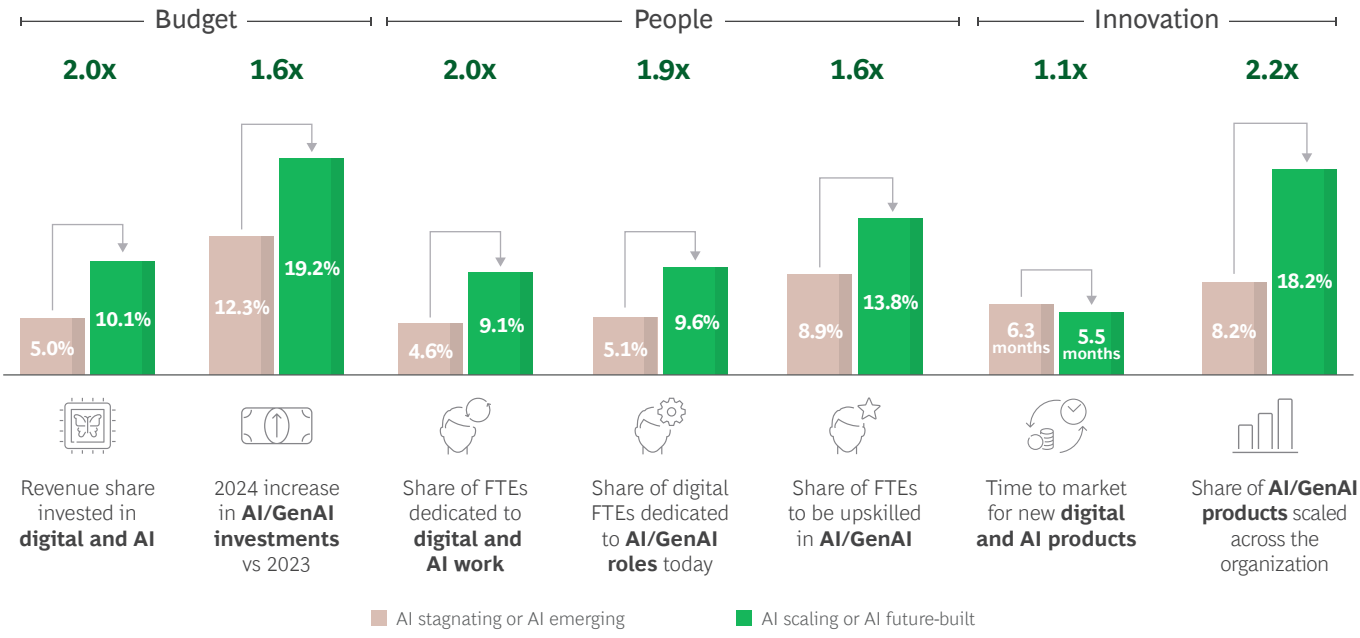
They focus on the core business processes as well as support functions. A common misconception is that AI's value lies mainly in streamlining operations and reducing costs in support functions. In fact, its greatest value lies in core business processes, where leaders are generating 62% of the value. Leveraging AI in both core business and support functions gives these companies competitive advantage.

They are more ambitious. Leaders' expectations for revenue growth from AI by 2027 are 60% higher than those of other companies, and they expect to reduce costs by almost 50% more. Three-quarters of the most forward-looking companies focus on company-level innovation core to the business. In contrast, only 10% of other companies do so—and if they leverage AI at all, it is mainly for productivity. Leaders look beyond pure productivity plays and back their ambitions with investment in AI and workforce enablement, doubling down on several aspects of AI, relative to their peers. (See Exhibit 2.) They make twice the investment in digital, twice the people allocation, and twice the number of AI solutions scaled.

They invest strategically in a few high-priority opportunities to scale and maximize AI's value. Data on AI adoption shows that leaders pursue, on average, only about half as many opportunities as their less advanced peers. Leaders focus on the most promising initiatives, and they expect more than twice the RoI in 2024 that other companies do. In addition, leaders successfully scale more than twice as many AI products and services across their organizations.

They integrate AI in efforts both to lower costs and to generate revenue. Almost 45% of leaders integrate AI in their cost transformation efforts across functions (compared with only 10% of nonleaders). And more than a third of leaders focus on revenue generation from AI, compared with only a quarter of other companies. (See Exhibit 3.) "We have a program under which every business unit is required to submit three to five projects each year—and since 2020, they have all had to focus on AI," said the enterprise product director of an alternative energy company. "These projects need to demonstrate how they would improve the company either through cost savings, increased operational efficiency, or revenue generation."

Exhibit 2 - Compared with Their Peers, Leaders Are Allocating More of Their Budget and Resources to Digital and AI Capabilities in 2024

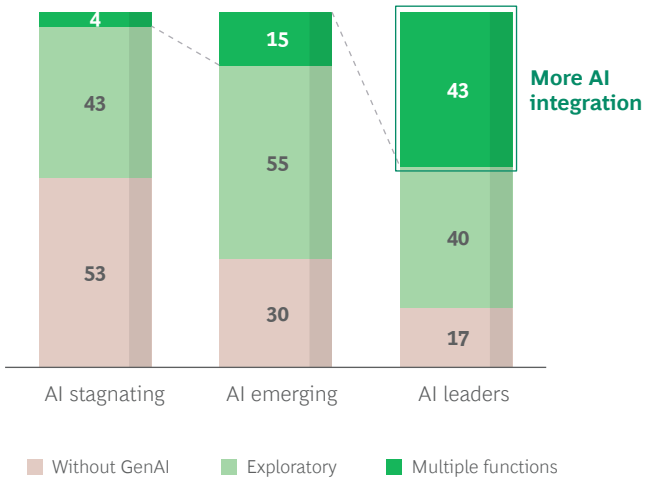


Source: BCG Build for the Future 2024 Global Study (merged with DAI).

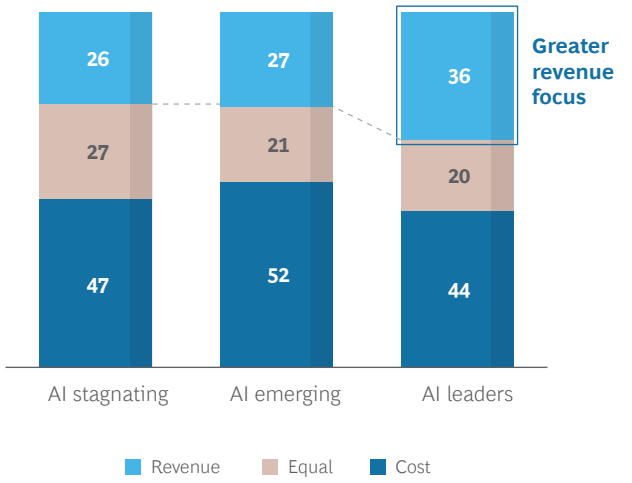
Note: FTEs = full-time equivalent employees.

Exhibit 3 - Leaders Integrate AI with Broader Cost Transformation Efforts and Have a Greater Focus on Revenue

Integration of AI with broader **cost transformation efforts** (%)



AI **investment split** between cost reduction and revenue growth (%)



Source: BCG Build for the Future 2024 Global Study (merged with DAI).

They direct their efforts more toward people and processes than toward technology and algorithms. Leaders follow the rule of putting 10% of their resources into algorithms, 20% into technology and data, and 70% into people and processes, which our data shows are the key capabilities underpinning success.

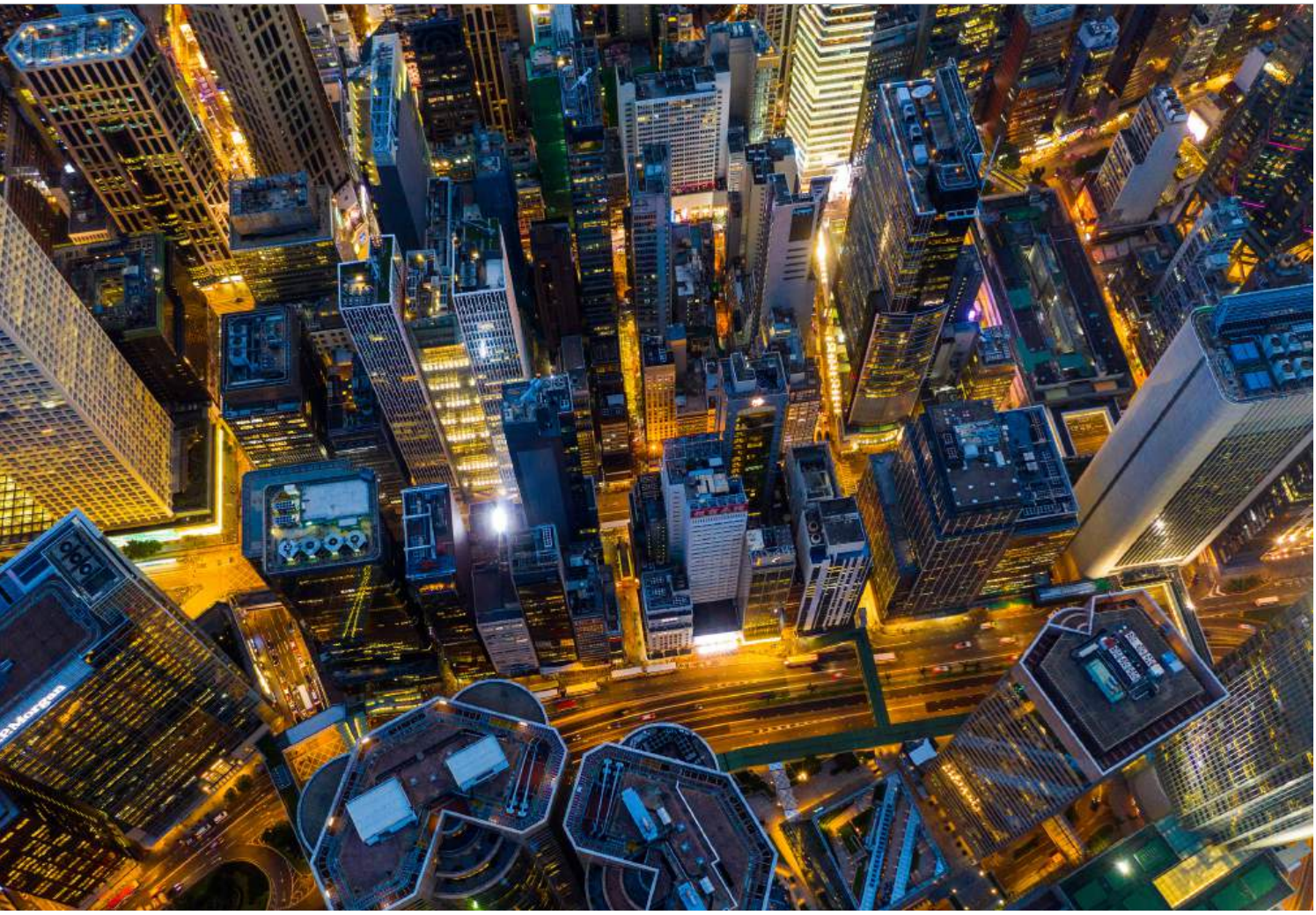
They have moved quickly to focus on GenAI. Leaders use both predictive AI and GenAI, and they are faster in adopting GenAI, which opens opportunities in content creation, qualitative reasoning, and connecting other tools and platforms—in part because their more advanced capabilities facilitate putting the prerequisites (such as large language models) in place.

Incumbents Reap Value

Not all AI leaders are hyperscalers and digital natives, companies that include AI as part of their product or services offering. More than half of the top-performing 26%, including the ones described at the beginning of this chapter, are traditional incumbents that have strengthened their capabilities and are using them to build differentiated competitive advantage. The sectors with the biggest percentages of AI leaders tend to be those that were among the first to experience digital disruption a decade and half ago and got the earliest start on building digital capabilities. They include fintech (49% are leaders), software (46%), and banking (35%).

But AI's impact extends to all industries. For example, a leading automaker used GenAI to accelerate tender document drafting and adjustments by 50% while improving document quality and consistency. GenAI also increased the automaker's speed in analyzing competing offers (by 50%) and reduced the time necessary to search knowledge assets (by 50% to 75%).

Leaders are blazing the AI trail, but other companies can catch up if they take a page from the leaders' playbook and focus on the areas that offer them the best opportunities and on the capabilities they need to build in order to capitalize. We explore these factors in the next two chapters.



The Surprising Sources of Value from AI

Leading companies are dreaming big. By 2027, the top 26% of companies in our survey of AI maturity expect to achieve 45% more value via cost reduction and 60% more value via revenue growth than other firms. Even in 2024, leaders expect to realize more than twice the RoI from AI initiatives than other companies do, resulting in a 5% reduction in addressable operational expenses and a 5% increase in addressable revenues.

The common narrative for AI involves support functions—HR, IT, legal, and the like—where automating relatively low-level and repetitive functions creates significant value. But the companies that are generating the most value are not only deploying productivity plays in support functions but also focusing on reshaping their core business processes and inventing new revenue streams. They are achieving results from AI across a wide range of functions, from R&D to operations and from sales and marketing to customer service. Because they have built the necessary capabilities, they can more readily identify, pilot, and scale up value-creating use cases. For example, one chemicals company expects to create more than $500 million in value from an end-to-end transformation that will implement AI across operations, site services, and procurement.

In the Core

Overall, the companies in our survey derive 62% of the value they obtain from AI and generative AI in core business functions, including operations (23%), sales and marketing (20%), and R&D (13%). Support functions generate 38% of the value, with customer service (12%), IT (7%,) and procurement (7%) leading the way.

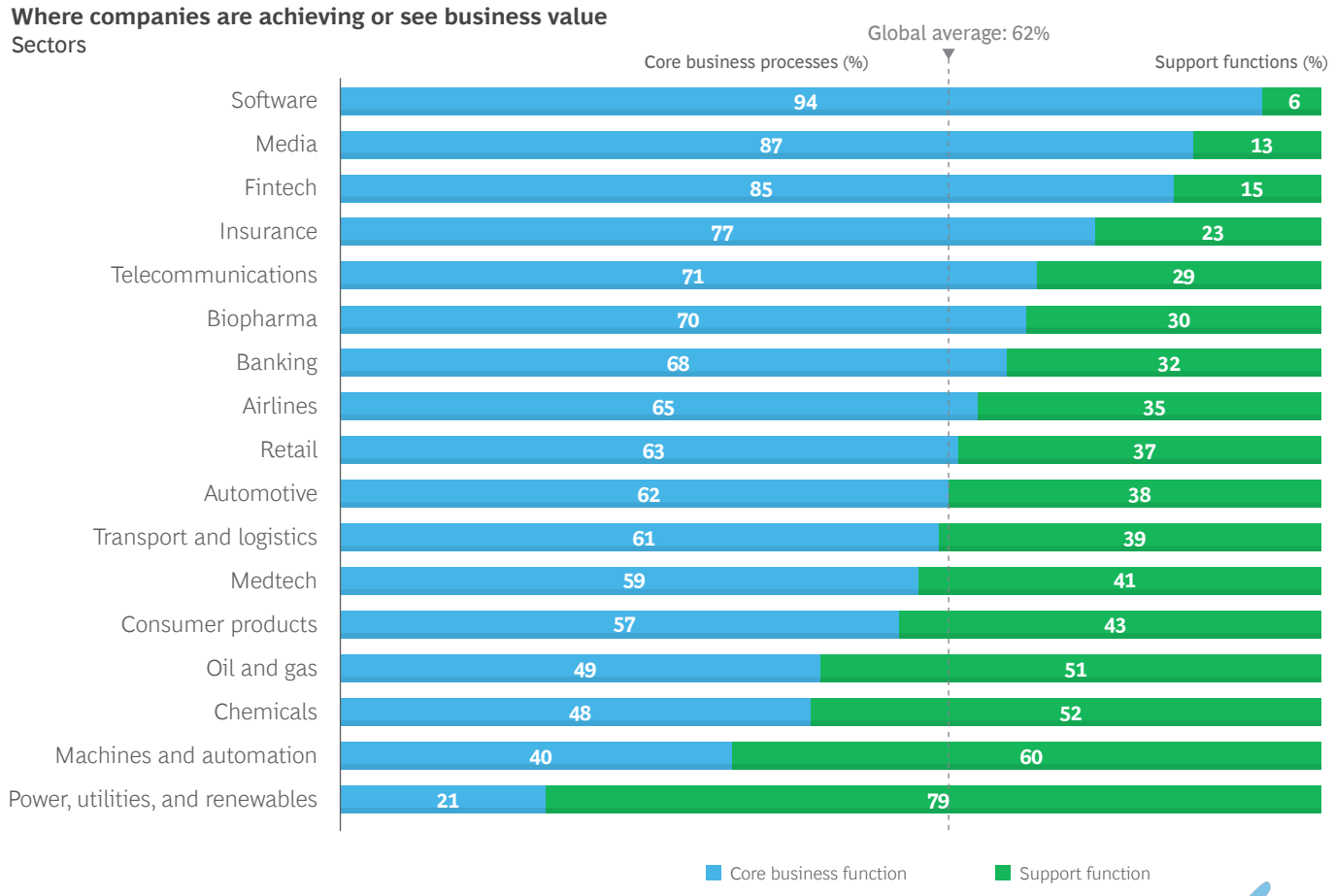
In some sectors the spread between core and support is even wider. (See Exhibit 4.) Software, media, fintech, insurance, telecommunications, and biopharma generate 70% to 90% of their AI-related value in core business processes. Although we found wide variation among sectors, the overall results are consistent—even most of the sectors in the bottom quartile generate 40% to 60% of AI value in core processes.

Sector Matters

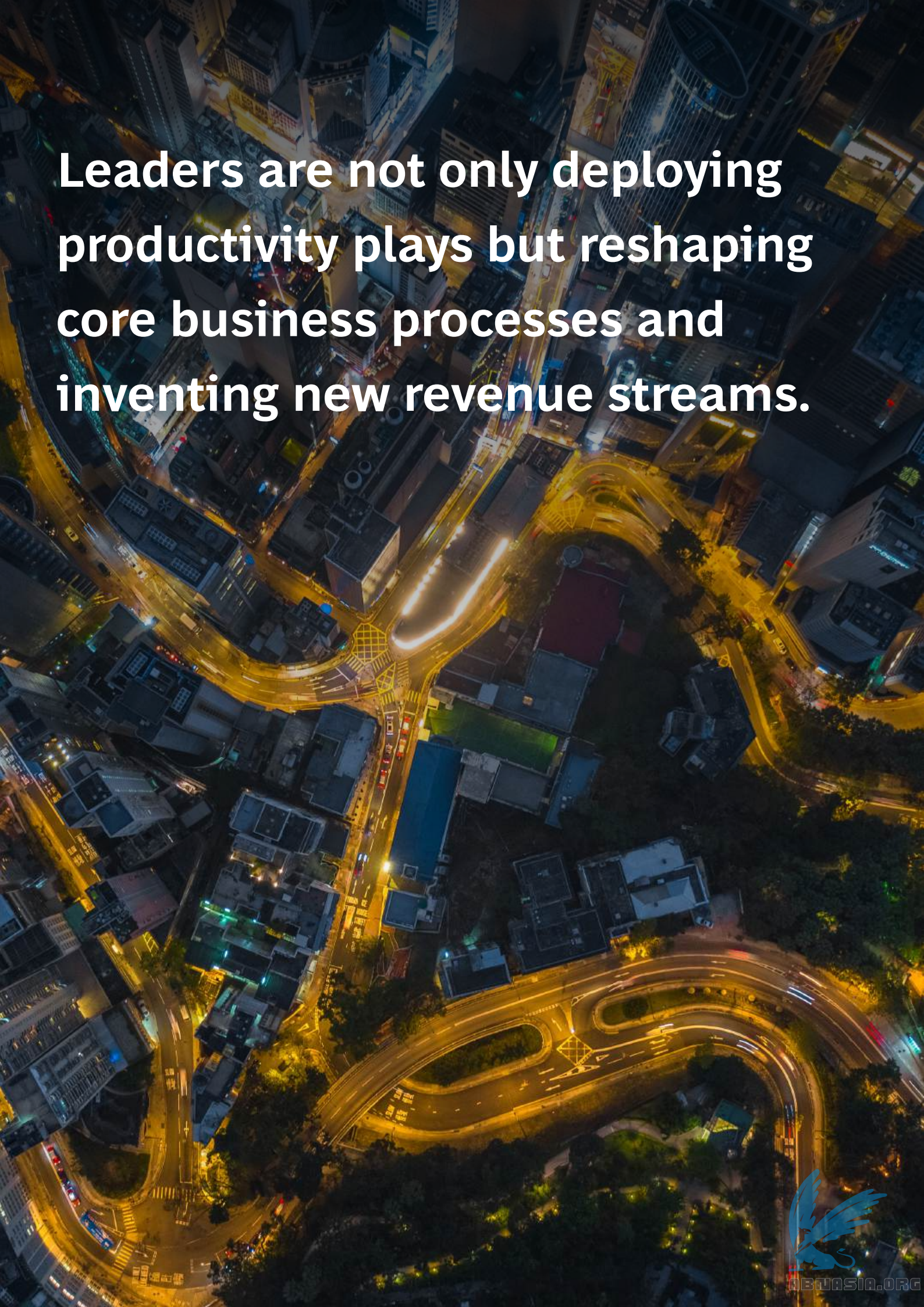
Companies in different sectors also benefit from identifying the domains in which AI can produce the most value. Our research shows that they vary widely by industry. (See "AI in Insurance and Biopharma.")

Sales and marketing, for example, is fast emerging as a major source of AI value in such sectors as software (31% of AI value generated), travel and tourism (31%), media (26%), and telecommunications (25%). Specific roles and the scale of impact differ by industry, but AI offers companies a near-term opportunity to reshape the sales function with next-best action recommendations, talk tracks, and basic workflow automation. In the medium term, AI and GenAI will enable real-time assisted selling and autonomous selling via digital sales avatars, with limited human involvement. Such automation will permit human staff to focus on strategic and relationship selling, while virtual assistants cover more transactional tasks. As predictive smart selling becomes the norm, traditional silos dividing marketing, sales, and pricing will dissolve. Our experience indicates that resulting increases in customer lifetime value and go-to-market efficiencies could almost double profit margins.

Exhibit 4 - To Realize Value from AI, Companies Focus on Core Business Processes, with Sector-Specific Variability



Source: BCG Build for the Future 2024 Global Study (merged with DAI).


Leaders are not only deploying productivity plays but reshaping core business processes and inventing new revenue streams.

The impact on marketing will be equally profound and will encompass four key processes:

- **Insight to Innovation.** Automated data collection and analysis will speed identification of market opportunities and increase marketers' ability to develop new product design.

- **Concept to Creation.** Workflows will accelerate asset creation and feedback loops, seamlessly adapting, localizing, and disseminating content.

- **Campaign Setup and Execution.** Hyper-segmentation and real-time execution that responds to trends and feedback will speed campaign creation and automatically track progress against key objectives.

- **Marketer Productivity.** Marketers will spend less time on time-consuming, repetitive, administrative tasks and more time on strategic decision making.

For example, a leading North American telco is already using AI to analyze call recordings to identify opportunities for cost savings and higher customer satisfaction. The company has reduced call center interaction time by 20% and cut call transfers to live agents by 25%. AI-powered chatbots now handle 30% of calls, and the telco expects to reduce total costs in the relevant business unit by 25%.

Predictably, AI is having a big impact in R&D in research-intensive sectors such as biopharma (27% of value created), medtech (19%), and automotive (29%, in an industry undergoing a major transition to software-driven vehicles). A medtech company vice president told us, "Generative AI has allowed us to generate images for training purposes that mimic real diseases that humans can have. We started deep diving into generating thousands of images that aren't coming from patients but are being generated by the generative model mimicking real-life cases. Our predictive AI model improved accuracy by 4% to 5% because of this generative AI approach."

In the R&D function of the future, we expect individual-, team-, and company-level changes to improve concept R&D, product development and industrialization, and product evolution. AI will accelerate and automate each step by shortening iteration loops, democratizing access to expertise across teams and organizations, fast-tracking exploration of new concepts, simulating product designs, and forecasting procurement orders, among other changes.

In one current instance, a global pharmaceuticals company is using AI to accelerate its drug discovery capabilities. The initial vision was to build, test, and validate an AI prototype with chemists to quantify the value impact in the discovery workflow. The company assessed the potential of state-of-the-art models to find new preclinical candidates faster, and then it built its own machine learning algorithm to rapidly screen over 1 billion drug compounds and a genetic algorithm to power a lead optimization pipeline for molecular chemists. The project generated value of $100 million a year through faster launches, including a 25% reduction in cycle time. The company expanded its library of molecules by 100 times, increasing the visibility of novel compounds to its researchers.

Customer service is already a significant source of AI-generated value in insurance (24% of the value created) and banking (18%). Companies are using AI to boost productivity, reducing the need for multiskilled frontline teams and redesigned agent journeys. We are seeing near-term increases of 30% to 40% in productivity and a profit-and-loss impact of 10% to 20% for the function.

Ambitions run much bigger. Leading companies expect to realize long-term increases in productivity of up to 60%. The impact of integrating AI into customer service processes will reverberate throughout the value chain. Customer service functions will be able to preempt issues and self-heal by fixing problems before customers detect them, and they will enable customers to resolve their own issues through self-help. If the customer still needs human assistance, AI will support the agent's response with augmented capabilities such as optimizing the conversation in real-time by considering the customer's needs in context and making offers where relevant.

A leading international bank needed to modernize its customer management system to improve service quality, reduce operational costs, and enhance revenue generation. It turned to GenAI to reshape both customer interactions and backend processes, including deploying GenAI for chat support, enhancing agent efficiency, improving service quality, and increasing conversion rates. It also integrated GenAI into its APIs and apps for smooth and scalable operations. Results included a reduction of almost 20% in interaction time between customers and agents; a drop of 4 minutes in average service time while retaining similar levels of customer satisfaction, an increase of 28 points in conversion rates, and a doubling in breadth of products sold.

Consumer products and retail companies are making big gains with AI-driven personalization (19% of the value created for the former and 22% for the latter). About 30% of consumer companies in our survey have adopted AI for personalized marketing (among other functions) and are seeing productivity gains of about 30% from such activities as marketing content generation, marketing mix and RoI optimization, and data-driven digital marketing. As a result, leaders are doubling down in other areas at two to four times the rate of slower movers, applying AI to generative product design, and manufacturing optimization.

Within each process or function, it's critical to define specific use cases and associated business value. In most sectors, more than half of GenAI's value potential lies in two or three functional domains. In insurance, 55% of the value lies in in policy administration, underwriting, and claims management. In biopharma, 57% of the value is found in R&D and in sales and marketing.

The critical challenge for companies is to identify the key use cases within each function. For example, 43% of insurance companies leverage AI in scoring, fraud assessment, and triage while 42% of biopharma companies use AI in systematic protein and drug molecule generation (at least for pilots and proofs of concept). The highest value use cases typically involve a mix of predictive AI and GenAI.

Although companies in each sector may be generating the greatest value from use cases in one or two domains, most are still experimenting—and obtaining measurable results in up to half a dozen domains in the core business, including customer relations and experience, content production and management, and product management. In more than a few sectors—including oil and gas, utilities, and machinery and automation—support functions are a significant source sources of value, too.

There are many routes to value. Chapter 3 explores how your company can efficiently find its most productive paths.

AI in Insurance and Biopharma

At the business process, function, and use-case level, value creation from AI is already taking different directions in different sectors, highlighting the importance to each company of independently identifying where its best opportunities lie. Consider the evidence that our survey gathered in two very different sectors: insurance and biopharma.

The average AI maturity of both sectors falls in the middle of the maturity curve, not far off the all-sector average. Companies in both sectors generate an average of 70% or more of AI value from core business processes and 30% or less from support functions. But the similarities end there.

Insurance

Insurers are focusing on operations (policy administration, underwriting, and claims management), customer service, and marketing and sales. (See the AI factsheet for insurance.) So far, the widest adoption of predictive AI at the individual-opportunity level has occurred in the areas of scoring, fraud assessment, and triage and policy automation. Adoption of GenAI is strongest in the use of chatbots to resolve questions and summarize customer interactions.

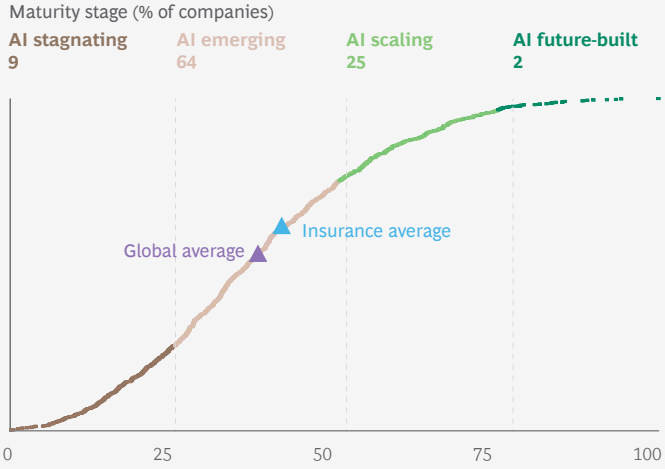
In line with their overall scores, insurers' biggest challenges involve people and processes: improving staff AI literacy, prioritizing opportunities over other concerns, and establishing RoI for identified opportunities. They also wrestle with the tasks of integrating AI with existing IT systems and of increasing the accuracy and reliability of AI models.

An Asian life and health insurance company with a strong track record in digital transformation sought to demonstrate the benefits that GenAI could have on its operations by identifying and executing a couple of high-impact, high-use cases. The insurer prioritized the possibilities on the basis of a high-level analysis of potential impact. It selected two opportunities, one in customer-service call center operations and the other in sales and marketing. The former achieved a 30% reduction in call center search times and the latter a 30% to 40% reduction in marketing and sales material creation time.

AI Factsheet for Insurance

Where does insurance stand on the AI maturity curve?

Maturity stage (% of companies)



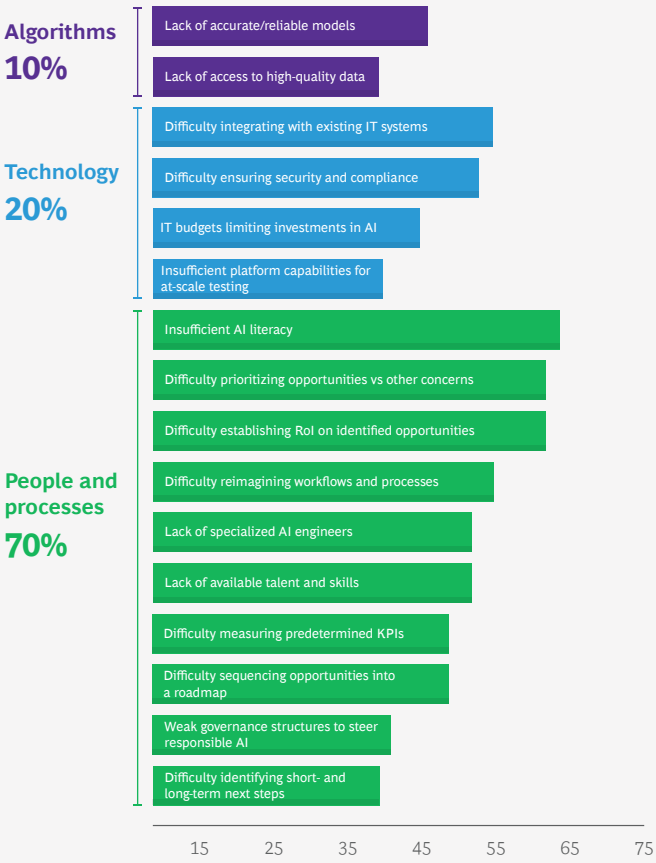
Insurance companies have emerging AI capabilities slightly ahead of the global average

Where are the value pools in my sector?

Distribution of AI value potential along functional domains (%)

Main challenges

Top challenges across people and processes, technology, and algorithms



Source: BCG Build for the Future 2024 Global Study (merged with DAI).

Biopharma

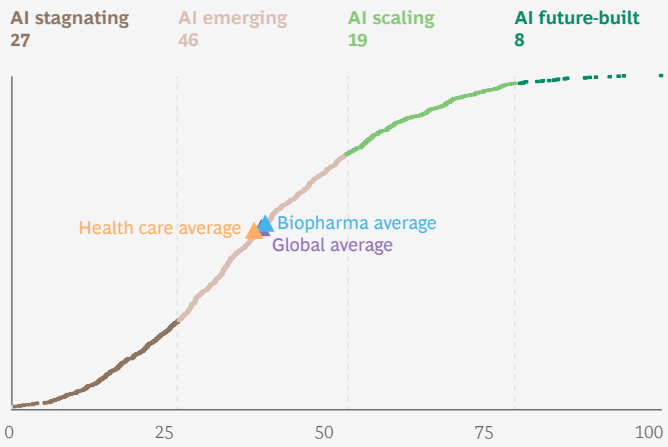
Biopharma tells a different story. More than half of the value in this sector comes from commercial/sales and marketing (30%), and R&D (27%). Biopharma companies are using GenAI for systematic protein, drug, and biological processes generation, real-time hyperpersonalized engagement with health care practitioners, and personalized outreach to patients and providers. They are using AI and GenAI together for analyzing and documenting customer interactions and for targeting patient identification via biological data. (See the AI factsheet for biopharma.)

Once again, the biggest challenges in applying the technology relate to people and processes: prioritizing opportunities over other concerns, advancing staff AI literacy, acquiring available talent and skills, and establishing RoI on identified opportunities. The top algorithm and technology issues involve integrating AI with existing IT systems, and maximizing the accuracy and reliability of models.

AI Factsheet for Biopharma

Where does biopharma stand on the AI maturity curve?

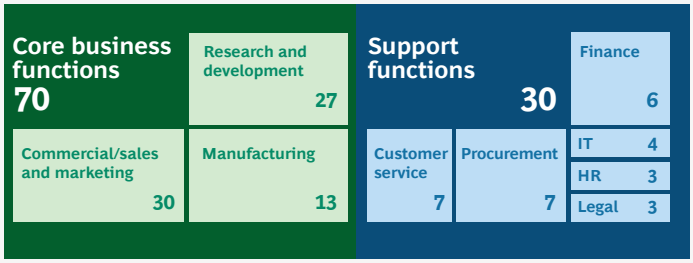
Maturity stage (% of companies)



Biopharma companies have emerging AI capabilities on a par with the global average

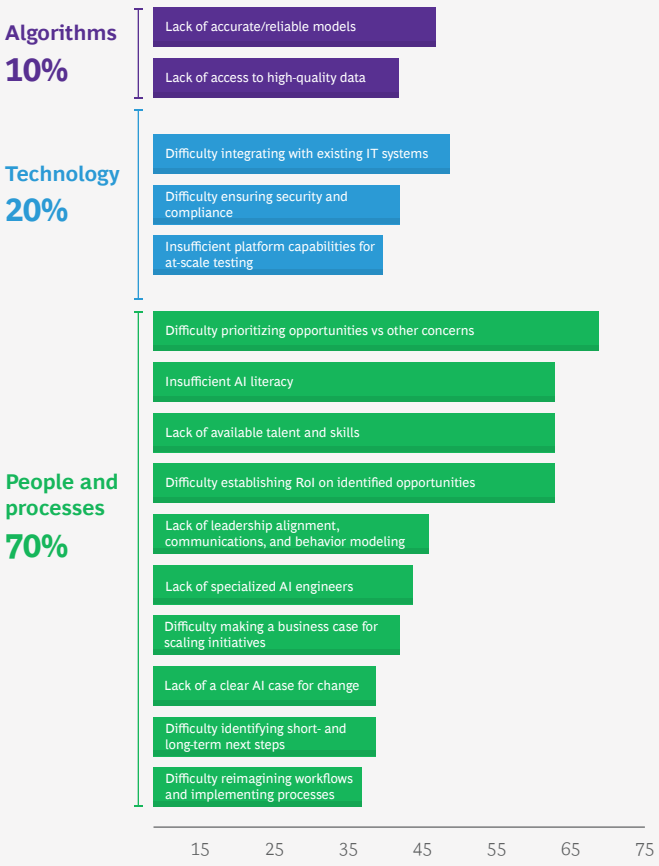
Where are the value pools in my sector?

Distribution of AI value potential along functional domains (%)



Main challenges

Top challenges across people and processes, technology, and algorithms



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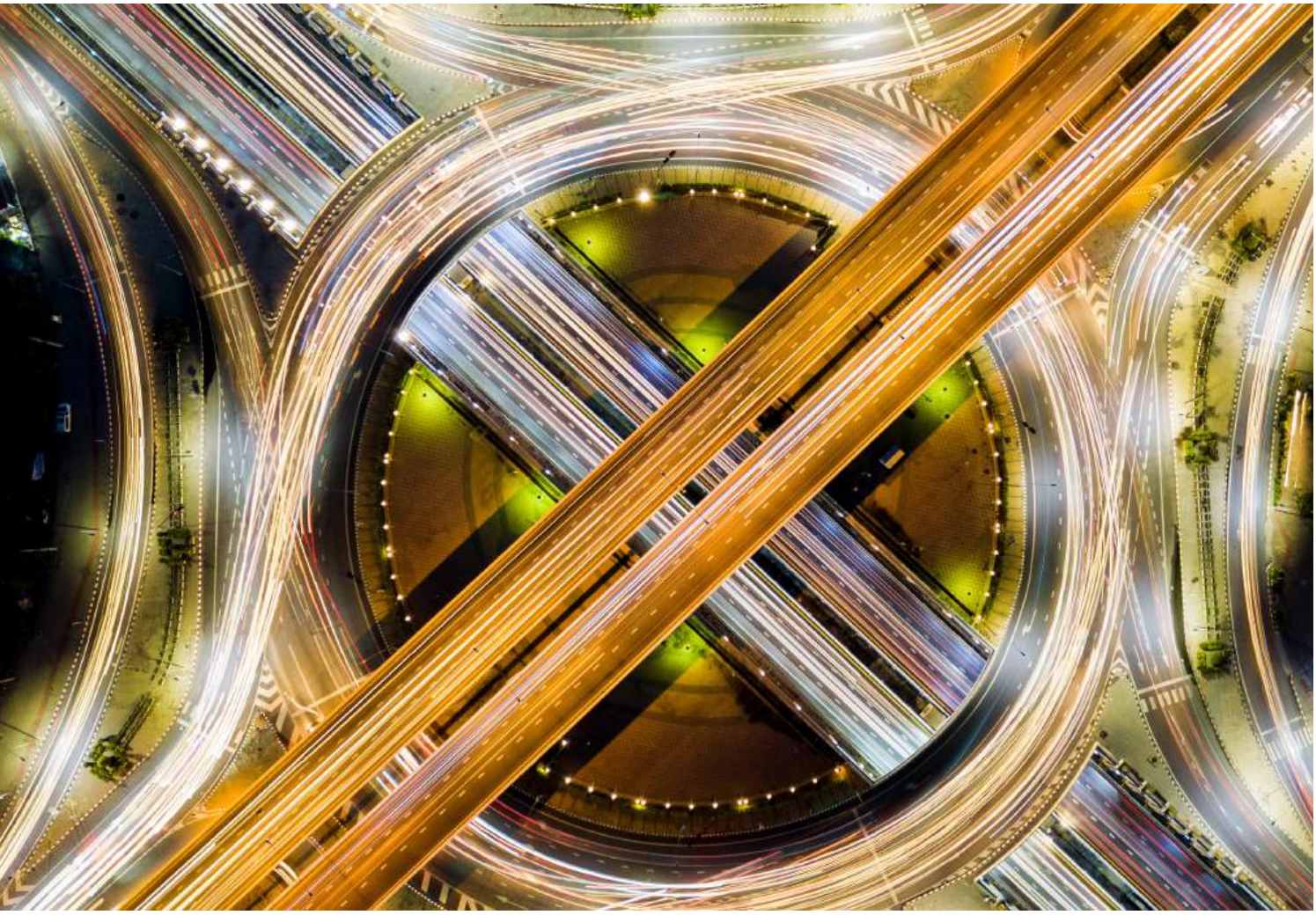


The Playbook for Winning with AI

Leading companies are well on their way to creating significant value and advantage from AI. For example, a consumer products company applied GenAI to reduce costs by $300 million through productivity gains and agency cost savings. A global consumer goods company expects to generate $100 million in additional sales from a GenAI-powered virtual conversational assistant, the first in its sector. A North American telco achieved a 10% reduction in call handling time and cut the cost of customer retention by more than 30%, leading to $200 million in annualized savings.

Meanwhile, the 70% of companies that are struggling, waiting, planning, and experimenting have an urgent need to accelerate their efforts to overcome barriers and catch up as their competitors improve their productivity, revenues, and customer experience. As leaders and aspiring leaders expand their AI capabilities and as GenAI models and tools mature, less capable companies will fall farther behind.

Here's an AI playbook that all companies can follow.

Overcoming Tough Challenges

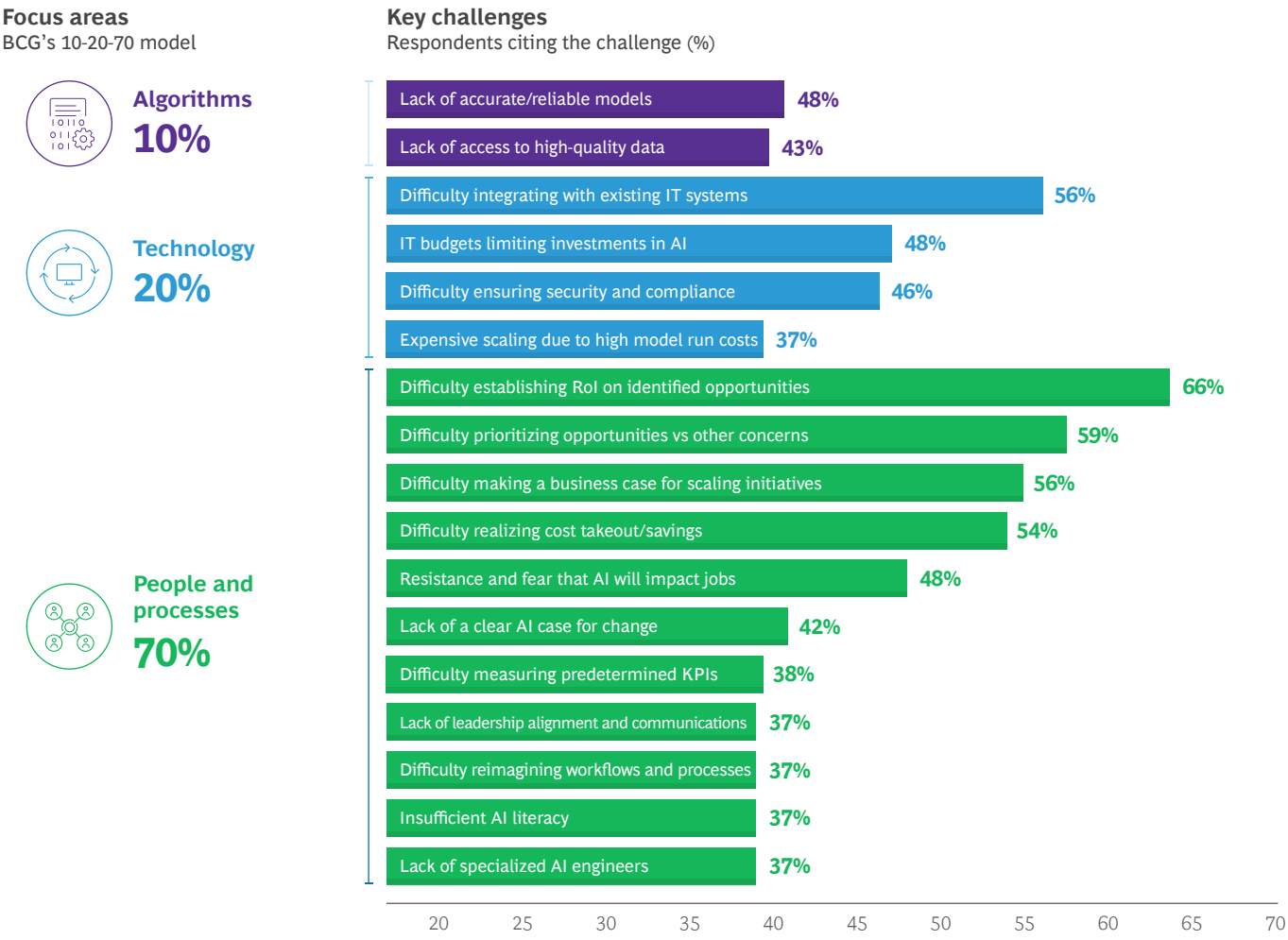
Our survey highlights the most difficult challenges that companies face in implementing AI initiatives. They fall into four groups:

- Difficulties in defining clear priority use cases with compelling returns for the anticipated investments
- A host of issues related to moving from plans to action and delivering value, such as prioritizing investments, scaling solutions across functions and businesses, overcoming resistance to adoption, and realizing the benefits
- People and skills issues, including building specific AI skills and broader AI literacy
- Integrating AI solutions with existing IT systems, and enabling access to high-quality data

Our experience, corroborated by our new research, indicates that about 70% of the challenges relate to people and process, about 20% are technology issues, and only 10% involve AI algorithms (which often occupy a lot more organizational time and resources). (See Exhibit 5.) The survey confirms our long-held view that when companies undertake digital or AI transformations, they need to focus 70% of their effort and resources on people-related capabilities, 20% on technology, and 10% on algorithms. Too often, companies make the mistake of prioritizing the technical issues over the human ones—which helps explain why many of them do not achieve the results they are looking for.

Challenges evolve over time, of course, as companies build their capabilities. But while less AI-capable companies focus on getting the basics right, leaders are more concerned with ensuring security and compliance, implementing responsible AI, and resolving technical issues such as guardrails for large language models, high model latency, and run costs.

Exhibit 5 - The Biggest Challenges Relate to People and Processes, Such as Prioritizing Opportunities and Establishing RoI



Source: BCG Build for the Future 2024 Global Study (merged with DAI); n = 1,000.

The Capabilities Required for Success

We analyzed the self-reported capabilities of AI leaders compared with those of other companies. This assessment revealed empirical evidence about the most important capabilities for implementing AI at scale. Most relate to peoples and processes—change management, product development skills, and workflow capabilities such as new technologies, role clarity, process reimagination, AI talent, and responsible AI governance. (See Exhibit 6.) The most important technology capabilities are related to data and platforms, and the most important algorithm capability is AI model quality and performance. As a senior executive of a leading AI player said, "We strongly believe that the key capabilities for success revolve around talent and process excellence. You need to have specific skills, such as data science, general enthusiasm for innovation, and the ability to reimagine and implement new approaches. The AI technology is amazing, but we try not to get dazzled by it."

Jump-Starting Your Journey to AI Value

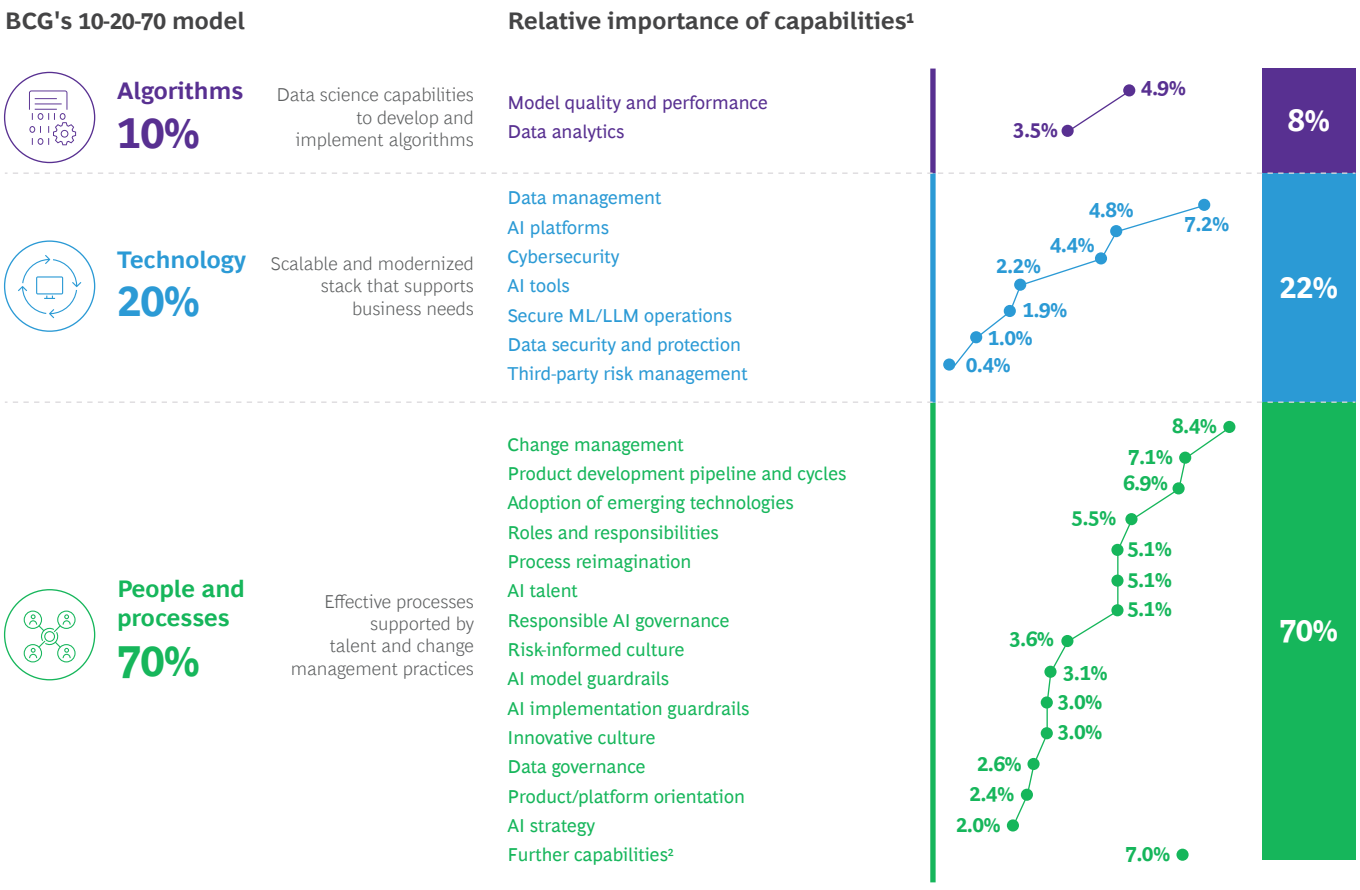
After assessing the capabilities and approaches of the leading companies, we have compiled a playbook for how any company can drive value quickly and effectively from AI. The approach has seven critical steps:

1. Set a bold strategic commitment from the top, and be prepared to support it over multiple years.

2. Maximize the potential value of AI with a balanced portfolio of initiatives that include streamlining everyday business processes, transforming entire business functions, and developing AI-native offerings that unlock new business models.

3. Focus on fewer but higher-impact lighthouse programs, starting with implementation with one to three high-RoI, easy-to-implement initiatives to fund the journey.

Exhibit 6 - To Get an AI Transformation Right, 70% of the Focus Should Be on People and Processes



Source: BCG 2024 Global Study on AI and Digital maturity; n = 1,000.

Note: LLM = large language model; ML = machine learning.

[1]Based on regression against probability of being an AI and GenAI value creator, defined as the average of expected cost savings and revenue uplift from AI and GenAI initiatives being ≥5%.

[2]"Further capabilities" summarizes all capabilities that fall into the "people and processes" category but individually received an importance score of less than 2%.

4. Ensure that the minimal viable infrastructure required for these initiatives exists, especially with respect to integration with IT systems and access to quality data.

5. Identify your company's capability gaps vis-à-vis the leaders in the known critical capabilities for success, and invest in parallel to build these capabilities. It may be necessary initially to focus on issues related to technology and data, but capabilities involving people and processes are critical and demand close and prolonged attention.

6. Ensure that implementation governance focuses on end-to-end transformation and on people and processes, including redesigning ways of working, cultivating talent, reimagining processes, strengthening effective decision making, and addressing reluctance to adopting new solutions.

7. Set up guardrails to deploy AI responsibly in all initiatives through transparency, control, and accountability to ensure ethical and legal compliance and to manage business risks.

How Two Companies Applied the Playbook for Success

Here's how two big companies in very different industries and states of maturity used this playbook to jump-start their AI journeys.

A global financial institution is applying GenAI to increase value of its data by boosting productivity and consistency in data governance, improving the employee data-management work experience, and reimagining its data management operation. Its ability to use data to create business value was constrained by governance procedures that covered only 10% of its available data. Scalability was limited by manual processes to generate metadata and capture data lineage.

The company turned to GenAI to automate and optimize data management processes, such as capturing data lineage, generating business metadata, and tagging sensitive data elements. It implemented the project in three waves of use-case deployment: building foundations, enriching context, and generating insights. The first phase involved a ten-week proof of concept to test feasibility and demonstrate value using automated metadata labeling and accelerating the capture of cross-system data lineage (source and quality) information. On the basis of the lessons learned in the pilots, the company embarked on a multi-month journey to scale the solution in production and to pilot it within critical data domains to measure the impact delivered and determine the further investment required for expansion.

So far, the company has built the production-grade solution and plan to deploy, and it has achieved a productivity gain on the order of 40% to 70% in specific activities such as metadata generation and lineage creation. It realized a net productivity gain of 20% to 25% in onboarding data with end-to-end data governance controls and has accelerated the inclusion of data under governance by more than five years. It also reimagined the operating model to be implemented as part of a pilot program, further accelerating impact delivery across more than 10 data domains and more than 200 data management experts globally.

A major European automaker faced heightened competition from rivals in Asia whose required time to market had dropped by as much as 45%. The company was well along its path toward digital transformation and was ready for the next stage—a journey to leverage AI to reshape its R&D function and become a next-generation OEM leader. It defined a clear ambition to identify where and how to integrate AI to achieve gains in scale and speed, with a particular focus on R&D. The automaker prioritized 11 high-impact changes, including high-fidelity simulation, AI generation of initial designs, and accelerated software performance checking. It then brought its well-established process improvement capabilities to bear on the challenge. The company so far has reduced time from idea to production by 30% (equivalent to one year) and saved up to 40% in the industrialization ramp-up of new products. It has also reduced its cost of goods sold by 1.5% to 2% overall.

Three-quarters of companies have yet to generate value from AI. They need to act or risk falling far behind. The good news is that AI leaders are showing the way forward in adopting valuable AI solutions at scale. The myriad challenges are clear, as are the ways to address them. Companies in any sector and at any level of AI maturity can tailor our playbook, which is compiled from a trove of empirical evidence, to their particular needs. They can start by conducting an AI maturity assessment—a focused health check for AI readiness across the organization—to helps the C-suite understand the company's starting point and how to move from pilots to scale.

As AI technologies continue to mature, and as adoption increases, time is of the essence for companies to make rapid progress.

Appendix

Definitions and Methodology

Definitions

In this report, when we refer to *AI*, *generative AI (GenAI)*, and *predictive AI*, we are using the definitions detailed below.

AI refers to all artificial intelligence technologies and applications.

Predictive AI refers to the use of artificial intelligence products and systems to analyze historical and current data to make predictions about future events or trends. These systems use data analytics, machine learning, and various statistical algorithms to identify patterns and relationships in data, which can then be used to forecast outcomes with a certain level of probability.

GenAI refers to the use of products and programs that can generate new realistic content, such as text and images. Examples include ChatGPT for text generation and DALL-E for image generation. Essential to GenAI are foundational models that include large language models (LLMs)—a subset of deep-learning algorithms that leverage breakthrough algorithm development in self-supervised and transfer learning.

Methodology

We designed our 2024 Build for the Future survey following the AI Tritad, which focuses on the AI capabilities necessary to support strategic objectives, deliver significant business value, and identify and capitalize on new market possibilities.

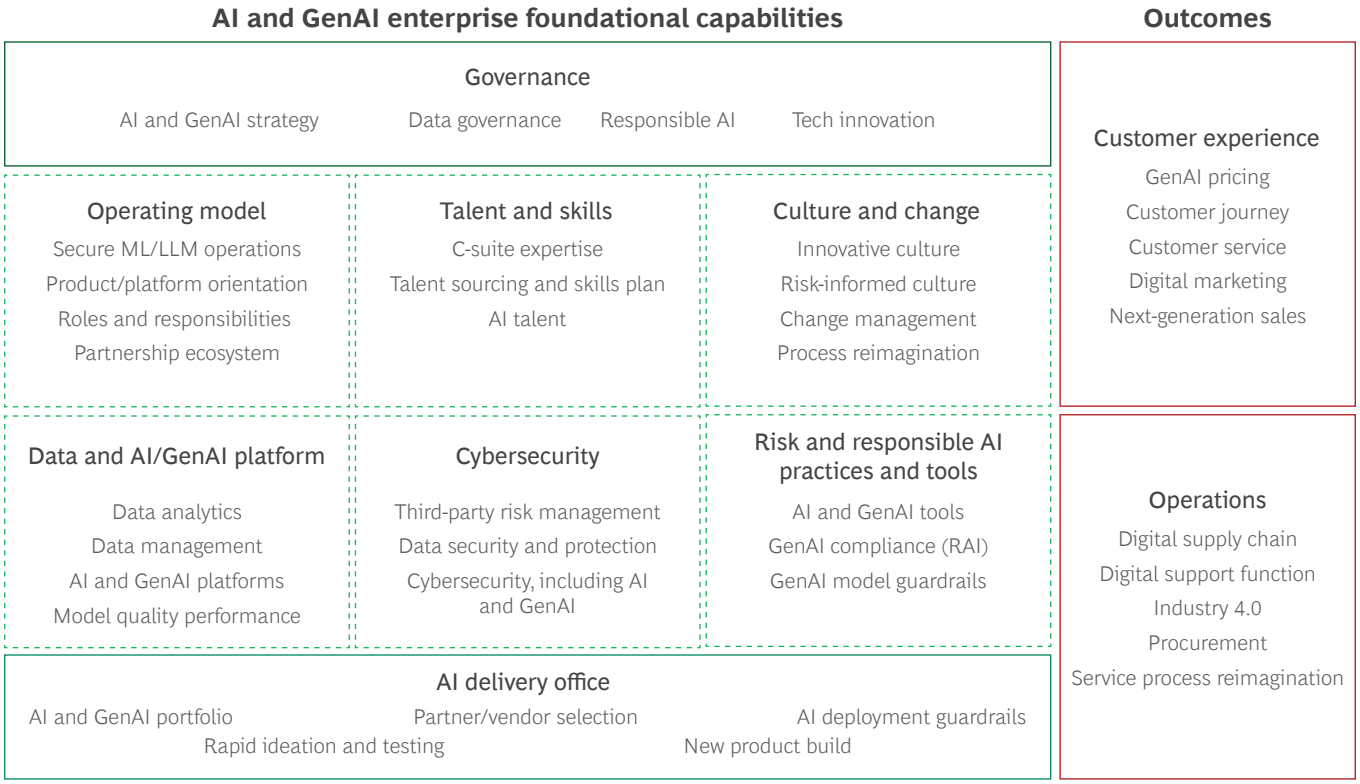
In this context, our comprehensive AI maturity score is built on 30 enterprise foundational capabilities, each measured along four clearly defined maturity stages. (See the exhibit.) We then applied robust statistical methods to calculate individual weights for each capability, on the basis of their overall contribution to the AI value generation that respondents reported. Next we sorted the weighted scores into four categories:

- **AI stagnating:** score of 0–25
- **AI emerging:** score of >25–50)
- **AI scaling:** score of >50–75)
- **AI future-built:** score of >75–100)

When we refer to *AI leaders* in the report, we are combining the top two categories of AI-scaling and AI future-built companies.

In our survey, we asked 1,000 CxOs and senior executives across more than 20 sectors to estimate their companies' AI maturity along the 30 foundational capabilities. In addition, they assessed outcomes in ten dimensions in response to sector-specific questions. Respondents came from 59 countries in Asia, Europe, and North America and from ten industries: consumer goods, energy, financial services, health care, industrial goods, insurance, public sector, technology, media, and telecommunications.

Methodology: Underlying Framework Along Enterprise Foundational Capabilities and Outcomes



Source: BCG Build for the Future 2024 Global Study (merged with DAI), n = 1,000.

Note: LLM = large language model; ML = machine learning; RAI = responsible AI.

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